

13e

# ADVANCED **ACCOUNTING**

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Education

# Advanced Accounting

Thirteenth Edition

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## ADVANCED ACCOUNTING, THIRTEENTH EDITION

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To our families

*The real purpose of books is to trap the  
mind into doing its own thinking.*

—Christopher Morley

# About the Authors



## **Joe B. Hoyle, *University of Richmond***

Joe B. Hoyle is associate professor of accounting at the Robins School of Business at the University of Richmond, where he teaches intermediate accounting, financial accounting, and advanced accounting. In 2015, he was the first recipient of the J. Michael and Mary Anne Cook Prize for undergraduate teaching. The Cook Prize is awarded by the American Accounting Association and “is the foremost recognition of an individual who consistently demonstrates the attributes of a superior teacher in the discipline of accounting.” Professor Hoyle has also been named (in 2007) as the Virginia Professor of the Year by the Carnegie Foundation for the Advancement of Teaching and the Center for Advancement and Support of Education. He has been selected as a Distinguished Educator five times at the University of Richmond and Professor of the Year on two occasions. He has authored a book of essays titled *Tips and Thoughts on Improving the Teaching Process in College*, which is available at <http://oncampus.richmond.edu/~jhoyle/>. His blog, *Teaching—Getting the Most from Your Students*, at <http://joehoyle-teaching.blogspot.com/> was named the Accounting Education Innovation of the Year for 2013 by the American Accounting Association.



## **Thomas F. Schaefer, *University of Notre Dame***

Thomas F. Schaefer is the KPMG Professor of Accounting at the University of Notre Dame. He has written a number of articles for scholarly journals such as *The Accounting Review*, *Journal of Accounting Research*, *Journal of Accounting & Economics*, *Accounting Horizons*, and others. His primary teaching and research interests are in financial accounting and reporting. Tom is a past president of the American Accounting Association’s Accounting Program Leadership Group. He received the 2007 Joseph A. Silvos Faculty Merit Award from the Federation of Schools of Accountancy and the 2013 Notre Dame Master of Science in Accountancy Dincolo Outstanding Professor Award.



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Timothy S. Douplik is distinguished professor emeritus of accounting at the University of South Carolina. He is a current member of the accounting faculty at the College of Charleston, where he teaches advanced and international accounting. Tim has published extensively in the area of international accounting in journals such as *The Accounting Review*; *Accounting, Organizations, and Society*; *Abacus*; *International Journal of Accounting*; and *Journal of International Business Studies*. Tim is a past president of the American Accounting Association’s International Accounting Section and a recipient of the section’s Outstanding International Accounting Educator Award.

# Advanced Accounting 13e Stays Current

**Overall—this edition of the text provides relevant and up-to-date accounting standards references to the Financial Accounting Standards Board (FASB) *Accounting Standards Codification*<sup>®</sup> (ASC).**

Chapter Changes for *Advanced Accounting*, 13th Edition:

## Chapter 1

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- Updated the chapter to reflect *Accounting Standards Update* (ASU) No. 2016-07 to ASC Topic 323, Investments—Equity Method and Joint Ventures, entitled “Simplifying the Transition to the Equity Method of Accounting.” The ASU is effective for fiscal years beginning after December 15, 2016.

The ASU eliminates the requirement to retrospectively apply the equity method to previously held ownership interests in an investee when an increase in ownership results in significant influence and thus qualifies for use of the equity method.

- Updated coverage for *Accounting Standards Update* (ASU) No. 2016-01, Financial Instruments—Overall, which requires equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income, unless fair values are not readily determinable. Thus, the previously available-for-sale category with fair value changes recorded in other comprehensive income will no longer be available. The ASU is effective for fiscal years beginning after December 15, 2017, with early adoption permitted.
- Eliminate coverage of investee extraordinary items to align the text coverage with *Accounting Standards Update* No. 2015-01 which eliminates the concept of extraordinary items.
- Updated terminology in discussion of intra-entity gross profits to reflect the new revenue recognition standards (ASC 606).
- Updated real-world references.
- Added and revised several end-of-chapter problems.

## Chapter 2

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- Added new descriptive coverage of three recent real-world business combinations—Facebook and WhatsApp, AT&T and DirecTV, and MeadwestVaco and Rock-Tenn.
- Revised chapter learning objectives to focus on combinations when the acquired firm is dissolved vs. continued existence. The chapter also newly recognizes a learning objective on the related costs that typically accompany business combinations.
- Added an updated appendix on pushdown accounting based on *Accounting Standards Update* (ASU) No. 2014-17, Business Combinations: Pushdown Accounting. The ASU allows companies an option to apply pushdown accounting for newly acquired subsidiaries.
- Updated real-world references.
- In addition to several new and revised end-of-chapter problems, replaced/added new research cases that provide students with real-world applications of financial reporting for business combinations.

## Chapter 3

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- Added coverage of post-acquisition procedures for excess fair value attributable to subsidiary long-term debt. Moved coverage of pushdown accounting to Chapter 2.
- Added a Discussion Question that addresses worksheet adjustments to the parent’s beginning-of-the-year retained earnings.
- Updated real-world references.
- Added an appendix covering *Accounting Standards Update* (ASU 2014-02) to Topic 350, “Intangibles—Goodwill and Other, on Accounting for Goodwill. The ASU provides an external reporting option (i.e., amortization) for private company goodwill accounting. The appendix also covers ASU 2014-18, Accounting for Identifiable Intangible Assets in a Business Combination, an amendment of Business Combinations (Topic 805). The new standards allow private companies an option to simplify their accounting by recognizing fewer intangible assets in future business combinations.
- Added new equity method end-of-chapter problems requiring the preparation of consolidated financial statements subsequent to acquisition. In addition,

# as the Accounting Profession Changes

changed the facts and requirements in several end-of-chapter problems.

- Added a new research and analysis case on Microsoft's 2015 goodwill impairment loss.

## Chapter 4

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- Updated real-world references.
- Added two new equity method end-of-chapter problems.
- Added new end-of-chapter cases using the financial reports of Starbucks (step-acquisition example) and Costco (various noncontrolling interest figures and interpretations).
- Revised the end-of-chapter comprehensive FASB ASC and IFRS research case. The new case, entitled *Bardeen Electric*, continues to focus on valuation issues accompanying a business combination including alternative goodwill measurement under IFRS. In addition, several other end-of-chapter problems have been revised.

## Chapter 5

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- Updated terminology in discussion of intra-entity gross profits to reflect the new revenue recognition standards (ASC 606).
- Revised and expanded coverage of the deferral and subsequent recognition of intra-entity gains on long-term assets transfers across affiliates. The revised exposition emphasizes the nature of reallocating intra-entity gains across time increasing consistency with the chapter's coverage of intra-entity gross profits in inventory.
- Updated real-world references.
- Changed the facts and requirements in several end-of-chapter problems.

## Chapter 6

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- Updated real-world references.
- Expanded coverage of post-control period reporting for primary beneficiaries and variable interest entities including an example of consolidated statement preparation.
- Added and revised several end-of-chapter problems.

## Chapter 7

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- Updated real-world references.
- Added coverage of the FASB 2015 *Proposed Accounting Standards Update* on Income Taxes

(Topic 740), entitled Intra-Entity Asset Transfers. The proposed accounting would converge the IFRS and U.S. GAAP treatment.

- Updated terminology in discussion of intra-entity gross profits to reflect the new revenue recognition standards (ASC 606).
- Changed the facts and requirements in several end-of-chapter problems.

## Chapter 8

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- Deleted the section within Interim Reporting related to extraordinary items.
- Added a real-world example of a company with seasonal items.
- Added the name of the relevant international standard to the title of sections on IFRS.
- Removed reference to IFRS from the learning objectives.
- Updated references to actual company practices and excerpts from annual reports.
- Changed the facts in several end-of-chapter problems.

## Chapter 9

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- Reduced the size of Exhibit 9.1 containing exchange rates for selected countries.
- Rewrote the section now titled Forward Contracts that was previously titled Spot and Forward Rates.
- Moved the section on foreign currency borrowing from the end of the chapter to immediately follow the section on foreign currency transactions.
- Moved the portion of the IFRS section at the end of the chapter that deals with foreign currency transactions to immediately follow the section on foreign currency borrowing.
- Expanded the learning objective related to how forward contracts and foreign currency options can be used to hedge foreign exchange risk to include understanding what types of foreign exchange risk can be hedged.
- Added new learning objectives on the accounting guidelines for derivatives and the basics of hedge accounting.
- Updated real-world references including examples of company practices, excerpts from annual reports, and foreign exchange rates.



- Added language to more clearly explain the impact that the accounting for a derivative financial instrument used to hedge a foreign exchange risk has on financial statements within the examples demonstrating the accounting for various types of foreign currency hedges.
- Updated the section at the end of the chapter that summarizes the accounting for derivative financial instruments under IFRS.
- Changed the facts in several end-of-chapter problems.
- Updated the develop your skills assignments based on actual exchange rates.

## Chapter 10

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- Updated references to actual company practice and related excerpts from annual reports.
- In the section on Exchange Rates Used in Translation, added instruction to first read the related Discussion Question before continuing.
- Removed reference to the theoretical possibility of translating income statement items at the current exchange rate.
- Removed reference to a research study published in 1988 that investigated the weighting of functional currency indicators.
- Moved the section on IFRS from the end of the chapter to immediately after the section describing U.S. authoritative literature.
- Changed facts in several end-of-chapter problems.

## Chapter 11

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- Updated real-world references.
- Removed the discussion of culture as a reason for accounting diversity and the section “A General Model of the Reasons for International Differences in Financial Reporting.”
- Expanded discussion of results from the FASB-IASB convergence process to include a new exhibit summarizing successful convergence projects.
- Added a section on “IFRS for SMEs.”
- Added a section on the “Relevance of IFRS for U.S. Accountants.”
- Removed the section “U.S. GAAP Reconciliations.”
- Added a major new section focusing on the “Conversion of IFRS Financial Statements to U.S. GAAP.”

- Deleted the section “A Principles-Based Approach to Standard Setting.”
- Revised the Comprehensive Illustration to show the process for determining conversion worksheet entries necessary to convert from IFRS to U.S. GAAP for nine differences between the two sets of standards.
- Added several new questions related to material added to the chapter.
- Added several new problems focusing on the conversion of IFRS to U.S. GAAP.
- Deleted the end-of-chapter case related to “Voluntary Adoption of IFRS” and added a new case related to “IFRS Website.”

## Chapter 12

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- Updated SEC data and Registration Statement exemptions.
- Updated SEC division information.
- Updated web link references as necessary.
- Revised end-of-chapter material.

## Chapter 13

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- Added discussion of reporting issues that companies face as the possibility of bankruptcy grows, such as the need to test goodwill and other assets for impairment and the possibility that a valuation allowance is required to offset any deferred income tax assets.
- Presented coverage of new FASB pronouncement: *Accounting Standards Update 2014-15* (“Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern”) which provides accounting and reporting guidance if the possibility arises that substantial doubt exists as to whether a company will be able to remain a going concern.
- Included additional discussion about the liquidation basis of accounting, including examples of the necessary financial statements.
- Revised references to include companies that have recently experienced bankruptcy and liquidation such as RadioShack.

## Chapter 14

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- Revised tables showing the allocation of partnership income/loss across partners to provide additional

emphasis on the step-by-step nature of the income distribution across partners.

- Changed the facts and requirements in several end-of-chapter problems.

## Chapter 15

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- Split an existing end-of-chapter problem with two unrelated parts into two separate problems.
- Added a new end-of-chapter problem related to learning objectives LO 15-2 and LO 15-5.
- Changed the facts and requirements in several end-of-chapter problems.

## Chapter 16

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- Updated numerous references to the financial statements of a wide variety of state and local governments such as the City of Baltimore, the City of Houston, the City of Charlotte, and the City of Dallas.

## Chapter 17

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- Provided coverage of new pronouncement: *GASB Statement No. 76*, “The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments.”

- Provided coverage of new pronouncement: *GASB Statement No. 77*, “Tax Abatement Disclosures.”
- Updated references to the financial statements of state and local governments such as the City of Los Angeles, the City of Chicago, the City of Orlando, and the City of Boston.

## Chapter 18

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- Discussed the potential implications of FASB’s current projects on the presentation and disclosure of financial statements by not-for-profit entities
- Updated numerous references to the financial statements of a wide variety of private not-for-profit entities such as ChildFund International, Girl Scouts of the United States of America, American Heart Association, and Georgetown University.

## Chapter 19

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- Updated tax code references, numbers, and statistics.
- Included coverage of the American Taxpayer Relief Act of 2012.
- Revised web links in footnote references as appropriate.
- Revised end-of-chapter material reflecting changes from the chapter.

# Students Solve the Accounting Puzzle

The approach used by Hoyle, Schaefer, and Douppnik allows students to think critically about accounting, just as they will in their careers and as they prepare for the CPA exam. Read on to understand how students will succeed as accounting majors and as future CPAs by using *Advanced Accounting, 13e*.

## Thinking Critically

With this text, students gain a well-balanced appreciation of the accounting profession. As *Hoyle 13e* introduces them to the field's many aspects, it often focuses on past controversies and present resolutions. The text shows the development of financial reporting as a product of intense and considered debate that continues today and will in the future.

## Readability

The writing style of the 12 previous editions has been highly praised. **Students easily comprehend** chapter concepts because of the conversational tone used throughout the book. The authors have made every effort to ensure that the writing style remains engaging, lively, and consistent.

**EXHIBIT 2.1**  
Recent Notable Business Combinations

Acquirer	Target
AT&T	DirecTV
Berkshire Hathaway, Inc.	Precision Castparts
Visa, Inc.	Visa Europe Ltd
Facebook, Inc.	WhatsApp
MeadWestvaco	RockTenn
Intel Corporation	Altera Corporation
CVS Health Corporation	Omnicare, Inc.
Marriott	Starwood Hotels Int
Merck	Cubist
Weyerhaeuser	Plum Creek Timber
Celgene Corporation	Receptos, Inc.
Cox Automotive	Dealertrack Techno
FedEx	TNT Express
Expedia	HomeAway
Microsemi Corporation	PMC-Sierra, Inc.
Constellation Brands	Ballast Point Brewin

## Real-World Examples

**Students are better able to relate** what they learn to what they will encounter in the business world after reading these frequent examples. Quotations, articles, and illustrations from *Forbes*, *The Wall Street Journal*, *Time*, and *Bloomberg BusinessWeek* are incorporated throughout the text. Data have been pulled from business, not-for-profit, and government financial statements as well as official pronouncements.

**Discussion Question**

**DOES GAAP UNDERVALUE POST-CONTROL**

In Berkshire Hathaway's 2012 annual report, Warren Buffett discusses the post-control step acquisitions of Marmon Holdings, Inc. Marmon provides an example of a clear and sustainable value and intrinsic value. Let me explain the odd value. Last year I told you that we had purchased an 80% ownership to 80% (up from the 64% we acquired in 2011).

## Discussion Questions

This feature **facilitates student understanding** of the underlying accounting principles at work in particular reporting situations. Similar to minicases, these questions help explain the issues at hand in practical terms. Many times, these cases are designed to demonstrate to students why a topic is problematic and worth considering.

# with 13th Edition Features

## CPA Simulations

Hoyle 13e provides instructors and students access to CPA Simulations that correspond to several key topics and chapters throughout the text. Students can complete these simulations online, allowing them to practice advanced accounting concepts in a web-based interface that mimics the actual CPA exam. There will be no hesitation or confusion when students sit for the real exam; they will know exactly how to maneuver through the computerized test.

## End-of-Chapter Materials

As in previous editions, the end-of-chapter material remains a strength of the text. The sheer number of questions, problems, and Internet assignments test and, therefore, **expand the students' knowledge** of chapter concepts.

Excel Spreadsheet Assignments extend specific problems and are located on the 13th edition Instructor Resources page, with templated versions that can be provided to students for assignments. An Excel icon appears next to those problems that have corresponding spreadsheet assignments.

“Develop Your Skills” asks questions that address the four skills students need to master to pass the CPA exam: Research, Analysis, Spreadsheet, and Communication. An icon indicates when these skills are tested.

**Comprehensive Illustration** (Estimated Time: 45 to 65 Minutes) Following are the financial statements of the Diamond Company as of December 31. The fair values also listed.

Problem

	Cash	Accounts Receivable	Inventory	Property, Plant, and Equipment	Accounts Payable	Long-Term Debt	Common Stock	Retained Earnings
Balance Sheet								

**Develop Your Skills**

**FASB ASC RESEARCH AND ANALYSIS CASE—CONSIDERATION OF COMPENSATION?**

**CPA skills**

NaviNow Company agrees to pay \$20 million in cash to the four owners of TrafficEye, Inc. for its assets and liabilities. These four owners of TrafficEye, Inc. plan to combine the new technology with its existing technology to create a new company.

**Questions**

1. What is a business combination?
2. Describe the different types of legal arrangements that can take place to create a business combination.
3. What does the term *consolidated financial statements* mean?
4. Within the consolidation process, what is the purpose of a worksheet?
5. Jones Company obtains all of the common stock of Hudson, Inc., by issuing 50,000 shares of its own stock. Under these circumstances, why might the determination of a fair value for the consideration transferred be difficult?
6. What is the accounting valuation basis for consolidating assets and liabilities in a business combination?
7. How should a parent consolidate its subsidiary's revenues and expenses?
8. Morgan Company acquires all of the outstanding shares of Jennings, Inc., for cash. Morgan transfers consideration more than the fair value of the company's net assets. How should the payment in excess of fair value be accounted for in the consolidation process?
9. Catron Corporation is having liquidity problems, and as a result, it sells all of its outstanding stock to Lambert, Inc., for cash. Because of Catron's problems, Lambert, Inc., is able to acquire the stock at a price less than the fair value of the stock.

**Problems**

**LO 2-1**

**LO 2-2**

1. Which of the following does not represent a business combination?
  - a. Combinations are often a vehicle to acquire new technology.
  - b. Cost savings can be achieved through combinations.
  - c. Synergies may be available through combinations.
  - d. Larger firms are less likely to fail.
2. Which of the following is the best theoretical justification for a business combination?

# Connect Accounting for *Advanced Accounting*, 13e

The 13<sup>th</sup> Edition of *Advanced Accounting* has a full Connect package, with the following features available for instructors and students.

- **(New for 13e!) SmartBook®** is the market-leading adaptive study resource that is proven to strengthen memory recall, increase retention, and boost grades. SmartBook, powered by LearnSmart, is the first and only adaptive reading experience designed to change the way students read and learn. SmartBook delivers a personalized reading experience by highlighting the most impactful concepts a student needs to learn at that moment in time. As a student engages with SmartBook, the reading experience continuously adapts by highlighting content based on what the student has mastered or is ready to learn. This ensures that the student stays focused on the content he or she needs to learn, while simultaneously promoting long-term retention of material. Both students and Instructors can use SmartBook's real-time reports to quickly identify the concepts that require more attention from individual students—or the entire class. The end result? Students are more engaged with course content, can better prioritize their time, and come to class ready to participate.
- The **End-of-Chapter Content** in Connect provides a robust offering of review and question material designed to aid and assess the student's retention of chapter content. The End-of-Chapter content is composed of both static and algorithmic versions of the problems in each chapter, which are designed to challenge students using McGraw-Hill Education's state-of-the-art online homework technology. Connect helps students learn more efficiently by providing feedback and practice material when and where they need it. Connect grades homework automatically, and students benefit from the immediate feedback that they receive, particularly on any questions they may have missed.

## Example of End-of-Chapter Problem

Prepare a consolidated balance sheet for Pratt and Spider as of December 31, 2018.

PRATT COMPANY AND SUBSIDIARY Consolidated Balance Sheet December 31, 2018			
Assets		Liabilities and Owners' Equity	
Cash .....			
Total assets .....		Total liabilities and equities .....	

- The **Test Bank** for each chapter has been updated for the 13th edition to stay current with new and revised chapter material, with all questions available for assignment through Connect. Instructors can also create tests and quizzes from the Test Bank through our TestGen software, which is available on the Instructor Resources page.
- The **Instructor and Student Resources** have been updated for the 13<sup>th</sup> edition and are available in the Connect Instructor Resources page. Available resources include Instructor and Solutions Manuals, PowerPoint presentations, Test Bank files, Excel templates, and Chapter Check Figures. All applicable Student Resources will be available in a convenient file that can be distributed to students for classes either directly, through Connect, or via courseware.



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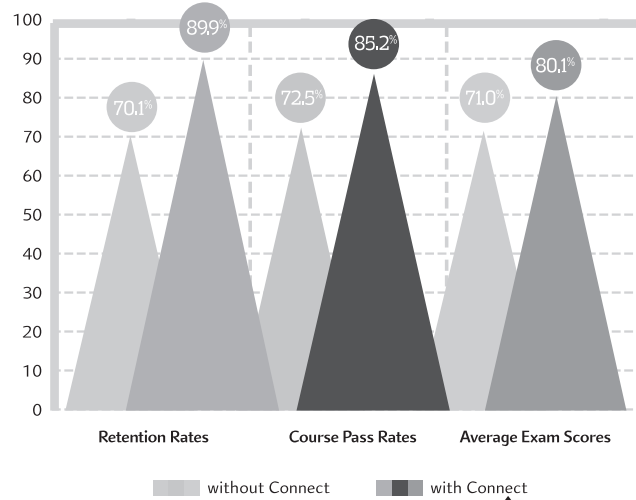
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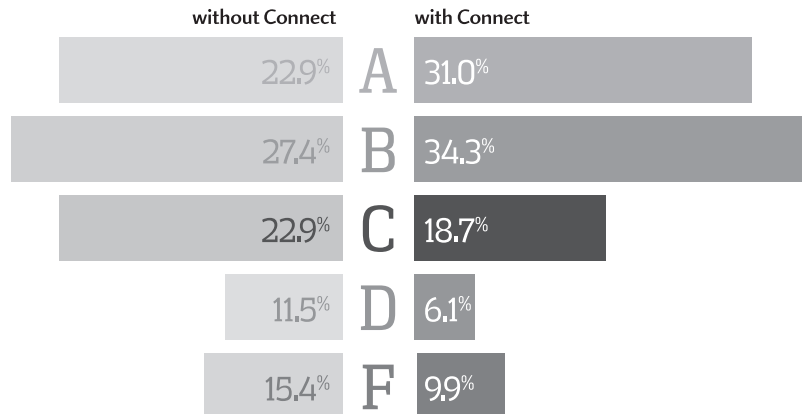
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## Analytics

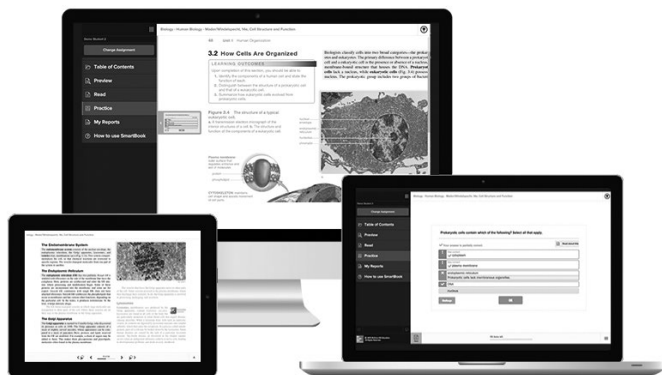
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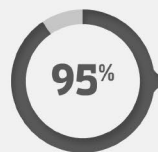
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\*Findings based on 2015 focus group results administered by McGraw-Hill Education

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# The Equity Method of Accounting for Investments

The first several chapters of this text present the accounting and reporting for investment activities of businesses. The focus is on investments when one firm possesses either significant influence or control over another through ownership of voting shares. When one firm owns enough voting shares to be able to affect the decisions of another, accounting for the investment can become challenging and complex. The source of such complexities typically stems from the fact that transactions among the firms affiliated through ownership cannot be considered independent, arm's-length transactions. As in many matters relating to financial reporting, we look to transactions with *outside parties* to provide a basis for accounting valuation. When firms are affiliated through a common set of owners, measurements that recognize the relationships among the firms help to provide objectivity in financial reporting.

## The Reporting of Investments in Corporate Equity Securities

In its recent annual report, The Coca-Cola Company describes its 28 percent investment in Coca-Cola FEMSA, a Mexican bottling company with operations throughout much of Latin America. The Coca-Cola Company uses the equity method to account for several of its bottling company investments, including Coca-Cola FEMSA. The Coca-Cola Company states,

We use the equity method to account for investments in companies, if our investment provides us with the ability to exercise significant influence over operating and financial policies of the investee. Our consolidated net income includes our Company's proportionate share of the net income or loss of these companies.

Our judgment regarding the level of influence over each equity method investment includes considering key factors such as our ownership interest, representation on the board of directors, participation in policy-making decisions and material intercompany transactions.

Such information is hardly unusual in the business world; corporate investors frequently acquire ownership shares of both domestic and foreign businesses. These investments can range from the purchase of a few shares to the acquisition of 100 percent control. Although purchases of corporate equity securities (such as the ones made by Coca-Cola) are not uncommon, they pose a considerable number of financial reporting issues because a close relationship has been established without the investor gaining actual control. These issues are currently addressed by the *equity method*. This chapter deals with accounting for stock investments that fall under the application of this method.

## Learning Objectives

After studying this chapter, you should be able to:

- LO 1-1** Describe in general the various methods of accounting for an investment in equity shares of another company.
- LO 1-2** Identify the sole criterion for applying the equity method of accounting and know the guidelines to assess whether the criterion is met.
- LO 1-3** Describe the financial reporting for equity method investments and prepare basic equity method journal entries for an investor.
- LO 1-4** Allocate the cost of an equity method investment and compute amortization expense to match revenues recognized from the investment to the excess of investor cost over investee book value.
- LO 1-5** Understand the financial reporting consequences for:
  - a. A change to the equity method.
  - b. Investee's other comprehensive income.
  - c. Investee losses.
  - d. Sales of equity method investments.
- LO 1-6** Describe the rationale and computations to defer the investor's share of gross profits on intra-entity inventory sales until the goods are either consumed by the owner or sold to outside parties.
- LO 1-7** Explain the rationale and reporting implications of fair-value accounting for investments otherwise accounted for by the equity method.



**LO 1-1**

Describe in general the various methods of accounting for an investment in equity shares of another company.

Generally accepted accounting principles (GAAP) recognize four different approaches to the financial reporting of investments in corporate equity securities:

1. Fair-value method.
2. Cost method for equity securities without readily determinable fair values.
3. Consolidation of financial statements.
4. Equity method.

The financial statement reporting for a particular investment depends primarily on the degree of influence that the investor (stockholder) has over the investee, a factor most often indicated by the relative size of ownership.<sup>1</sup> Because voting power typically accompanies ownership of equity shares, influence increases with the relative size of ownership. The resulting influence can be very little, a significant amount, or, in some cases, complete control.

### Fair-Value Method

In many instances, an investor possesses only a small percentage of an investee company's outstanding stock, perhaps only a few shares. Because of the limited level of ownership, the investor cannot expect to significantly affect the investee's operations or decision making. These shares are bought in anticipation of cash dividends or in appreciation of stock market values. Such investments are recorded at cost and periodically adjusted to fair value according to the Financial Accounting Standards Board (FASB) *Accounting Standards Codification* (ASC) Topic 321, "Investments—Equity Securities."

Fair value is defined by the ASC (Master Glossary) as the "price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date." For most investments in equity securities, quoted stock market prices represent fair values.

Because a full coverage of limited ownership investments in equity securities is presented in intermediate accounting textbooks, only the following basic principles are noted here:

- Initial investments in equity securities are recorded at cost and subsequently adjusted to fair value if fair value is readily determinable (typically by reference to market value); otherwise, the investment remains at cost.
- Changes in the fair values of equity securities during a reporting period are recognized as income.<sup>2</sup>
- Dividends declared on the equity securities are recognized as income.

The above procedures are followed for equity security investments (with readily determinable fair values) when the owner possesses neither significant influence nor control.

### Cost Method (Investments in Equity Securities without Readily Determinable Fair Values)

When the fair value of an investment in equity securities is not readily determinable, and the investment provides neither significant influence nor control, the investment may be measured at cost. Such investments sometimes can be found in ownership shares of firms that are not publicly traded or experience only infrequent trades.

<sup>1</sup>The relative size of ownership is most often the key factor in assessing one company's degree of influence over another. However, as discussed later in this chapter, other factors (e.g., contractual relationships between firms) can also provide influence or control over firms regardless of the percentage of shares owned.

<sup>2</sup>FASB Accounting Standards Update (ASU) No. 2016-01, Financial Instruments—Overall, requires equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income, unless fair values are not readily determinable. Thus, the previous available-for-sale category with fair value changes recorded in other comprehensive income will no longer be available. The ASU is effective for fiscal years beginning after December 15, 2017, with early adoption permitted.

Investments in equity securities that employ the cost method often continue to be reported at their original cost over time.<sup>3</sup> Income from cost method equity investments usually consists of the investor's share of dividends declared by the investee. However, despite its emphasis on cost measurements, GAAP allows for two fair value assessments that may affect cost method amounts reported on the balance sheet and the income statement.

- First, cost method equity investments periodically must be assessed for impairment to determine if the fair value of the investment is less than its carrying amount. The ASC allows a qualitative assessment to determine if impairment is likely.<sup>4</sup> Because the fair value of a cost method equity investment is not readily available (by definition), if impairment is deemed likely, an entity must estimate a fair value for the investment to measure the amount (if any) of the impairment loss.
- Second, ASC (321-10-35-2) allows for recognition of “observable price changes in orderly transactions for the identical or a similar investment of the same issuer.” Any unrealized holding gains (or losses) from these observable price changes are included in earnings with a corresponding adjustment to the investment account. So even if equity shares are only infrequently traded (and thus fair value is not readily determinable), such trades can provide a basis for financial statement recognition under the cost method for equity investments.

## Consolidation of Financial Statements

Many corporate investors acquire enough shares to gain actual control over an investee's operations. In financial accounting, such control may be achieved when a stockholder accumulates more than 50 percent of an organization's outstanding voting stock. At that point, rather than simply influencing the investee's decisions, the investor often can direct the entire decision-making process. A review of the financial statements of America's largest organizations indicates that legal control of one or more subsidiary companies is an almost universal practice. PepsiCo, Inc., as just one example, holds a majority interest in the voting stock of literally hundreds of corporations.

Investor control over an investee presents a special accounting challenge. Normally, when a majority of voting stock is held, the investor-investee relationship is so closely connected that the two corporations are viewed as a single entity for reporting purposes.<sup>5</sup> Hence, an entirely different set of accounting procedures is applicable. Control generally requires the consolidation of the accounting information produced by the individual companies. Thus, a single set of financial statements is created for external reporting purposes with all assets, liabilities, revenues, and expenses brought together. The various procedures applied within this consolidation process are examined in subsequent chapters of this textbook.

The FASB ASC Section 810-10-05 on variable interest entities expands the use of consolidated financial statements to include entities that are financially controlled through special contractual arrangements rather than through voting stock interests. Prior to the accounting requirements for variable interest entities, many firms (e.g., Enron) avoided consolidation of entities that they owned little or no voting stock in but otherwise controlled through special contracts. These entities were frequently referred to as “special purpose entities (SPEs)” and provided vehicles for some firms to keep large amounts of assets and liabilities off their consolidated financial statements. Accounting for these entities is discussed in Chapters 2 and 6.

<sup>3</sup> Dividends received in excess of earnings subsequent to the date of investment are considered returns of the investment and are recorded as reductions of cost of the investment.

<sup>4</sup> Impairment indicators include assessments of earnings performance, economic environment, going-concern ability, etc. If the qualitative assessment does not indicate impairment, no further testing is required. If an equity security without a readily determinable fair value is impaired, the investor recognizes the difference between the investment's fair value and carrying amount as an impairment loss in net income (ASC 321-10-35-3).

<sup>5</sup> As discussed in Chapter 2, ownership of a majority voting interest in an investee does not always lead to consolidated financial statements.



## Discussion Question

### DID THE COST METHOD INVITE EARNINGS MANIPULATION?

Prior to GAAP for equity method investments, firms used the cost method to account for their unconsolidated investments in common stock regardless of the presence of significant influence. Under the cost method, when the investee declares a dividend, the investor records “dividend income.” The investment account typically remains at its original cost—hence the term *cost method*.

Many firms’ compensation plans reward managers based on reported annual income. How might the use of the cost method of accounting for significant influence investments have resulted in unintended wealth transfers from owners to managers? Do the equity or fair-value methods provide similar incentives?

### Equity Method

Another investment relationship is appropriately accounted for using the equity method. In many investments, although control is not achieved, the degree of ownership indicates the ability of the investor to exercise *significant influence* over the investee. Recall Coca-Cola’s 28 percent investment in Coca-Cola FEMSA’s voting stock. Through its ownership, Coca-Cola can undoubtedly influence Coca-Cola FEMSA’s decisions and operations.

To provide objective reporting for investments with significant influence, FASB ASC Topic 323, “Investments—Equity Method and Joint Ventures,” describes the use of the equity method. The equity method employs the accrual basis for recognizing the investor’s share of investee income. Accordingly, the investor recognizes income as it is earned by the investee. As noted in FASB ASC (para. 323-10-05-5), because of its significant influence over the investee, the investor

has a degree of responsibility for the return on its investment and it is appropriate to include in the results of operations of the investor its share of earnings or losses of the investee.

Furthermore, under the equity method, the investor records its share of investee dividends declared as a decrease in the investment account, not as income.

In today’s business world, many corporations hold significant ownership interests in other companies without having actual control. The Coca-Cola Company, for example, owns between 20 and 50 percent of several bottling companies, both domestic and international. Many other investments represent joint ventures in which two or more companies form a new enterprise to carry out a specified operating purpose. For example, Ford Motor Company and Sollers formed FordSollers, a passenger and commercial vehicle manufacturing, import, and distribution company in Russia. Each partner owns 50 percent of the joint venture. For each of these investments, the investors do not possess absolute control because they hold less than a majority of the voting stock. Thus, the preparation of consolidated financial statements is inappropriate. However, the large percentage of ownership indicates that each investor possesses some ability to affect the investee’s decision-making process.

Finally, as discussed at the end of this chapter, firms may elect a fair-value option in their financial reporting for certain financial assets and financial liabilities. Among the qualifying financial assets for fair-value reporting are significant influence investments otherwise accounted for by the equity method.

## International Accounting Standard 28—Investments in Associates

The International Accounting Standards Board (IASB), similar to the FASB, recognizes the need to take into account the significant influence that can occur when one firm holds a certain amount of voting shares of another. The IASB defines significant influence as the power to participate in the financial and operating policy decisions of the investee, but it is not control or joint control over those policies. The following describes the basics of the equity method in International Accounting Standard (IAS) 28:<sup>6</sup>

If an investor holds, directly or indirectly (e.g., through subsidiaries), 20 per cent or more of the voting power of the investee, it is presumed that the investor has significant influence, unless it can be clearly demonstrated that this is not the case. Conversely, if the investor holds, directly or indirectly (e.g., through subsidiaries), less than 20 per cent of the voting power of the investee, it is presumed that the investor does not have significant influence, unless such influence can be clearly demonstrated. A substantial or majority ownership by another investor does not necessarily preclude an investor from having significant influence.

Under the equity method, the investment in an associate is initially recognised at cost and the carrying amount is increased or decreased to recognise the investor's share of the profit or loss of the investee after the date of acquisition. The investor's share of the profit or loss of the investee is recognised in the investor's profit or loss. Distributions received from an investee reduce the carrying amount of the investment.

As seen from the above excerpt from *IAS 28*, the equity method concepts and applications described are virtually identical to those prescribed by the FASB ASC.

### Application of the Equity Method

An understanding of the equity method is best gained by initially examining the FASB's treatment of two questions:

1. What factors indicate when the equity method should be used for an investment in another entity's ownership securities?
2. How should the investor report this investment and the income generated by it to reflect the relationship between the two entities?

#### Criteria for Utilizing the Equity Method

The rationale underlying the equity method is that an investor begins to gain the ability to influence the decision-making process of an investee as the level of ownership rises. According to FASB ASC Topic 323 on equity method investments, achieving this "ability to exercise significant influence over operating and financial policies of an investee even though the investor holds 50 percent or less of the common stock" is the sole criterion for requiring application of the equity method [FASB ASC (para. 323-10-15-3)].

Clearly, a term such as *the ability to exercise significant influence* is nebulous and subject to a variety of judgments and interpretations in practice. At what point does the acquisition of one additional share of stock give an owner the ability to exercise significant influence? This decision becomes even more difficult in that only the *ability* to exercise significant influence need be present. There is no requirement that any actual influence must ever be applied.

FASB ASC Topic 323 provides guidance to the accountant by listing several conditions that indicate the presence of this degree of influence:

- Investor representation on the board of directors of the investee.
- Investor participation in the policy-making process of the investee.
- Material intra-entity transactions.

#### LO 1-2

Identify the sole criterion for applying the equity method of accounting and guidance in assessing whether the criterion is met.

<sup>6</sup>International Accounting Standards Board, IAS 28, "Investments in Associates," Technical Summary ([www.iasb.org](http://www.iasb.org)).

- Interchange of managerial personnel.
- Technological dependency.
- Extent of ownership by the investor in relation to the size and concentration of other ownership interests in the investee.

No single one of these guides should be used exclusively in assessing the applicability of the equity method. Instead, all are evaluated together to determine the presence or absence of the sole criterion: the ability to exercise significant influence over the investee.

These guidelines alone do not eliminate the leeway available to each investor when deciding whether the use of the equity method is appropriate. To provide a degree of consistency in applying this standard, the FASB provides a general ownership test: *If an investor holds between 20 and 50 percent of the voting stock of the investee, significant influence is normally assumed and the equity method is applied.*

An investment (direct or indirect) of 20 percent or more of the voting stock of an investee shall lead to a presumption that in the absence of predominant evidence to the contrary an investor has the ability to exercise significant influence over an investee. Conversely, an investment of less than 20 percent of the voting stock of an investee shall lead to a presumption that an investor does not have the ability to exercise significant influence unless such ability can be demonstrated.<sup>7</sup>

### ***Limitations of Equity Method Applicability***

At first, the 20 to 50 percent rule may appear to be an arbitrarily chosen boundary range established merely to provide a consistent method of reporting for investments. However, the essential criterion is still the ability to significantly influence (but not control) the investee, rather than 20 to 50 percent ownership. If the absence of this ability is proven (or control exists), the equity method should not be applied regardless of the percentage of shares held.

For example, the equity method is not appropriate for investments that demonstrate any of the following characteristics regardless of the investor's degree of ownership:<sup>8</sup>

- An agreement exists between investor and investee by which the investor surrenders significant rights as a shareholder.
- A concentration of ownership operates the investee without regard for the views of the investor.
- The investor attempts but fails to obtain representation on the investee's board of directors.

In each of these situations, because the investor is unable to exercise significant influence over its investee, the equity method is not applied.

Alternatively, if an entity can exercise *control* over its investee, regardless of its ownership level, consolidation (rather than the equity method) is appropriate. FASB ASC (para. 810-10-05-8) limits the use of the equity method by expanding the definition of a controlling financial interest and addresses situations in which financial control exists absent majority ownership interest. In these situations, control is achieved through contractual and other arrangements called *variable interests*.

To illustrate, one firm may create a separate legal entity in which it holds less than 50 percent of the voting interests but nonetheless controls that entity through governance document provisions and/or contracts that specify decision-making power and the distribution of profits and losses. Entities controlled in this fashion are typically designated as *variable interest entities*, and their sponsoring firm may be required to include them in consolidated financial reports despite the fact that ownership is less than 50 percent. For example, the Walt Disney Company reclassified several former equity method investees as variable interest entities and now consolidates these investments.<sup>9</sup>

<sup>7</sup> FASB ASC (para. 323-10-15-8).

<sup>8</sup> FASB ASC (para. 323-10-15-10). This paragraph deals specifically with limits to using the equity method for investments in which the owner holds 20 to 50 percent of the outstanding shares.

<sup>9</sup> Chapters 2 and 6 provide further discussions of variable interest entities.

### Extensions of Equity Method Applicability

For some investments that either fall short of or exceed 20 to 50 percent ownership, the equity method is nonetheless appropriately used for financial reporting. As an example, The Coca-Cola Company acquired a 16.7 percent investment in Monster Beverage Corporation in 2015. Coca-Cola notes in its annual 2015 financial statements that “Based on our equity ownership percentage, the significance that our expanded distribution and coordination agreements have on Monster’s operations, and our representation on Monster’s Board of Directors, the Company is accounting for its interest in Monster as an equity method investment.”

Conditions can also exist where the equity method is appropriate despite a majority ownership interest. In some instances, rights granted to noncontrolling shareholders restrict the powers of the majority shareholder. Such rights may include approval over compensation, hiring, termination, and other critical operating and capital spending decisions of an entity. If the noncontrolling rights are so restrictive as to call into question whether control rests with the majority owner, the equity method is employed for financial reporting rather than consolidation. For example, prior to its acquisition of BellSouth, AT&T, Inc., stated in its financial reports “we account for our 60 percent economic investment in Cingular under the equity method of accounting because we share control equally with our 40 percent partner BellSouth.”

To summarize, the following table indicates the method of accounting that is typically applicable to various stock investments:

Criterion	Normal Ownership Level	Applicable Accounting Method
Inability to significantly influence	Less than 20%	Fair value or cost method
Ability to significantly influence	20%–50%	Equity method or fair value
Control through voting interests	More than 50%	Consolidated financial statements
Control through variable interests (governance documents, contracts)	Primary beneficiary status (no ownership required)	Consolidated financial statements

#### LO 1-3

Describe the financial reporting for equity method investments and prepare basic equity method journal entries for an investor.

### Accounting for an Investment—The Equity Method

Now that the criteria leading to the application of the equity method have been identified, a review of its reporting procedures is appropriate. Knowledge of this accounting process is especially important to users of the investor’s financial statements because the equity method affects both the timing of income recognition as well as the carrying amount of the investment account.

*In applying the equity method, the accounting objective is to report the investment and investment income to reflect the close relationship between the investor and investee. After recording the cost of the acquisition, two equity method entries periodically record the investment’s impact:*

1. The investor’s investment account *increases as the investee recognizes and reports income*. Also, the investor recognizes investment income using the accrual method—that is, in the same period as reported by the investee in its financial statements. If an investee reports income of \$100,000, a 30 percent owner should immediately increase its own income by \$30,000. This earnings accrual reflects the essence of the equity method by emphasizing the connection between the two companies; as the owners’ equity of the investee increases through the earnings process, the investment account also increases. Although the investor initially records the acquisition at cost, upward adjustments in the asset balance are recorded as soon as the investee makes a profit. The investor reduces the investment account if the investee reports a loss.

2. The investor decreases its investment account for its share of investee cash dividends. When the investee declares a cash dividend, its owners' equity decreases. The investor mirrors this change by recording a reduction in the carrying amount of the investment rather than recognizing the dividend as revenue. Furthermore, because the investor recognizes income when the investee recognizes it, double counting would occur if the investor also recorded its share of subsequent investee dividends as revenue. Importantly, a cash dividend declaration is not an appropriate point for income recognition. As stated in FASB ASC (para. 323-10-35-4),

Under the equity method, an investor shall recognize its share of the earnings or losses of an investee in the periods for which they are reported by the investee in its financial statements rather than in the period in which an investee declares a dividend.

Because the investor can influence their timing, investee dividends cannot objectively measure income generated from the investment.

<b>Application of Equity Method</b>	
<b>Investee Event</b>	<b>Investor Accounting</b>
Income is recognized.	Proportionate share of income is recognized.
Dividends are declared.	Investor's share of investee dividends reduce the investment account.

Application of the equity method thus causes the investment account on the investor's balance sheet to vary directly with changes in the investee's equity.

In contrast, the fair-value method reports investments at fair value if it is readily determinable. Also, income is recognized both from changes in fair value and upon receipt of dividends. Consequently, financial reports can vary depending on whether the equity method or fair-value method is appropriate.

To illustrate, assume that Big Company owns a 20 percent interest in Little Company purchased on January 1, 2017, for \$210,000. Little then reports net income of \$200,000, \$300,000, and \$400,000, respectively, in the next three years while declaring dividends of \$50,000, \$100,000, and \$200,000. The fair values of Big's investment in Little, as determined by market prices, were \$245,000, \$282,000, and \$325,000 at the end of 2017, 2018, and 2019, respectively.

Exhibit 1.1 compares the accounting for Big's investment in Little across the two methods. The fair-value method carries the investment at its market values, presumed to be readily available in this example. Income is recognized both through changes in Little's fair value and as Little declares dividends.

In contrast, under the equity method, Big recognizes income as it is recorded by Little. As shown in Exhibit 1.1, Big recognizes \$180,000 in income over the three years, and the

**EXHIBIT 1.1** Comparison of Fair-Value Method (ASC 321) and Equity Method (ASC 323)

Year	Income of Little Company	Dividends Declared by Little Company	Accounting by Big Company When Influence Is Not Significant (fair-value method)			Accounting by Big Company When Influence Is Significant (equity method)	
			Dividend Income	Fair-Value Change to Income	Carrying Amount of Investment	Equity in Investee Income*	Carrying Amount of Investment†
2017	\$200,000	\$ 50,000	\$10,000	\$ 35,000	\$ 245,000	\$ 40,000	\$240,000
2018	300,000	100,000	20,000	37,000	282,000	60,000	280,000
2019	400,000	200,000	40,000	43,000	325,000	80,000	320,000
Total income recognized			<u>\$70,000</u>	<u>\$115,000</u>		<u>\$180,000</u>	

\*Equity in investee income is 20 percent of the current year income reported by Little Company.

†The carrying amount of an investment under the equity method is the original cost plus income recognized less dividends. For 2017, as an example, the \$240,000 reported balance is the \$210,000 cost plus \$40,000 equity income less \$10,000 in dividends.

carrying amount of the investment is adjusted upward to \$320,000. Dividends from Little are not an appropriate measure of income because of the assumed significant influence over the investee. Big's ability to influence Little's decisions applies to the timing of dividend distributions. Therefore, dividends from Little do not objectively measure Big's income from its investment in Little. As Little records income, however, under the equity method Big recognizes its share (20 percent) of the income and increases the investment account. Thus the equity method reflects the accrual model: The investor recognizes income as it is recognized by the investee, not when the investee declares a cash dividend.

Exhibit 1.1 shows that the carrying amount of the investment fluctuates each year under the equity method. This recording parallels the changes occurring in the net asset figures reported by the investee. If the owners' equity of the investee rises through income, an increase is made in the investment account; decreases such as losses and dividends cause reductions to be recorded. Thus, the equity method conveys information that describes the relationship created by the investor's ability to significantly influence the investee.

## Equity Method Accounting Procedures

Once guidelines for the application of the equity method have been established, the mechanical process necessary for recording basic transactions is straightforward. The investor accrues its percentage of the earnings reported by the investee each period. Investee dividend declarations reduce the investment balance to reflect the decrease in the investee's book value.<sup>10</sup>

Referring again to the information presented in Exhibit 1.1, Little Company reported a net income of \$200,000 during 2017 and declared and paid cash dividends of \$50,000. These figures indicate that Little's net assets have increased by \$150,000 during the year. Therefore, in its financial records, Big Company records the following journal entries to apply the equity method:

Investment in Little Company . . . . .	40,000	
Equity in Investee Income . . . . .		40,000
To accrue earnings of a 20 percent owned investee (\$200,000 × 20%).		
Dividend Receivable . . . . .	10,000	
Investment in Little Company . . . . .		10,000
To record a dividend declaration by Little Company (\$50,000 × 20%).		
Cash . . . . .	10,000	
Dividend Receivable . . . . .		10,000
To record collection of the cash dividend.		

In the first entry, Big accrues income based on the investee's reported earnings. The second entry reflects the dividend declaration and the related reduction in Little's net assets followed then by the cash collection. The \$30,000 net increment recorded here in Big's investment account (\$40,000 – \$10,000) represents 20 percent of the \$150,000 increase in Little's book value that occurred during the year.

### Excess of Investment Cost over Book Value Acquired

After the basic concepts and procedures of the equity method are mastered, more complex accounting issues can be introduced. Surely one of the most common problems encountered in applying the equity method occurs when the investment cost exceeds the proportionate book value of the investee company.<sup>11</sup>

#### LO 1-4

Allocate the cost of an equity method investment and compute amortization expense to match revenues recognized from the investment to the excess of investor cost over investee book value.

<sup>10</sup> In this text, the terms *book value* and *carrying amount* are used synonymously. Each refers to either an account balance, an amount appearing in a financial statement, or the amount of net assets (stockholders' equity) of a business entity.

<sup>11</sup> Although encountered less frequently, investments can be purchased at a cost that is less than the underlying book value of the investee. Accounting for this possibility is explored in later chapters.





## Discussion Question

### DOES THE EQUITY METHOD REALLY APPLY HERE?

Abraham, Inc., a New Jersey corporation, operates 57 bakeries throughout the northeastern section of the United States. In the past, its founder, James Abraham, owned all the company's outstanding common stock. However, during the early part of this year, the corporation suffered a severe cash flow problem brought on by rapid expansion. To avoid bankruptcy, Abraham sought additional investment capital from a friend, Dennis Bostitch, who owns Highland Laboratories. Subsequently, Highland paid \$700,000 cash to Abraham, Inc., to acquire enough newly issued shares of common stock for a one-third ownership interest.

At the end of this year, the accountants for Highland Laboratories are discussing the proper method of reporting this investment. One argues for maintaining the asset at its original cost: "This purchase is no more than a loan to bail out the bakeries. Mr. Abraham will continue to run the organization with little or no attention paid to us. After all, what does anyone in our company know about baking bread? I would be surprised if Abraham does not reacquire these shares as soon as the bakery business is profitable again."

One of the other accountants disagrees, stating that the equity method is appropriate. "I realize that our company is not capable of running a bakery. However, the official rules state that we must have only the *ability* to exert significant influence. With one-third of the common stock in our possession, we certainly have that ability. Whether we use it or not, this ability means that we are required to apply the equity method."

How should Highland Laboratories account for its investment in Abraham, Inc.?

Unless the investor acquires its ownership at the time of the investee's conception, paying an amount equal to book value is rare. A number of possible reasons exist for a difference between the book value of a company and its fair value as reflected by the price of its stock. A company's fair value at any time is based on a multitude of factors such as company profitability, the introduction of a new product, expected dividend payments, projected operating results, and general economic conditions. Furthermore, stock prices are based, at least partially, on the perceived worth of a company's net assets, amounts that often vary dramatically from underlying book values. Many asset and liability accounts shown on a balance sheet tend to measure historical costs rather than current value. In addition, these reported figures are affected by the specific accounting methods adopted by a company. Inventory costing methods such as LIFO and FIFO, for example, obviously lead to different book values as does each of the acceptable depreciation methods.

If an investment is acquired at a price in excess of the investee's book value, logical reasons should explain the additional cost incurred by the investor. The source of the excess of cost over book value is important. Income recognition requires matching the income generated from the investment with its cost. Excess costs allocated to fixed assets will likely be expensed over longer periods than costs allocated to inventory. In applying the equity method, the cause of such an excess payment can be divided into two general categories:

1. Specifically identifiable investee assets and liabilities can have fair values that differ from their present book values. The excess payment can be identified directly with individual accounts such as inventory, equipment, franchise rights, and so on.
2. The investor may pay an extra amount because it expects future benefits to accrue from the investment. Such benefits could be anticipated as the result of factors such as the estimated profitability of the investee or the expected relationship between the two companies. When

the additional payment cannot be attributed to any specifically identifiable investee asset or liability, the investor recognizes an intangible asset called *goodwill*. For example, eBay Inc. once disclosed in its annual report that goodwill related to its equity method investments was approximately \$27.4 million.

As an illustration, assume that Grande Company is negotiating the acquisition of 30 percent of the outstanding shares of Chico Company. Chico's balance sheet reports assets of \$500,000 and liabilities of \$300,000 for a net book value of \$200,000. After investigation, Grande determines that Chico's equipment is undervalued in the company's financial records by \$60,000. One of its patents is also undervalued, but only by \$40,000. By adding these valuation adjustments to Chico's book value, Grande arrives at an estimated \$300,000 worth for the company's net assets. Based on this computation, Grande offers \$90,000 for a 30 percent share of the investee's outstanding stock.

Book value of Chico Company [assets minus liabilities (or stockholders' equity)]	\$200,000
Undervaluation of equipment	60,000
Undervaluation of patent	40,000
Value of net assets	<u>\$300,000</u>
Percentage acquired	30%
Purchase price	<u><u>\$ 90,000</u></u>

Although Grande's purchase price is in excess of the proportionate share of Chico's book value, this additional amount can be attributed to two specific accounts: Equipment and Patents. No part of the extra payment is traceable to any other projected future benefit. Thus, the cost of Grande's investment is allocated as follows:

Payment by investor	\$90,000
Percentage of book value acquired (\$200,000 × 30%)	<u>60,000</u>
Payment in excess of book value	30,000
Excess payment identified with specific assets:	
Equipment (\$60,000 undervaluation × 30%)	\$18,000
Patent (\$40,000 undervaluation × 30%)	<u>12,000</u>
Excess payment not identified with specific assets—goodwill	<u><u>\$ -0-</u></u>

Of the \$30,000 excess payment made by the investor, \$18,000 is assigned to the equipment whereas \$12,000 is traced to a patent and its undervaluation. No amount of the purchase price is allocated to goodwill.

To take this example one step further, assume that Chico's owners reject Grande's proposed \$90,000 price. They believe that the value of the company as a going concern is higher than the fair value of its net assets. Because the management of Grande believes that valuable synergies will be created through this purchase, the bid price is raised to \$125,000 and accepted. This new acquisition price is allocated as follows:

Payment by investor	\$125,000
Percentage of book value acquired (\$200,000 × 30%)	<u>60,000</u>
Payment in excess of book value	65,000
Excess payment identified with specific assets:	
Equipment (\$60,000 undervaluation × 30%)	\$18,000
Patent (\$40,000 undervaluation × 30%)	<u>12,000</u>
Excess payment not identified with specific assets—goodwill	<u><u>\$ 35,000</u></u>

As this example indicates, *any extra payment that cannot be attributed to a specific asset or liability is assigned to the intangible asset goodwill*. Although the actual purchase price can be computed by a number of different techniques or simply result from negotiations, goodwill is always the excess amount not allocated to identifiable asset or liability accounts.

Under the equity method, the investor enters total cost in a single investment account regardless of the allocation of any excess purchase price. If all parties accept Grande's bid of \$125,000, the acquisition is initially recorded at that amount despite the internal assignments made to equipment, patents and goodwill. The entire \$125,000 was paid to acquire this investment, and it is recorded as such.

### The Amortization Process

In the above transaction, the extra payment over Grande's book value was made for specific identifiable assets (equipment and patents), and goodwill. Even though the actual dollar amounts are recorded within the investment account, a definite historical cost can be attributed to these assets. With a cost to the investor as well as a specified life, the payment relating to each asset (except land, goodwill, and other indefinite life intangibles) should be amortized over an appropriate time period.<sup>12</sup> However, certain intangibles such as goodwill, are considered to have indefinite lives and thus are not subject to amortization.<sup>13</sup>

Goodwill associated with equity method investments, for the most part, is measured in the same manner as goodwill arising from a business combination (see Chapters 2 through 7). One difference is that goodwill arising from a business combination is subject to annual impairment reviews, whereas goodwill implicit in equity method investments is not. Equity method investments are tested in their entirety for permanent declines in value.<sup>14</sup>

To show the amortization process for definite-lived assets, we continue with our Grande and Chico example. Assume, that the equipment has a 10-year remaining life, the patent a 5-year life, and the goodwill an indefinite life. If the straight-line method is used with no salvage value, *the investor's cost* should be amortized initially as follows:<sup>15</sup>

Account	Cost Assigned	Remaining Useful Life	Annual Amortization
Equipment	\$18,000	10 years	\$1,800
Patent	12,000	5 years	2,400
Goodwill	35,000	Indefinite	—0—
Annual expense (for five years until patent cost is completely amortized)			<u>\$4,200</u>

In recording this annual expense, Grande reduces the investment balance in the same way it would amortize the cost of any other asset that had a limited life. Therefore, at the end of the first year of holding the investment, the investor records the following journal entry under the equity method:

Equity in Investee Income	4,200	
Investment in Chico Company		4,200
To record amortization of excess payment allocated to equipment and patent.		

<sup>12</sup> A 2015 FASB *Proposed Accounting Standards Update*, "Simplifying the Equity Method of Accounting," recommended the elimination of the identification and amortization of excess cost over acquired investee book value. However, at a December 2015 meeting, the FASB did not affirm the proposed elimination of current accounting treatment for the excess cost over acquired investee book value and directed its staff to research additional alternatives for improving the equity method.

<sup>13</sup> Other intangibles (such as certain licenses, trademarks, etc.) also can be considered to have indefinite lives and thus are not amortized unless and until their lives are determined to be limited. Further discussion of intangibles with indefinite lives appears in Chapter 3.

<sup>14</sup> Because equity method goodwill is not separable from the related investment, goodwill should not be separately tested for impairment. See also FASB ASC para. 350-20-35-59.

<sup>15</sup> Unless otherwise stated, all amortization computations are based on the straight-line method with no salvage value.

Because this amortization relates to investee assets, the investor does not establish a specific expense account. Instead, as in the previous entry, the expense is recognized by decreasing the the investor’s equity income accruing from the investee company.

To illustrate this entire process, assume that Tall Company purchases 20 percent of Short Company for \$200,000. Tall can exercise significant influence over the investee; thus, the equity method is appropriately applied. The acquisition is made on January 1, 2017, when Short holds net assets with a book value of \$700,000. Tall believes that the investee’s building (10-year remaining life) is undervalued within the financial records by \$80,000 and equipment with a 5-year remaining life is undervalued by \$120,000. Any goodwill established by this purchase is considered to have an indefinite life. During 2017, Short reports a net income of \$150,000 and at year-end declares a cash dividend of \$60,000.

Tall’s three basic journal entries for 2017 pose little problem:

<i>January 1, 2017</i>	
Investment in Short Company . . . . .	200,000
Cash . . . . .	200,000
To record acquisition of 20 percent of the outstanding shares of Short Company.	

<i>December 31, 2017</i>	
Investment in Short Company . . . . .	30,000
Equity in Investee Income . . . . .	30,000
To accrue 20 percent of the 2017 reported earnings of investee (\$150,000 × 20%).	
Dividend Receivable . . . . .	12,000
Investment in Short Company . . . . .	12,000
To record a dividend declaration by Short Company (\$60,000 × 20%).	

An allocation of Tall’s \$200,000 purchase price must be made to determine whether an additional adjusting entry is necessary to recognize annual amortization associated with the extra payment:

Payment by investor . . . . .	\$200,000
Percentage of 1/1/17 book value (\$700,000 × 20%) . . . . .	<u>140,000</u>
Payment in excess of book value . . . . .	60,000
Excess payment identified with specific assets:	
Building (\$80,000 × 20%) . . . . .	\$16,000
Equipment (\$120,000 × 20%) . . . . .	<u>24,000</u>
	<u>40,000</u>
Excess payment not identified with specific assets—goodwill . . . . .	<u>\$ 20,000</u>

As can be seen, \$16,000 of the purchase price is assigned to a building and \$24,000 to equipment, with the remaining \$20,000 attributed to goodwill. For each asset with a definite useful life, periodic amortization is required.

Asset	Attributed Cost	Remaining Useful Life	Annual Amortization
Building	\$16,000	10 years	\$1,600
Equipment	24,000	5 years	4,800
Goodwill	20,000	Indefinite	<u>—0—</u>
Total for 2017			<u>\$6,400</u>

At the end of 2017, Tall must also record the following adjustment in connection with these cost allocations:

Equity in Investee Income . . . . .	6,400	
Investment in Short Company . . . . .		6,400
To record 2017 amortization of excess payment allocated to building (\$1,600) and equipment (\$4,800).		

Although these entries are shown separately here for better explanation, Tall would probably net the income accrual for the year (\$30,000) and the amortization (\$6,400) to create a single entry increasing the investment and recognizing equity income of \$23,600. Thus, the first-year return on Tall Company's beginning investment balance (defined as equity earnings/beginning investment balance) is equal to 11.80 percent (\$23,600/\$200,000).

## Equity Method—Additional Issues

The previous sections on equity income accruals and excess cost amortizations provide the basics for applying the equity method. However, several other non-routine issues can arise during the life of an equity method investment. More specifically, special procedures are required in accounting for each of the following:

1. Reporting a change to the equity method.
2. Reporting investee income from sources other than continuing operations.
3. Reporting investee losses.
4. Reporting the sale of an equity investment.

### Reporting a Change to the Equity Method

In many instances, an investor's ability to significantly influence an investee is not achieved through a single stock acquisition. The investor could possess only a minor ownership for some years before purchasing enough additional shares to require conversion to the equity method. Before the investor achieves significant influence, any investment should be reported by either the fair-value method, or if the investment fair value is not readily determinable, the cost method. After the investment reaches the point at which the equity method becomes applicable, a technical question arises about the appropriate means of changing from one method to the other.<sup>16</sup>

FASB ASC (para. 323-10-35-33) addresses the issue of how to account for an investment in the common stock of an investee that, through additional stock acquisition or other means (e.g., increased degree of influence, reduction of investee's outstanding stock, etc.) becomes qualified for use of the equity method.

If an investment qualifies for use of the equity method . . . , the investor shall add the cost of acquiring the additional interest in the investee (if any) to the current basis of the investor's previously held interest and adopt the equity method of accounting as of the date the investment becomes qualified for equity method accounting.

Thus, the FASB requires a prospective approach by requiring that the cost of any new share acquired simply be added to the current investment carrying amount. By mandating prospective treatment, the FASB avoids the complexity of restating prior period amounts.<sup>17</sup>

To illustrate, assume that on January 1, 2017, Alpha Company exchanges \$84,000 for a 10 percent ownership in Bailey Company. At the time of the transaction, officials of Alpha do not believe that their company gained the ability to exert significant influence over Bailey. Alpha properly accounts for the investment using the fair-value method and recognizes in net

#### LO 1-5a

Understand the financial reporting consequences for a change to the equity method.

<sup>16</sup> A switch to the equity method also can be required if the investee purchases a portion of its own shares as treasury stock. This transaction can increase the investor's percentage of outstanding stock.

<sup>17</sup> Prior to 2017, the FASB required a retrospective adjustment to an investor's previous ownership shares upon achieving significant influence over an investee.

income its 10 percent ownership share of changes in Bailey's fair value. The fair and book values of Bailey's common stock appear below:

Date	Fair Value	Book Value
January 1, 2017	\$840,000	\$670,000
December 31, 2017	890,000	715,000

At the end of 2017, Alpha recognizes the increase in its 10 percent share of Bailey's fair value and increases its investment account to \$89,000. Because the fair-value method is used to account for the investment, Bailey's \$670,000 book value balance at January 1, 2017 does not affect Alpha's accounting.

Then on January 1, 2018, Alpha purchases an additional 30 percent of Bailey's outstanding voting stock for \$267,000 and achieves the ability to significantly influence the investee's decision making. Alpha will now apply the equity method to account for its investment in Bailey. To bring about the prospective change to the equity method, Alpha prepares the following journal entry on January 1, 2018:

Investment in Bailey Company .....	267,000	
Cash .....		267,000
To record an additional 30 percent investment in Bailey Company		

On January 1, 2018, Bailey's carrying amounts for its assets and liabilities equaled their fair values except for a patent, which was undervalued by \$175,000 and had a 10-year remaining useful life.

To determine the proper amount of excess fair value amortization required in applying the equity method, Alpha prepares an investment allocation schedule. The fair value of Alpha's total (40 percent) investment serves as the valuation basis for the allocation schedule as of January 1, 2018, the date Alpha achieves the ability to exercise significant influence over Bailey. Below is the January 1, 2018 investment allocation schedule:

**Investment Fair Value Allocation Schedule**  
**Investment in Bailey Company**  
**January 1, 2018**

Current fair value of initial 10 percent ownership of Bailey	\$ 89,000
Payment for additional 30 percent investment in Bailey	267,000
Total fair value of 40 percent investment in Bailey	<u>\$356,000</u>
Alpha's share of Bailey's book value (40% x \$715,000)	286,000
Investment fair value in excess of Bailey's book value	<u>\$ 70,000</u>
Excess fair value attributable to Bailey's patent (40% x \$175,000)	<u>\$ 70,000</u>
	-0-

We next assume that Bailey reports net income of \$130,000 and declares and pays a \$50,000 dividend at the end of 2018. Accordingly, Alpha applies the equity method and records the following three journal entries at the end of 2018:

Investment in Bailey Company .....	45,000	
Equity in Investee Income .....		45,000
To accrue 40 percent of the year 2018 income reported by Bailey Company (\$130,000 x 40%) – \$7,000 excess patent amortization (10-year remaining life).		
Dividend Receivable .....	20,000	
Investment in Bailey Company .....		20,000
To record the 2018 dividend declaration by Bailey Company (\$50,000 x 40%).		
Cash .....	20,000	
Dividend Receivable .....		20,000
To record collection of the cash dividend.		

**LO 1-5b**

Understand the financial reporting consequences for investee's other comprehensive income.

## Reporting Investee's Other Comprehensive Income and Irregular Items

In many cases, reported net income and dividends sufficiently capture changes in an investee's owners' equity. By recording its share of investee income and dividends, an investor company typically ensures its investment account reflects its share of the underlying investee equity. However, when an investee company's activities require recognition of other comprehensive income (OCI), its owners' equity (and net assets) will reflect changes not captured in its reported net income.<sup>18</sup>

Equity method accounting requires that the investor record its share of investee OCI which then is included in its balance sheet as Accumulated Other Comprehensive Income (AOCI). As noted by The Coca-Cola Company in its 2014 annual 10-K report,

AOCI attributable to shareowners of The Coca-Cola Company is separately presented on our consolidated balance sheets as a component of The Coca-Cola Company's shareowners' equity, which also includes our proportionate share of equity method investees' AOCI.

Included in AOCI are items such as accumulated derivative net gains and losses, foreign currency translation adjustments, and certain pension adjustments.

To examine this issue, assume that Charles Company applies the equity method in accounting for its 30 percent investment in the voting stock of Norris Company. No excess amortization resulted from this investment. In 2017, Norris reports net income of \$500,000. Norris also reports \$80,000 in OCI from pension and other postretirement adjustments. Charles Company accrues earnings of \$150,000 based on 30 percent of the \$500,000 net figure. However, for proper financial reporting, Charles must recognize an increase in its Investment in Norris account for its 30 percent share of its investee's OCI. This treatment is intended, once again, to mirror the close relationship between the two companies.

The journal entry by Charles Company to record its equity interest in the income and OCI of Norris follows:

Investment in Norris Company . . . . .	174,000	
Equity in Investee Income . . . . .		150,000
Other Comprehensive Income of Investee . . . . .		24,000
To accrue the investee's operating income and other comprehensive income from equity investment.		

OCI thus represents a source of change in investee company net assets that is recognized under the equity method. In the above example, Charles Company includes \$24,000 of other comprehensive income in its balance sheet AOCI total.

Other equity method recognition issues arise for irregular items traditionally included within net income. For example, an investee may report income (loss) from discontinued operations as components of its current net income. In such cases, the equity method requires the investor to record and report its share of these items in recognizing equity earnings of the investee.

## Reporting Investee Losses

Although most of the previous illustrations are based on the recording of profits, accounting for losses incurred by the investee is handled in a similar manner. The investor recognizes the appropriate percentage of each loss and reduces the carrying amount of the investment account. Even though these procedures are consistent with the concept of the equity method, they fail to take into account all possible loss situations.

### *Impairments of Equity Method Investments*

Investments can suffer permanent losses in fair value that are not evident through equity method accounting. Such declines can be caused by the loss of major customers, changes

<sup>18</sup> OCI is defined as revenues, expenses, gains, and losses that under generally accepted accounting principles are included in comprehensive income but excluded from net income. OCI is accumulated and reported in stockholders' equity.

**LO 1-5c**

Understand the financial reporting consequences for investee losses.

in economic conditions, loss of a significant patent or other legal right, damage to the company's reputation, and the like. Permanent reductions in fair value resulting from such adverse events might not be reported immediately by the investor through the normal equity entries discussed previously. The FASB ASC (para. 323-10-35-32) provides the following guidance:

A loss in value of an investment which is other than a temporary decline shall be recognized. Evidence of a loss in value might include, but would not necessarily be limited to, absence of an ability to recover the carrying amount of the investment or inability of the investee to sustain an earnings capacity that would justify the carrying amount of the investment.

Thus, when a permanent decline in an equity method investment's value occurs, the investor must recognize an impairment loss and reduce the asset to fair value.

However, this loss must be permanent before such recognition becomes necessary. Under the equity method, a temporary drop in the fair value of an investment is simply ignored.

Navistar International Corporation, for example, noted the following in its 2015 annual report:

We assess the potential impairment of our equity method investments and determine fair value based on valuation methodologies, as appropriate, including the present value of estimated future cash flows, estimates of sales proceeds, and market multiples. If an investment is determined to be impaired and the decline in value is other than temporary, we record an appropriate write-down.

### ***Investment Reduced to Zero***

Through the recognition of reported losses as well as any permanent drops in fair value, the investment account can eventually be reduced to a zero balance. This condition is most likely to occur if the investee has suffered extreme losses or if the original purchase was made at a low, bargain price. Regardless of the reason, the carrying amount of the investment account is sometimes eliminated in total.

When an investment account is reduced to zero, the investor should discontinue using the equity method rather than establish a negative balance. The investment retains a zero balance until subsequent investee profits eliminate all unrecognized losses. Once the original cost of the investment has been eliminated, no additional losses can accrue to the investor (since the entire cost has been written off).

For example, Sirius XM Holdings Corporation explains in its 2015 financial statements that

... As of December 31, 2015, we had \$840 (thousand) in losses related to our investment in Sirius XM Canada that we had not recorded in our consolidated financial statements since our investment balance is zero. Future equity income will be offset by these losses prior to recording equity income in our results.

#### **LO 1-5d**

Understand the financial reporting consequences for sales of equity method investments.

### **Reporting the Sale of an Equity Investment**

At any time, the investor can choose to sell part or all of its holdings in the investee company. If a sale occurs, the equity method continues to be applied until the transaction date, thus establishing an appropriate carrying amount for the investment. The investor then reduces this balance by the percentage of shares sold.

As an example, assume that Top Company owns 40 percent of the 100,000 outstanding shares of Bottom Company, an investment accounted for by the equity method. Any excess investment cost over Top's share of Bottom's book value is considered goodwill. Although these 40,000 shares were acquired some years ago for \$200,000, application of the equity method has increased the asset balance to \$320,000 as of January 1, 2018. On July 1, 2018, Top elects to sell 10,000 of these shares (one-fourth of its investment) for \$110,000 in cash, thereby reducing ownership in Bottom from 40 percent to 30 percent. Bottom Company reports net income of \$70,000 during the first six months of 2018 and declares and pays cash dividends of \$30,000.



Top, as the investor, initially makes the following journal entries on July 1, 2018, to accrue the proper income and establish the correct investment balance:

Investment in Bottom Company .....	28,000	
Equity in Investee Income .....		28,000
To accrue equity income for first six months of 2018 (\$70,000 × 40%).		
Dividend Receivable .....	12,000	
Investment in Bottom Company .....		12,000
To record a cash dividend declaration by Bottom Company (\$30,000 × 40%).		
Cash .....	12,000	
Dividend Receivable .....		12,000
To record collection of the cash dividend.		

These two entries increase the carrying amount of Top's investment by \$16,000, creating a balance of \$336,000 as of July 1, 2018. The sale of one-fourth of these shares can then be recorded as follows:

Cash .....	110,000	
Investment in Bottom Company .....		84,000
Gain on Sale of Investment .....		26,000
To record sale of one-fourth of investment in Bottom Company (1/4 × \$336,000 = \$84,000).		

After the sale is completed, Top continues to apply the equity method to this investment based on 30 percent ownership rather than 40 percent. However, if the sale had been of sufficient magnitude to cause Top to lose its ability to exercise significant influence over Bottom, the equity method would cease to be applicable. For example, if Top Company's holdings were reduced from 40 percent to 15 percent, the equity method might no longer be appropriate after the sale. The remaining shares held by the investor are reported according to the fair-value method with the remaining book value becoming the new *cost* figure for the investment rather than the amount originally paid.

If an investor is required to change from the equity method to the fair-value method, no retrospective adjustment is made. As previously demonstrated, a change to the equity method is also treated prospectively.

### LO 1-6

Describe the rationale and computations to defer gross profits on intra-entity inventory sales until the goods are either consumed by the owner or sold to outside parties.

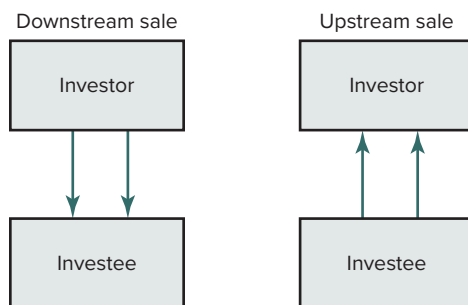
## Deferral of Intra-Entity Gross Profits in Inventory<sup>19</sup>

Many equity acquisitions establish ties between companies to facilitate the direct purchase and sale of inventory items. For example, The Coca-Cola Company recently disclosed net sales in excess of \$8.9 billion to its equity method investees. The significant influence relationship between an investor and investee in many ways creates its own entity that works to achieve business objectives. Thus, we use the term *intra-entity* to describe sales between an investor and its equity method investee.

Intra-entity sales require special accounting to ensure proper timing for profit recognition. A fundamental accounting concept is that an entity cannot recognize profits through activities with itself. For example, when an investor company sells inventory to its 40 percent-owned investee at a profit, 40 percent of this intra-entity sale effectively is with itself. Consequently, when inventory sales occur between investor and investee, because of their ownership

<sup>19</sup> Intra-entity transfers can involve the sale of items other than inventory. The intra-entity transfer of depreciable fixed assets and land is discussed in a later chapter.

**EXHIBIT 1.2**  
**Downstream and Upstream**  
**Sales**



affiliation, the investor delays gross profit recognition until the inventory is sold to an independent party or is consumed.<sup>20</sup>

Importantly, in the presence of significant influence, the amount of profit deferred is limited to the investor's ownership share of the investee. In applying the equity method, the investor therefore defers only its share of the profit from intra-entity sales until the buyer's ultimate disposition of the goods. When the inventory is eventually consumed within operations or resold to an unrelated party, the investor recognizes the remaining gross profit. Accounting for both the profit deferral and subsequent recognition takes place through adjustments to the "Equity in Investee Income" and "Investment" accounts.

Intra-entity inventory sales are identified as either *downstream* or *upstream*. *Downstream sales* refer to the investor's sale of an item to the investee. Conversely, an *upstream sale* describes one that the investee makes to the investor (see Exhibit 1.2). *Although the direction of intra-entity sales does not affect reported equity method balances for investments when significant influence exists, it has definite consequences when financial control requires the consolidation of financial statements, as discussed in Chapter 5.* Therefore, these two types of intra-entity sales are examined separately even at this introductory stage.

### Downstream Sales of Inventory

Assume that Major Company owns a 40 percent share of Minor Company and accounts for this investment through the equity method. In 2018, Major sells inventory to Minor at a price of \$50,000. This figure includes a gross profit of 30 percent, or \$15,000. By the end of 2018, Minor has sold \$40,000 of these goods to outside parties while retaining \$10,000 in inventory for sale during the subsequent year.

The investor has made downstream sales to the investee. In applying the equity method, recognition of the related profit must be delayed until the buyer disposes of these goods. Although total intra-entity inventory sales amounted to \$50,000 in 2018, \$40,000 of this merchandise has already been resold to outsiders, thereby justifying the normal reporting of profits. For the \$10,000 still in the investee's inventory, the investor delays gross profit recognition. In computing equity income, the investor's portion of the intra-entity profit must be deferred until Minor disposes of the goods.

The gross profit on the original intra-entity sale was 30 percent of the sale price; therefore, Major's profit associated with these remaining items is \$3,000 ( $\$10,000 \times 30\%$ ). *However, because only 40 percent of the investee's stock is held, just \$1,200 ( $\$3,000 \times 40\%$ ) of this profit is deferred.* Major's ownership percentage reflects the intra-entity portion of the profit. The total \$3,000 gross profit within the ending inventory balance is not the amount deferred. Rather, 40 percent of that gross profit is viewed as the currently deferred figure.

Remaining Ending Inventory	Gross Profit Percentage	Gross Profit in Ending Inventory	Investor Ownership Percentage	Deferred Intra-Entity Gross Profit
\$10,000	30%	\$3,000	40%	\$1,200

<sup>20</sup>When inventory is consumed, for example in a manufacturing process, sales of the resulting production are assumed to generate revenues from outside, unrelated parties.

After calculating the appropriate deferral, the investor decreases current equity income by \$1,200 to reflect the deferred portion of the intra-entity profit. This procedure temporarily removes this portion of the profit from the investor's books in 2018 until the investee disposes of the inventory in 2019. Major accomplishes the actual deferral through the following year-end journal entry:

<b>Intra-Entity Gross Profit Deferral</b>		
Equity in Investee Income .....	1,200	
Investment in Minor Company.....		1,200
To defer gross profit on sale of inventory to Minor Company.		

In the subsequent year, when this inventory is eventually consumed by Minor or sold to unrelated parties, the deferral is no longer needed. Because a sale to an outside party has now occurred, Major should recognize the \$1,200. By merely reversing the preceding deferral entry, the accountant succeeds in moving the investor's profit into the appropriate time period. Recognition shifts from the year of inventory transfer to the year in which the sale to customers outside of the affiliated entity takes place.

<b>Subsequent Recognition of Intra-Entity Gross Profit</b>		
Investment in Minor Company .....	1,200	
Equity in Investee Income.....		1,200
To recognize income on intra-entity sale that now can be recognized after sales to outsiders.		

## Upstream Sales of Inventory

Unlike consolidated financial statements (see Chapter 5), the equity method reports upstream sales of inventory in the same manner as downstream sales. Hence, the investor's share of gross profits remaining in ending inventory is deferred until the items are used or sold to unrelated parties. To illustrate, assume that Major Company once again owns 40 percent of Minor Company. During the current year, Minor sells merchandise costing \$40,000 to Major for \$60,000. At the end of the fiscal period, Major still retains \$15,000 of these goods. Minor reports net income of \$120,000 for the year.

To reflect the basic accrual of the investee's earnings, Major records the following journal entry at the end of this year:

<b>Income Accrual</b>		
Investment in Minor Company .....	48,000	
Equity in Investee Income.....		48,000
To accrue income from 40 percent owned investee (\$120,000 × 40%).		

The amount of the deferred intra-entity gross profit remaining at year-end is computed using the  $33\frac{1}{3}\%$  gross profit percentage of the sales price (\$20,000/\$60,000):

Remaining Ending Inventory	Gross Profit Percentage	Gross Profit in Ending Inventory	Investor Ownership Percentage	Deferred Intra-Entity Gross Profit
\$15,000	33⅓%	\$5,000	40%	\$2,000

Based on this calculation, a second entry is required of the investor at year-end. Once again, a deferral of the gross profit created by the intra-entity sale is necessary for proper timing of income recognition. *Under the equity method for investments with significant influence, the direction of the sale between the investor and investee (upstream or downstream) has no effect on the final amounts reported in the financial statements.*

**Intra-Entity Gross Profit Deferral**

Equity in Investee Income .....	2,000	
Investment in Minor Company .....		2,000
To defer recognition of intra-entity gross profit until inventory is used or sold to unrelated parties.		

After the adjustment, Major, the investor, reports earnings from this equity investment of \$46,000 (\$48,000 – \$2,000). The income accrual is reduced because the investor defers its portion of the intra-entity gross profit. When the investor eventually consumes or sells the \$15,000 in merchandise, the preceding journal entry is reversed. In this way, the effects of the inventory transfer are reported in the proper accounting period when sales to an outside party allow the recognition of the previously deferred intra-entity gross profit.

In an upstream sale, the investor's own inventory account contains the deferred gross profit. The previous entry, though, defers recognition of this profit by decreasing Major's investment account rather than the inventory balance. An alternative treatment would be the direct reduction of the investor's inventory balance as a means of accounting for this deferred amount. Although this alternative is acceptable, decreasing the investment account remains the traditional approach for deferring gross profits, even for upstream sales.

Whether upstream or downstream, the investor's sales and purchases are still reported as if the transactions were conducted with outside parties. Only the investor's share of the gross profit is deferred, and that amount is adjusted solely through the equity income account. Furthermore, because the companies are not consolidated, the investee's reported balances are not altered at all to reflect the nature of these sales/purchases. Obviously, readers of the financial statements need to be made aware of the inclusion of these amounts in the income statement. Thus, reporting companies must disclose certain information about related-party transactions. These disclosures include the nature of the relationship, a description of the transactions, the dollar amounts of the transactions, and amounts due to or from any related parties at year-end.

## Financial Reporting Effects and Equity Method Criticisms

### Equity Method Reporting Effects

It is important to realize that business decisions, including equity investments, typically involve the assessment of a wide range of consequences. For example, managers frequently are very interested in how financial statements report the effects of their decisions. This attention to financial reporting effects of business decisions arises because measurements of financial performance often affect the following:

- The firm's ability to raise capital.
- Managerial compensation.
- The ability to meet debt covenants and future interest rates.
- Managers' reputations.

Managers are also keenly aware that measures of earnings per share can strongly affect investors' perceptions of the underlying value of their firms' publicly traded stock. Consequently, prior to making investment decisions, firms will study and assess the prospective effects of applying the equity method on the income reported in financial statements. Additionally, such analyses of prospective reported income effects can influence firms regarding the degree of influence they wish to have, or even on the decision of whether to invest. For example, managers could have a required projected rate of return on an initial investment. In such cases, an analysis of projected income will be made to assist in setting an offer price.

For example, Investmor Co. is examining a potential 25 percent equity investment in Marco, Inc., that will provide a significant level of influence. Marco projects an annual

income of \$300,000 for the near future. Marco's book value is \$450,000, and it has an unrecorded newly developed technology appraised at \$200,000 with an estimated useful life of 10 years. In considering offer prices for the 25 percent investment in Marco, Investmor projects equity earnings as follows:

Projected income (25% × \$300,000) . . . . .	\$75,000
Excess unpatented technology amortization [(25% × 200,000) ÷ 10 years] . . . . .	<u>(5,000)</u>
Annual expected equity in Marco earnings . . . . .	<u>\$70,000</u>

Investmor's required first-year rate of return (before tax) on these types of investments is 20 percent. Therefore, to meet the first-year rate of return requirement involves a maximum price of \$350,000 ( $\$70,000 \div 20\% = \$350,000$ ). If the shares are publicly traded (leaving the firm a "price taker"), such income projections can assist the company in making a recommendation to wait for share prices to move to make the investment attractive.

### Criticisms of the Equity Method

Over the past several decades, thousands of business firms have accounted for their investments using the equity method. Recently, however, the equity method has come under criticism for the following:

- Emphasizing the 20–50 percent of voting stock in determining significant influence versus control.
- Allowing off-balance-sheet financing.
- Potentially biasing performance ratios.

The guidelines for the equity method suggest that a 20–50 percent ownership of voting shares indicates significant influence that falls short of control. But can one firm exert "control" over another firm absent an interest of more than 50 percent? Clearly, if one firm controls another, consolidation is the appropriate financial reporting technique. However, over the years, firms have learned ways to control other firms despite owning less than 50 percent of voting shares. For example, contracts across companies can limit one firm's ability to act without permission of the other. Such contractual control can be seen in debt arrangements, long-term sales and purchase agreements, and agreements concerning board membership. As a result, control is exerted through a variety of contractual arrangements. For financial reporting purposes, however, if ownership is 50 percent or less, a firm can argue that control technically does not exist.

In contrast to consolidated financial reports, when applying the equity method, the investee's assets and liabilities are not combined with the investor's amounts. Instead, the investor's balance sheet reports a single amount for the investment, and the income statement reports a single amount for its equity in the earnings of the investee. If consolidated, the assets, liabilities, revenues, and expenses of the investee are combined and reported in the body of the investor's financial statements.

Thus, for those companies wishing to actively manage their reported balance sheet numbers, the equity method provides an effective means. By keeping its ownership of voting shares below 50 percent, a company can technically meet the rules for applying the equity method for its investments and at the same time report investee assets and liabilities "off balance sheet." As a result, relative to consolidation, a firm employing the equity method will report smaller values for assets and liabilities. Consequently, higher rates of return for its assets and sales, as well as lower debt-to-equity ratios, could result.

On the surface, it appears that firms can avoid balance sheet disclosure of debts by maintaining investments at less than 50 percent ownership. However, the equity method requires summarized information as to assets, liabilities, and results of operations of the investees to be presented in the notes or in separate statements. Therefore, supplementary information could be available under the equity method that would not be separately identified in consolidation. Nonetheless, some companies have contractual provisions (e.g., debt covenants, managerial compensation agreements) based on ratios in the main body of the financial statements. Meeting the provisions of such contracts could provide managers strong incentives to maintain technical eligibility to use the equity method rather than full consolidation.

**LO 1-7**

Explain the rationale and reporting implications of fair-value accounting for investments otherwise accounted for by the equity method.

## Fair-Value Reporting for Equity Method Investments

Financial reporting standards allow a fair-value option under which an entity may irrevocably elect fair value as the initial and subsequent measurement attribute for certain financial assets and financial liabilities. Under the fair-value option, changes in the fair value of the elected financial items are included in earnings. Among the many financial assets available for the fair-value option were investments otherwise accounted for under the equity method.

For example, Citigroup has reported at fair value certain of its investments that previously were reported using the equity method. In its 2015 annual report, Citigroup noted that “certain investments in non-marketable equity securities and certain investments that would otherwise have been accounted for using the equity method are carried at fair value, since the Company has elected to apply fair-value accounting. Changes in fair value of such investments are recorded in earnings.” Many other firms, however, have been reluctant to elect the fair-value option for their equity method investments.

Firms using fair-value accounting simply report the investment’s fair value as an asset and changes in fair value as earnings. As such, firms neither compute excess cost amortizations nor adjust earnings for intra-entity profits. Dividends from an investee are included in earnings under the fair-value option. Because dividends typically reduce an investment’s fair value, an increase in earnings from investee dividends would be offset by a decrease in earnings from the decline in an investment’s fair value.

To illustrate, on January 1, 2017, Westwind Co. pays \$722,000 in exchange for 40,000 common shares of Armco, Inc., which has 100,000 common shares outstanding, the majority of which continue to trade on the New York Stock Exchange. During the next two years, Armco reports the following information:

Year	Net Income	Cash Dividends	Common Shares Total Fair Value at December 31
2017	\$158,000	\$25,000	\$1,900,000
2018	125,000	25,000	1,870,000

Westwind elects to use fair-value accounting and accordingly makes the following journal entries for its investment in Armco over the next two years.

Investment in Armco, Inc.	722,000	
Cash		722,000
To record Westwind’s initial 40 percent investment in Armco, Inc.		
Cash	10,000	
Dividend Income*		10,000
To recognize 2017 dividends received (40%) as investment income.		
Investment in Armco, Inc.	38,000	
Investment Income		38,000
To recognize Westwind’s 40 percent of the 2017 change in Armco’s fair value [(\$1,900,000 × 40%) – \$722,000].		
Cash	10,000	
Dividend Income*		10,000
To recognize 2018 dividends received (40%) as investment income.		
Investment Loss	12,000	
Investment in Armco, Inc.		12,000
To recognize Westwind’s 40 percent of the 2018 change in Armco’s fair value [40% × (\$1,870,000 – \$1,900,000)].		

\*This example assumes dividend declaration and payment occur at the same time.

In its December 31, 2018, balance sheet, Westwind thus reports its Investment in Armco account at \$748,000, equal to 40 percent of Armco's total fair value (or \$722,000 initial cost adjusted for 2017–2018 fair value changes of \$38,000 less \$12,000).

In addition to the increasing emphasis on fair values in financial reporting, the fair-value option also was motivated by a perceived need for consistency across various balance sheet items. In particular, the fair-value option is designed to limit volatility in earnings that occurs when some financial items are measured using cost-based attributes and others at fair value.

As FASB ASC (para. 825-10-10-1) observes, the objective of the fair-value option is

to improve financial reporting by providing entities with the opportunity to mitigate volatility in reported earnings caused by measuring related assets and liabilities differently without having to apply complex hedge accounting provisions.

Thus, the fair-value option is designed to match asset valuation with fair-value reporting requirements for many liabilities.

## Summary

1. The equity method of accounting for an investment reflects the close relationship that could exist between an investor and an investee. More specifically, this approach is available when the owner achieves the ability to apply significant influence to the investee's operating and financial decisions. Significant influence is presumed to exist at the 20 to 50 percent ownership level. However, the accountant must evaluate each situation, regardless of the percentage of ownership, to determine whether this ability is actually present.
2. To mirror the relationship between the companies, the equity method requires the investor to accrue income when the investee reports it in its financial statements. In recording this profit or loss, the investor separately reports items such as other comprehensive income and discontinued operations, to highlight their special nature. Dividend declarations decrease the owners' equity of the investee company; therefore, the investor reduces the investment account for its share of investee dividends.
3. When acquiring capital stock, an investor often pays an amount that exceeds the investee company's underlying book value. For accounting purposes, such excess payments must be either identified with specific assets and liabilities (such as land or buildings) or allocated to an intangible asset referred to as *goodwill*. The investor then amortizes each assigned cost (except for any amount attributed to land, goodwill, or other indefinite life assets) over the expected useful lives of the assets and liabilities. This amortization affects the amount of equity income recognized by the investor.
4. If the investor sells the entire investment or any portion of it, the equity method is applied until the date of disposal. A gain or loss is computed based on the adjusted book value at that time. Remaining shares are accounted for by means of either the equity method or the fair-value method, depending on the investor's subsequent ability to significantly influence the investee.
5. Inventory (or other assets) can be transferred between investor and investee. Because of the relationship between the two companies, the equity income accrual should be reduced to defer the portion of any gross profit included on these intra-entity sales until the items are either sold to outsiders or consumed. Thus, the amount of intra-entity gross profit in ending inventory decreases the amount of equity income recognized by the investor in the current period although this effect is subsequently reversed.
6. Firms may elect to report significant influence investments at fair value with changes in fair value as earnings. Under the fair-value option, firms simply report the investment's fair value as an asset and changes in fair value as earnings.

## Comprehensive Illustration

(*Estimated Time: 30 to 50 Minutes*) Every chapter in this textbook concludes with an illustration designed to assist students in tying together the essential elements of the material presented. After a careful reading of each chapter, attempt to work through the comprehensive problem. Then review the solution that follows the problem, noting the handling of each significant accounting issue.

## Problem

## Part A

On January 1, 2016, Red Hawk Company pays \$70,000 for a 10 percent interest in Wolf Company's common stock. Because market quotes for Wolf's stock are readily available on a continuing basis, the investment account has been appropriately maintained at fair value.

On January 1, 2017, Red Hawk acquires an additional 20 percent of Wolf Company for \$176,000. This second purchase provides Red Hawk the ability to exert significant influence over Wolf, and Red Hawk will now apply the equity method. At the time of this transaction, Wolf had a January 1, 2017 book value of \$650,000 although Wolf's equipment with a 4-year remaining life was undervalued by \$80,000 relative to its fair value.

During these two years, Wolf reported the following operational results (cash dividends are declared and paid in July each year):

Year	Net Income	Cash Dividends	Fair Value at January 1
2016	\$210,000	\$110,000	\$700,000
2017	270,000	110,000	880,000

## Required

- What income did Red Hawk originally report for 2016 in connection with this investment?
- On comparative financial statements for 2016 and 2017, what figures should Red Hawk report in connection with this investment?

## Part B (Continuation of Part A)

In 2018, Wolf Company reports \$400,000 in income and \$60,000 in other comprehensive income from foreign currency translation adjustments. The company declares and pays a \$120,000 cash dividend. During this fiscal year, Red Hawk sells inventory costing \$80,000 to Wolf for \$100,000. Wolf continues to hold 50 percent of this merchandise at the end of 2018. Red Hawk maintains 30 percent ownership of Wolf throughout the period.

## Required

Prepare all necessary journal entries for Red Hawk for the year 2018.

## Solution

## Part A

- Red Hawk Company accounts for its investment in Wolf Company at fair value during 2016. Because Red Hawk held only 10 percent of the outstanding shares, significant influence apparently was absent. Because stock quotes were readily available, the investment was periodically updated to fair value. Therefore, the investor recorded both dividends and changes in fair value in its 2016 financial statements as follows:

Dividend income (10% × \$110,000)	\$11,000
Increase in fair value [10% × (\$880,000 – 700,000)]	18,000
Total income recognized from investment in Wolf in 2016	<u>\$29,000</u>

- Changes to the equity method are accounted for prospectively. Therefore, in comparative statements, Red Hawk's 2016 income from its investment in Wolf is \$29,000 as reflected in the fair value method shown in part a. above.

Red Hawk's 2017 financial statements will reflect the equity method as a result of the January 1, 2017 share purchase that resulted in significant influence. To determine the 2017 equity method income Red Hawk first evaluates its combined investments in Wolf to determine whether either goodwill or incremental asset values need to be reflected within the equity method procedures.



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**Fair Value Allocation of 30 Percent Ownership of Wolf Company on January 1, 2017**


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Fair value of initial 10 percent purchase	\$ 88,000
Payment for 20 percent investment at January 1, 2017	<u>176,000</u>
Fair value of 30 percent ownership	264,000
Book value acquired ( $\$650,000 \times 30\%$ )	<u>195,000</u>
Fair value in excess of book value	69,000
Excess fair value identified with specific assets:	
Equipment ( $\$80,000 \times 30\%$ )	<u>24,000</u>
Excess fair value not identified with specific assets—goodwill	<u>\$ 45,000</u>

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In allocating Wolf's January 1, 2017 fair value, \$24,000 of the payment is attributable to the undervalued equipment with \$45,000 assigned to goodwill. Because the equipment now has only a four-year remaining life, annual amortization of \$6,000 is appropriate ( $\$24,000/4$ ).

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**Financial Reporting—2017**


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Equity in Investee Income (income statement)	
Income reported by Wolf	\$270,000
Red Hawk's ownership	<u>30%</u>
Red Hawk's share of Wolf's reported income	\$ 81,000
Less: Amortization expense:	
Equipment ( $\$24,000/4$ years)	<u>(6,000)</u>
Equity in investee income—2017	<u>\$ 75,000</u>
Investment in Wolf (balance sheet)	
Fair value—1/1/17 (above)	\$264,000
Equity in investee income (above)	75,000
Less: Investee dividends ( $\$110,000 \times 30\%$ )	<u>(33,000)</u>
Investment in Wolf—12/31/17	<u>\$306,000</u>

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**Part B**

In July 2018 Wolf declares and pays a \$36,000 cash dividend to Red Hawk ( $30\% \times \$120,000$ ). According to the equity method, this dividend reduces the carrying amount of the investment account:

Dividend Receivable	36,000	
Investment in Wolf Company		36,000
To record the 2018 cash dividend declaration by Wolf Company.		
Cash	36,000	
Dividend Receivable		36,000
To record collection of the cash dividend.		

Red Hawk records no other journal entries in connection with this investment until the end of 2018. At that time, the annual accrual of income as well as the adjustment to record amortization is made (see Part A for computation of expense). The investee's net income is reported separately from its other comprehensive income.

Investment in Wolf Company	138,000	
Equity in Investee Income		120,000
Investee Other Comprehensive Income		18,000
To recognize reported income of investee based on a 30 percent ownership level of \$400,000 net income and \$60,000 other comprehensive income.		
Equity in Investee Income	6,000	
Investment in Wolf Company		6,000
To record annual amortization on excess payment made in relation to equipment ( $\$24,000/4$ years).		

Red Hawk needs to make only one other equity entry during 2018. Intra-entity sales have occurred and Wolf continues to hold a portion of the inventory. Therefore, the investor's share of gross profit must be deferred. The gross profit rate from the sale was 20 percent ( $\$20,000/\$100,000$ ). Because the

investee still possesses \$50,000 of this merchandise, the related gross profit is \$10,000 ( $\$50,000 \times 20\%$ ). However, Red Hawk owns only 30 percent of Wolf's outstanding stock; thus, the intra-entity gross profit in inventory at year-end is \$3,000 ( $\$10,000 \times 30\%$ ). That amount must be deferred until Wolf either consumes the inventory or sells it to unrelated parties.

Equity in Investee Company	3,000	
Investment in Wolf Company		3,000
To defer the investor's share of intra-entity gross profit in ending inventory.		

## Questions

1. A company acquires a rather large investment in another corporation. What criteria determine whether the investor should apply the equity method of accounting to this investment?
2. What accounting treatments are appropriate for investments in equity securities without readily determinable fair values?
3. What indicates an investor's ability to significantly influence the decision-making process of an investee?
4. Why does the equity method record dividends from an investee as a reduction in the investment account, not as dividend income?
5. Jones Company owns a 25 percent interest in shares of Sandridge Company common stock. Under what circumstances might Jones decide that the equity method would not be appropriate to account for this investment?
6. Smith, Inc., has maintained an ownership interest in Watts Corporation for a number of years. This investment has been accounted for using the equity method. What transactions or events create changes in the Investment in Watts Corporation account as recorded by Smith?
7. Although the equity method is a generally accepted accounting principle (GAAP), recognition of equity income has been criticized. What theoretical problems can opponents of the equity method identify? What managerial incentives exist that could influence a firm's percentage ownership interest in another firm?
8. Because of the acquisition of additional investee shares, an investor will now change from the fair-value method to the equity method. Which procedures are applied to accomplish this accounting change?
9. Riggins Company accounts for its investment in Bostic Company using the equity method. During the past fiscal year, Bostic reported other comprehensive income from translation adjustments related to its foreign investments. How would this other comprehensive income affect the investor's financial records?
10. During the current year, Davis Company's common stock suffers a permanent drop in market value. In the past, Davis has made a significant portion of its sales to one customer. This buyer recently announced its decision to make no further purchases from Davis Company, an action that led to the loss of market value. Hawkins, Inc., owns 35 percent of the outstanding shares of Davis, an investment that is recorded according to the equity method. How would the loss in value affect this investor's financial reporting?
11. Wilson Company acquired 40 percent of Andrews Company at a bargain price because of losses expected to result from Andrews's failure in marketing several new products. Wilson paid only \$100,000, although Andrews's corresponding book value was much higher. In the first year after acquisition, Andrews lost \$300,000. In applying the equity method, how should Wilson account for this loss?
12. In a stock acquisition accounted for by the equity method, a portion of the purchase price often is attributed to goodwill or to specific assets or liabilities. How are these amounts determined at acquisition? How are these amounts accounted for in subsequent periods?
13. Princeton Company holds a 40 percent interest in shares of Yale Company common stock. On June 19 of the current year, Princeton sells part of this investment. What accounting should Princeton make on June 19? What accounting will Princeton make for the remainder of the current year?
14. What is the difference between downstream and upstream sales? How does this difference affect application of the equity method?
15. How is the investor's share of gross profit on intra-entity sales calculated? Under the equity method, how does the deferral of gross profit affect the recognition of equity income?
16. How are intra-entity transfers reported in an investee's separate financial statements if the investor is using the equity method?
17. What is the fair-value option for reporting equity method investments? How do the equity method and fair-value accounting differ in recognizing income from an investee?

## Problems

### LO 1-3

- When an investor uses the equity method to account for investments in common stock, the investor's share of cash dividends from the investee should be recorded as
  - A deduction from the investor's share of the investee's profits.
  - Dividend income.
  - A deduction from the stockholders' equity account, Dividends to Stockholders.
  - A deduction from the investment account.

(AICPA adapted)

### LO 1-2

- Which of the following does not indicate an investor company's ability to significantly influence an investee?
  - Material intra-entity transactions.
  - The investor owns 30 percent of the investee but another owner holds the remaining 70 percent.
  - Interchange of personnel.
  - Technological dependency.

### LO 1-5a

- Hawkins Company has owned 10 percent of Larker, Inc., for the past several years. This ownership did not allow Hawkins to have significant influence over Larker. Recently, Hawkins acquired an additional 30 percent of Larker and now will use the equity method. How will the investor report change?
  - A cumulative effect of an accounting change is shown in the current income statement.
  - A retrospective adjustment is made to restate all prior years presented using the equity method.
  - No change is recorded; the equity method is used from the date of the new acquisition.
  - Hawkins will report the change as a component of accumulated other comprehensive income.

### LO 1-7

- Under fair-value accounting for an equity investment, which of the following affects the income the investor recognizes from its ownership of the investee?
  - The investee's reported income adjusted for excess cost over book value amortizations.
  - Changes in the fair value of the investor's ownership shares of the investee.
  - Intra-entity profits from upstream sales.
  - Other comprehensive income reported by the investee.

### LO 1-5c

- When an equity method investment account is reduced to a zero balance
  - The investor should establish a negative investment account balance for any future losses reported by the investee.
  - The investor should discontinue using the equity method until the investee begins paying dividends.
  - Future losses are reported as unusual items in the investor's income statement.
  - The investment retains a zero balance until subsequent investee profits eliminate all unrecognized losses.

### LO 1-3

- On January 1, Puckett Company paid \$1.6 million for 50,000 shares of Harrison's voting common stock, which represents a 40 percent investment. No allocation to goodwill or other specific account was made. Significant influence over Harrison is achieved by this acquisition and so Puckett applies the equity method. Harrison declared a \$2 per share dividend during the year and reported net income of \$560,000. What is the balance in the Investment in Harrison account found in Puckett's financial records as of December 31?
  - \$1,724,000
  - \$1,784,000
  - \$1,844,000
  - \$1,884,000

### LO 1-3, 1-4

- In January 2017, Domingo, Inc., acquired 20 percent of the outstanding common stock of Martes, Inc., for \$700,000. This investment gave Domingo the ability to exercise significant influence over Martes, whose balance sheet on that date showed total assets of \$3,900,000 with liabilities of \$900,000. Any excess of cost over book value of the investment was attributed to a patent having a remaining useful life of 10 years.

In 2017, Martes reported net income of \$170,000. In 2018, Martes reported net income of \$210,000. Dividends of \$70,000 were declared in each of these two years. What is the equity method balance of Domingo's Investment in Martes, Inc., at December 31, 2018?

- \$728,000
- \$748,000
- \$756,000
- \$776,000

LO 1-3, 1-4

8. Franklin purchases 40 percent of Johnson Company on January 1 for \$500,000. Although Franklin did not use it, this acquisition gave Franklin the ability to apply significant influence to Johnson's operating and financing policies. Johnson reports assets on that date of \$1,400,000 with liabilities of \$500,000. One building with a seven-year remaining life is undervalued on Johnson's books by \$140,000. Also, Johnson's book value for its trademark (10-year remaining life) is undervalued by \$210,000. During the year, Johnson reports net income of \$90,000 while declaring dividends of \$30,000. What is the Investment in Johnson Company balance (equity method) in Franklin's financial records as of December 31?
- \$504,000
  - \$507,600
  - \$513,900
  - \$516,000

LO 1-3, 1-4

9. Evan Company reports net income of \$140,000 each year and declares an annual cash dividend of \$50,000. The company holds net assets of \$1,200,000 on January 1, 2017. On that date, Shalina purchases 40 percent of Evan's outstanding common stock for \$600,000, which gives it the ability to significantly influence Evan. At the purchase date, the excess of Shalina's cost over its proportionate share of Evan's book value was assigned to goodwill. On December 31, 2019, what is the Investment in Evan Company balance (equity method) in Shalina's financial records?
- \$600,000
  - \$660,000
  - \$690,000
  - \$708,000

LO 1-6

10. Perez, Inc., applies the equity method for its 25 percent investment in Senior, Inc. During 2018, Perez sold goods with a 40 percent gross profit to Senior, which sold all of these goods in 2018. How should Perez report the effect of the intra-entity sale on its 2018 income statement?
- Sales and cost of goods sold should be reduced by the amount of intra-entity sales.
  - Sales and cost of goods sold should be reduced by 25 percent of the amount of intra-entity sales.
  - Investment income should be reduced by 25 percent of the gross profit on the amount of intra-entity sales.
  - No adjustment is necessary.

LO 1-6

11. Panner, Inc., owns 30 percent of Watkins and applies the equity method. During the current year, Panner buys inventory costing \$54,000 and then sells it to Watkins for \$90,000. At the end of the year, Watkins still holds only \$20,000 of merchandise. What amount of gross profit must Panner defer in reporting this investment using the equity method?
- \$2,400
  - \$4,800
  - \$8,000
  - \$10,800

LO 1-3, 1-4, 1-6

12. Alex, Inc., buys 40 percent of Steinbart Company on January 1, 2017, for \$530,000. The equity method of accounting is to be used. Steinbart's net assets on that date were \$1.2 million. Any excess of cost over book value is attributable to a trade name with a 20-year remaining life. Steinbart immediately begins supplying inventory to Alex as follows:

Year	Cost to Steinbart	Transfer Price	Amount Held by Alex at Year-End (at transfer price)
2017	\$70,000	\$100,000	\$25,000
2018	96,000	150,000	45,000

Inventory held at the end of one year by Alex is sold at the beginning of the next.

Steinbart reports net income of \$80,000 in 2017 and \$110,000 in 2018 and declares \$30,000 in dividends each year. What is the equity income in Steinbart to be reported by Alex in 2018?

- \$34,050
- \$38,020
- \$46,230
- \$51,450

## LO 1-3, 1-4

13. On January 3, 2018, Matteson Corporation acquired 40 percent of the outstanding common stock of O'Toole Company for \$1,160,000. This acquisition gave Matteson the ability to exercise significant influence over the investee. The book value of the acquired shares was \$820,000. Any excess cost over the underlying book value was assigned to a copyright that was undervalued on its balance sheet. This copyright has a remaining useful life of 10 years. For the year ended December 31, 2018, O'Toole reported net income of \$260,000 and declared cash dividends of \$50,000. At December 31, 2018, what should Matteson report as its investment in O'Toole under the equity method?

## LO 1-3

14. On January 1, 2018, Fisher Corporation paid \$2,290,000 for 35 percent of the outstanding voting stock of Steel, Inc., and appropriately applies the equity method for its investment. Any excess of cost over Steel's book value was attributed to goodwill. During 2018, Steel reports \$720,000 in net income and a \$100,000 other comprehensive income loss. Steel also declares and pays \$20,000 in dividends.

- What amount should Fisher report as its Investment in Steel on its December 31, 2018, balance sheet?
- What amount should Fisher report as Equity in Earnings of Steel on its 2018 income statement?

## LO 1-3, 1-4

15. On January 1, 2017, Ridge Road Company acquired 20 percent of the voting shares of Sauk Trail, Inc., for \$2,700,000 in cash. Both companies provide commercial Internet support services but serve markets in different industries. Ridge Road made the investment to gain access to Sauk Trail's board of directors and thus facilitate future cooperative agreements between the two firms. Ridge Road quickly obtained several seats on Sauk Trail's board which gave it the ability to significantly influence Sauk Trail's operating and investing activities.

The January 1, 2017, carrying amounts and corresponding fair values for Sauk Trail's assets and liabilities follow:

	Carrying Amount	Fair Value
Cash and receivables	\$ 110,000	\$ 110,000
Computing equipment	5,000,000	5,700,000
Patented technology	100,000	4,000,000
Trademark	150,000	2,000,000
Liabilities	(185,000)	(185,000)

Also as of January 1, 2017, Sauk Trail's computing equipment had a seven-year remaining estimated useful life. The patented technology was estimated to have a three-year remaining useful life. The trademark's useful life was considered indefinite. Ridge Road attributed to goodwill any unidentified excess cost.

During the next two years, Sauk Trail reported the following net income and dividends:

	Net Income	Dividends Declared
2017	\$1,800,000	\$150,000
2018	1,985,000	160,000

- How much of Ridge Road's \$2,700,000 payment for Sauk Trail is attributable to goodwill?
- What amount should Ridge Road report for its equity in Sauk Trail's earnings on its income statements for 2017 and 2018?
- What amount should Ridge Road report for its investment in Sauk Trail on its balance sheets at the end of 2017 and 2018?

## LO 1-3, 1-4, 1-7

16. On January 1, 2017, Alison, Inc., paid \$60,000 for a 40 percent interest in Holister Corporation's common stock. This investee had assets with a book value of \$200,000 and liabilities of \$75,000. A patent held by Holister having a \$5,000 book value was actually worth \$20,000. This patent had a six-year remaining life. Any further excess cost associated with this acquisition was attributed to goodwill. During 2017, Holister earned income of \$30,000 and declared and paid dividends of \$10,000. In 2018, it had income of \$50,000 and dividends of \$15,000. During 2018, the fair value of Alison's investment in Holister had risen from \$68,000 to \$75,000.

- Assuming Alison uses the equity method, what balance should appear in the Investment in Holister account as of December 31, 2018?
- Assuming Alison uses fair-value accounting, what income from the investment in Holister should be reported for 2018?

LO 1-3, 1-6

17. On January 1, 2018, Alamar Corporation acquired a 40 percent interest in Burks, Inc., for \$210,000. On that date, Burks's balance sheet disclosed net assets with both a fair and book value of \$360,000. During 2018, Burks reported net income of \$80,000 and declared and paid cash dividends of \$25,000. Alamar sold inventory costing \$30,000 to Burks during 2018 for \$40,000. Burks used all of this merchandise in its operations during 2018. Prepare all of Alamar's 2018 journal entries to apply the equity method to this investment.

LO 1-1, 1-2, 1-3, 1-4, 1-5a

18. Milani, Inc., acquired 10 percent of Seida Corporation on January 1, 2017, for \$190,000 and appropriately accounted for the investment using the fair-value method. On January 1, 2018, Milani purchased an additional 30 percent of Seida for \$600,000 which resulted in significant influence over Seida. On that date, the fair value of Seida's common stock was \$2,000,000 in total. Seida's January 1, 2018, book value equaled \$1,850,000, although land was undervalued by \$120,000. Any additional excess fair value over Seida's book value was attributable to a trademark with an 8-year remaining life. During 2018, Seida reported income of \$300,000 and declared and paid dividends of \$110,000. Prepare the 2018 journal entries for Milani related to its investment in Seida.

LO 1-6

19. Tiberend, Inc., sold \$150,000 in inventory to Schilling Company during 2017 for \$225,000. Schilling resold \$105,000 of this merchandise in 2017 with the remainder to be disposed of during 2018. Assuming that Tiberend owns 25 percent of Schilling and applies the equity method, what journal entry is recorded at the end of 2017 to defer the intra-entity gross profit?

LO 1-3, 1-4, 1-6

20. BuyCo, Inc. holds 25 percent of the outstanding shares of Marqueen Company and appropriately applies the equity method of accounting. Excess cost amortization (related to a patent) associated with this investment amounts to \$10,000 per year. For 2017, Marqueen reported earnings of \$100,000 and declares cash dividends of \$30,000. During that year, Marqueen acquired inventory for \$50,000, which it then sold to BuyCo for \$80,000. At the end of 2017, BuyCo continued to hold merchandise with a transfer price of \$32,000.

- What Equity in Investee Income should BuyCo report for 2017?
- How will the intra-entity transfer affect BuyCo's reporting in 2018?
- If BuyCo had sold the inventory to Marqueen, how would the answers to (a) and (b) have changed?

LO 1-1, 1-2, 1-3, 1-4, 1-5a

21. On January 1, 2016, Halstead, Inc., purchased 75,000 shares of Sedgwick Company common stock for \$1,480,000, giving Halstead 25 percent ownership and the ability to apply significant influence over Sedgwick. Any excess of cost over book value acquired was attributed solely to goodwill.

Sedgwick reports net income and dividends as follows. These amounts are assumed to have occurred evenly throughout these years. Dividends are declared and paid in the same period.

	Net Income	Annual Cash Dividends (paid quarterly)
2016	\$340,000	\$120,000
2017	480,000	140,000
2018	600,000	160,000

On July 1, 2018, Halstead sells 12,000 shares of this investment for \$25 per share, thus reducing its interest from 25 to 21 percent, but maintaining its significant influence.

Determine the amounts that would appear on Halstead's 2018 income statement relating to its ownership and partial sale of its investment in Sedgwick's common stock.

LO 1-1, 1-2, 1-3, 1-4, 1-5d

22. Echo, Inc., purchased 10 percent of ProForm Corporation on January 1, 2017, for \$345,000 and accounted for the investment using the fair-value method. Echo acquires an additional 15 percent of ProForm on January 1, 2018, for \$580,000. The equity method of accounting is now appropriate for this investment. No intra-entity sales have occurred.

- How does Echo initially determine the income to be reported in 2017 in connection with its ownership of ProForm?
- What factors should have influenced Echo in its decision to apply the equity method in 2018?
- What factors could have prevented Echo from adopting the equity method after this second purchase?
- What is the objective of the equity method of accounting?
- What criticisms have been leveled at the equity method?

- LO 1-3, 1-6**
- f. In comparative statements for 2017 and 2018, how would Echo determine the income to be reported in 2017 in connection with its ownership of ProForm? Why is this accounting appropriate?
- g. How is the allocation of Echo's acquisition made?
- h. If ProForm declares a cash dividend, what impact does it have on Echo's financial records under the equity method? Why is this accounting appropriate?
- i. On financial statements for 2018, what amounts are included in Echo's Investment in ProForm account? What amounts are included in Echo's Equity in Income of ProForm account?
23. Parrot Corporation holds a 42 percent ownership of Sunrise, Inc., and applies the equity method to account for its investment. Parrot assigned the entire original excess purchase price over book value to goodwill. During 2017, the two companies made intra-entity inventory transfers. A portion of this merchandise was not resold until 2018. During 2018, additional transfers were made.
- a. What is the difference between upstream transfers and downstream transfers?
- b. How does the direction of an intra-entity transfer (upstream versus downstream) affect the application of the equity method?
- c. How is the intra-entity gross profit deferral computed in applying the equity method?
- d. How should Parrot compute the amount of equity income to be recognized in 2017? What entry is made to record this income?
- e. How should Parrot compute the amount of equity income to be recognized in 2018?
- f. If none of the transferred inventory had remained at the end of 2017, how would these transfers have affected the application of the equity method?
- g. How do these intra-entity transfers affect Sunrise's financial reporting?
- LO 1-1, 1-5d**
24. Several years ago, Einstein, Inc., bought 40 percent of the outstanding voting stock of Brooks Company. The equity method is appropriately applied. On August 1 of the current year, Einstein sold a portion of these shares.
- a. How does Einstein compute the book value of this investment on August 1 to determine its gain or loss on the sale?
- b. How should Einstein account for this investment after August 1?
- c. If Einstein retains only a 2 percent interest in Brooks so that it holds virtually no influence over Brooks, what figures appear in the investor's income statement for the current year?
- d. If Einstein retains only a 2 percent interest in Brooks so that virtually no influence is held, does the investor have to retroactively adjust any previously reported figures?
- LO 1-3, 1-4, 1-6**
25. Matthew, Inc. owns 30 percent of the outstanding stock of Lindman Company and has the ability to significantly influence the investee's operations and decision making. On January 1, 2018, the balance in the Investment in Lindman account is \$335,000. Amortization associated with this acquisition is \$9,000 per year. In 2018, Lindman earns an income of \$90,000 and declares cash dividends of \$30,000. Previously, in 2017, Lindman had sold inventory costing \$24,000 to Matthew for \$40,000. Matthew consumed all but 25 percent of this merchandise during 2017 and used the rest during 2018. Lindman sold additional inventory costing \$28,000 to Matthew for \$50,000 in 2018. Matthew did not consume 40 percent of these 2018 purchases from Lindman until 2019.
- a. What amount of equity method income would Matthew recognize in 2018 from its ownership interest in Lindman?
- b. What is the equity method balance in the Investment in Lindman account at the end of 2018?
- LO 1-1, 1-3, 1-4**
26. On December 31, 2016, Akron, Inc. purchased 5 Percent of Zip Company's common shares on the open market in exchange for \$16,000. On December 31, 2017, Akron, Inc., acquires an additional 25 percent of Zip Company's outstanding common stock for \$95,000. During the next two years, the following information is available for Zip Company:

	Income	Dividends Declared	Common Stock Fair Value (12/31)
2016			\$320,000
2017	\$ 75,000	\$ 7,000	380,000
2018	88,000	15,000	480,000

At December 31, 2017, Zip reports a net book value of \$290,000. Akron attributed any excess of its 30 percent share of Zip's fair over book value to its share of Zip's franchise agreements. The franchise agreements had a remaining life of 10 years at December 31, 2017.

- a. Assume Akron applies the equity method to its Investment in Zip account:
  - 1. What amount of equity income should Akron report for 2018?
  - 2. On Akron's December 31, 2018, balance sheet, what amount is reported for the Investment in Zip account?
- b. Assume Akron uses fair-value accounting for its Investment in Zip account:
  - 1. What amount of income from its investment in Zip should Akron report for 2018?
  - 2. On Akron's December 31, 2018, balance sheet, what amount is reported for the Investment in Zip account?

LO 1-3, 1-4, 1-5d, 1-6

27. Belden, Inc. acquires 30 percent of the outstanding voting shares of Sheffield, Inc. on January 1, 2017, for \$312,000, which gives Belden the ability to significantly influence Sheffield. Sheffield has a net book value of \$800,000 at January 1, 2017. Sheffield's asset and liability accounts showed carrying amounts considered equal to fair values except for a copyright whose value accounted for Belden's excess cost over book value in its 30 percent purchase. The copyright had a remaining life of 16 years at January 1, 2017. No goodwill resulted from Belden's share purchase.
- Sheffield reported net income of \$180,000 in 2017 and \$230,000 of net income during 2018. Dividends of \$70,000 and \$80,000 are declared and paid in 2017 and 2018, respectively. Belden uses the equity method.
- a. On its 2018 comparative income statements, how much income would Belden report for 2017 and 2018 in connection with the company's investment in Sheffield?
  - b. If Belden sells its entire investment in Sheffield on January 1, 2019, for \$400,000 cash, what is the impact on Belden's income?
  - c. Assume that Belden sells inventory to Sheffield during 2017 and 2018 as follows:

Year	Cost to Belden	Price to Sheffield	Year-End Balance (at transfer price)
2017	\$30,000	\$50,000	\$20,000 (sold in following year)
2018	33,000	60,000	40,000 (sold in following year)

What amount of equity income should Belden recognize for the year 2018?

LO 1-3, 1-4, 1-5b, 1-6

28. Harper, Inc. acquires 40 percent of the outstanding voting stock of Kinman Company on January 1, 2017, for \$210,000 in cash. The book value of Kinman's net assets on that date was \$400,000, although one of the company's buildings, with a \$60,000 carrying amount, was actually worth \$100,000. This building had a 10-year remaining life. Kinman owned a royalty agreement with a 20-year remaining life that was undervalued by \$85,000.
- Kinman sold inventory with an original cost of \$60,000 to Harper during 2017 at a price of \$90,000. Harper still held \$15,000 (transfer price) of this amount in inventory as of December 31, 2017. These goods are to be sold to outside parties during 2018.
- Kinman reported a \$40,000 net loss and a \$20,000 other comprehensive loss for 2017. The company still manages to declare and pay a \$10,000 cash dividend during the year.
- During 2018, Kinman reported a \$40,000 net income and declared and paid a cash dividend of \$12,000. It made additional inventory sales of \$80,000 to Harper during the period. The original cost of the merchandise was \$50,000. All but 30 percent of this inventory had been resold to outside parties by the end of the 2018 fiscal year.
- Prepare all journal entries for Harper for 2017 and 2018 in connection with this investment. Assume that the equity method is applied.

LO 1-3, 1-4, 1-5b, 1-6

29. On January 1, 2018, Pine Company owns 40 percent (40,000 shares) of Seacrest, Inc., which it purchased several years ago for \$182,000. Since the date of acquisition, the equity method has been properly applied, and the carrying amount of the investment account as of January 1, 2018, is \$293,600. Excess patent cost amortization of \$12,000 is still being recognized each year. During 2018, Seacrest reports net income of \$342,000 and a \$120,000 other comprehensive loss, both incurred uniformly throughout the year. No dividends were declared during the year. Pine sold 8,000 shares of Seacrest on August 1, 2018, for \$93,000 in cash. However, Pine retains the ability to significantly influence the investee.
- During the last quarter of 2017, Pine sold \$50,000 in inventory (which it had originally purchased for only \$30,000) to Seacrest. At the end of that fiscal year, Seacrest's inventory retained \$10,000 (at sales price) of this merchandise, which was subsequently sold in the first quarter of 2018.
- On Pine's financial statements for the year ended December 31, 2018, what income effects would be reported from its ownership in Seacrest?



## LO 1-3, 1-4, 1-6

30. On July 1, 2016, Killearn Company acquired 88,000 of the outstanding shares of Shaun Company for \$13 per share. This acquisition gave Killearn a 25 percent ownership of Shaun and allowed Killearn to significantly influence the investee's decisions.

As of July 1, 2016, the investee had assets with a book value of \$3 million and liabilities of \$74,400. At the time, Shaun held equipment appraised at \$364,000 above book value; it was considered to have a seven-year remaining life with no salvage value. Shaun also held a copyright with a five-year remaining life on its books that was undervalued by \$972,000. Any remaining excess cost was attributable to goodwill. Depreciation and amortization are computed using the straight-line method. Killearn applies the equity method for its investment in Shaun.

Shaun's policy is to declare and pay a \$1 per share cash dividend every April 1 and October 1. Shaun's income, earned evenly throughout each year, was \$598,000 in 2016, \$639,600 in 2017, and \$692,400 in 2018.

In addition, Killearn sold inventory costing \$91,200 to Shaun for \$152,000 during 2017. Shaun resold \$92,000 of this inventory during 2017 and the remaining \$60,000 during 2018.

- Determine the equity income to be recognized by Killearn during each of these years.
- Compute Killearn's investment in Shaun Company's balance as of December 31, 2018.

## LO 1-1, 1-2, 1-3, 1-4, 1-5d

31. On January 1, 2017, Fisher Corporation purchased 40 percent (80,000 shares) of the common stock of Bowden, Inc., for \$982,000 in cash and began to use the equity method for the investment. The price paid represented a \$60,000 payment in excess of the book value of Fisher's share of Bowden's underlying net assets. Fisher was willing to make this extra payment because of a recently developed patent held by Bowden with a 15-year remaining life. All other assets were considered appropriately valued on Bowden's books.

Bowden declares and pays a \$100,000 cash dividend to its stockholders each year on September 15. Bowden reported net income of \$400,000 in 2017 and \$380,000 in 2018. Each income figure was earned evenly throughout its respective years.

On July 1, 2018, Fisher sold 10 percent (20,000 shares) of Bowden's outstanding shares for \$330,000 in cash. Although it sold this interest, Fisher maintained the ability to significantly influence Bowden's decision-making process.

Prepare the journal entries for Fisher for the years of 2017 and 2018.

## LO 1-3, 1-4, 1-6

32. On January 1, 2017, Stream Company acquired 30 percent of the outstanding voting shares of Q-Video, Inc., for \$770,000. Q-Video manufactures specialty cables for computer monitors. On that date, Q-Video reported assets and liabilities with book values of \$1.9 million and \$700,000, respectively. A customer list compiled by Q-Video had an appraised value of \$300,000, although it was not recorded on its books. The expected remaining life of the customer list was five years with straight-line amortization deemed appropriate. Any remaining excess cost was not identifiable with any particular asset and thus was considered goodwill.

Q-Video generated net income of \$250,000 in 2017 and a net loss of \$100,000 in 2018. In each of these two years, Q-Video declared and paid a cash dividend of \$15,000 to its stockholders.

During 2017, Q-Video sold inventory that had an original cost of \$100,000 to Stream for \$160,000. Of this balance, \$80,000 was resold to outsiders during 2017, and the remainder was sold during 2018. In 2018, Q-Video sold inventory to Stream for \$175,000. This inventory had cost only \$140,000. Stream resold \$100,000 of the inventory during 2018 and the rest during 2019.

For 2017 and then for 2018, compute the amount that Stream should report as income from its investment in Q-Video in its external financial statements under the equity method.

## Develop Your Skills

### EXCEL CASE 1



On January 1, 2018, Acme Co. is considering purchasing a 40 percent ownership interest in PHC Co., a privately held enterprise, for \$700,000. PHC predicts its profit will be \$185,000 in 2018, projects a 10 percent annual increase in profits in each of the next four years, and expects to pay a steady annual dividend of \$30,000 for the foreseeable future. Because PHC has on its books a patent that is undervalued by \$375,000, Acme realizes that it will have an additional amortization expense of \$15,000 per year over the next 10 years—the patent's estimated remaining useful life. All of PHC's other assets and liabilities have book values that approximate market values. Acme uses the equity method for its investment in PHC.

## Required

- Using an Excel spreadsheet, set the following values in cells:
  - Acme's cost of investment in PHC.
  - Percentage acquired.
  - First-year PHC reported income.
  - Projected growth rate in income.
  - PHC annual dividends.
  - Annual excess patent amortization.
- Referring to the values in (1), prepare the following schedules using columns for the years 2018 through 2022.
  - Acme's equity in PHC earnings with rows showing these:
    - Acme's share of PHC reported income.
    - Amortization expense.
    - Acme's equity in PHC earnings.
  - Acme's Investment in PHC balance with rows showing the following:
    - Beginning balance.
    - Equity earnings.
    - Dividends.
    - Ending balance.
  - Return on beginning investment balance =  $\text{Equity earnings} / \text{Beginning investment balance}$  in each year.
- Given the preceding values, compute the average of the projected returns on beginning investment balances for the first five years of Acme's investment in PHC. What is the maximum Acme can pay for PHC if it wishes to earn at least a 10 percent average return on beginning investment balance? (*Hint:* Under Excel's Data tab, select What-If Analysis, and the Goal Seek capability to produce a 10 percent average return on beginning investment balance by changing the cell that contains Acme's cost of investment in PHC. Excel's Solver should produce an exact answer while Goal Seek should produce a close approximation. You may need to first add in the Solver capability under Excel's Tools menu.)

## EXCEL CASE 2

On January 1, Intergen, Inc., invests \$200,000 for a 40 percent interest in Ryan, a new joint venture with two other partners, each investing \$150,000 for 30 percent interest. Intergen plans to sell all of its production to Ryan, which will resell the inventory to retail outlets. The equity partners agree that Ryan will buy inventory only from Intergen. Also, Intergen plans to use the equity method for financial reporting.

During the year, Intergen expects to incur costs of \$850,000 to produce goods with a final retail market value of \$1,200,000. Ryan projects that, during this year, it will resell three-fourths of these goods for \$900,000. It should sell the remainder in the following year.

The equity partners plan a meeting to set the price Intergen will charge Ryan for its production. One partner suggests a transfer price of \$1,025,000 but is unsure whether it will result in an equitable return across the equity holders. Importantly, Intergen agrees that its total rate of return (including its own operations and its investment in Ryan) should be equal to that of the other investors' return on their investments in Ryan. All agree that Intergen's value including its investment in Ryan is \$1,000,000.

## Required

- Create an Excel spreadsheet analysis showing the following:
  - Projected income statements for Intergen and Ryan. Formulate the statements to do the following:
    - Link Ryan's cost of goods sold to Intergen's sales (use a starting value of \$1,025,000 for Intergen's sales).
    - Link Intergen's equity in Ryan's earnings to Ryan's net income (adjusted for Intergen's gross profit rate  $\times$  Ryan's ending inventory  $\times$  40 percent ownership percentage).
    - Be able to change Intergen's sales and see the effects throughout the income statements of Ryan and Intergen. Note that the cost of goods sold for Intergen is fixed.

- The rate of return for the two 30 percent equity partners on their investment in Ryan.
  - The total rate of return for Interger based on its \$1,000,000 value.
2. What transfer price will provide an equal rate of return for each of the investors in the first year of operation? (*Hint:* Under Excel's Data tab, select What-If Analysis and then the Goal Seek capability to produce a zero difference in rates of return across the equity partners by changing the cell that contains Interger's sales. Excel's Solver add-in will work as well.)

## ANALYSIS CASE

### CPA skills

Access The Coca-Cola Company's SEC 10-K filing at [www.coca-cola.com](http://www.coca-cola.com) and address the following:

1. What companies does Coca-Cola describe as significant equity method investments? How do these investments help Coca-Cola?
2. What criteria does Coca-Cola use in choosing to apply the equity method for these investments?
3. How does Coca-Cola describe its application of the equity method?
4. What amount of equity income did Coca-Cola report?
5. Coca-Cola discloses the fair values of its publicly traded bottlers accounted for as equity method investments. List the book values and fair values for these equity method investments that have publicly traded data. Discuss the relevance of each of these two values.

## RESEARCH AND ANALYSIS CASE—IMPAIRMENT

### CPA skills

Wolf Pack Transport Co. has a 25 percent equity investment in Maggie Valley Depot (MVD), Inc., which owns and operates a warehousing facility used for the collection and redistribution of various consumer goods. Wolf Pack paid \$1,685,000 for its 25 percent interest in MVD several years ago, including a \$300,000 allocation for goodwill as the only excess cost over book value acquired. Wolf Pack Transport has since appropriately applied the equity method to account for the investment. In its most recent balance sheet, because of recognized profits in excess of dividends since the acquisition, Wolf Pack reported a \$2,350,000 amount for its Investment in Maggie Valley Depot, Inc., account.

However, competition in the transit warehousing industry has increased in the past 12 months. In the same area as the MVD facility, a competitor company opened two additional warehouses that are much more conveniently located near a major interstate highway. MVD's revenues declined 30 percent as customers shifted their business to the competitor's facilities and the prices for warehouse services declined. The market value of Wolf Pack's stock ownership in MVD fell to \$1,700,000 from a high last year of \$2,500,000. MVD's management is currently debating ways to respond to these events but has yet to formulate a firm plan.

### Required

1. What guidance does the FASB ASC provide for equity method investment losses in value?
2. Should Wolf Pack recognize the decline in the value of its holdings in MVD in its current year financial statements?
3. Should Wolf Pack test for impairment of the value it had initially assigned to goodwill?

## RESEARCH CASE—NONCONTROLLING SHAREHOLDER RIGHTS

### CPA skills

Consolidated financial reporting is appropriate when one entity has a controlling financial interest in another entity. The usual condition for a controlling financial interest is ownership of a majority voting interest. But in some circumstances, control does not rest with the majority owner—especially when noncontrolling owners are contractually provided with approval or veto rights that can restrict the actions of the majority owner. In these cases, the majority owner employs the equity method rather than consolidation.

### Required

Address the following by searching the FASB ASC Topic 810 on consolidation.

1. What are protective noncontrolling rights?
2. What are substantive participating noncontrolling rights?

3. What noncontrolling rights overcome the presumption that all majority-owned investees should be consolidated?
4. Zee Company buys 60 percent of the voting stock of Bee Company with the remaining 40 percent noncontrolling interest held by Bee's former owners, who negotiated the following noncontrolling rights:
  - Any new debt above \$1,000,000 must be approved by the 40 percent noncontrolling shareholders.
  - Any dividends or other cash distributions to owners in excess of customary historical amounts must be approved by the 40 percent noncontrolling shareholders.

According to the FASB ASC, what are the issues in determining whether Zee should consolidate Bee or report its investment in Bee under the equity method?



# Consolidation of Financial Information

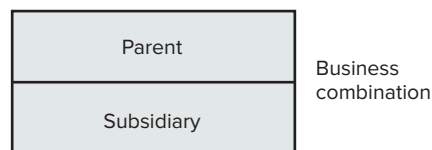
Financial statements published and distributed to owners, creditors, and other interested parties appear to report the operations and financial position of a single company. In reality, these statements frequently represent a number of separate organizations tied together through common control (a *business combination*). When financial statements represent more than one corporation, we refer to them as *consolidated financial statements*.

Consolidated financial statements are typical in today's business world. Most major organizations, and many smaller ones, hold control over an array of organizations. For example, from 2000 through 2016, Cisco Systems, Inc., reported more than 100 business acquisitions that now are consolidated in its financial reports. PepsiCo, Inc., as another example, annually consolidates data from a multitude of companies into a single set of financial statements. By gaining control over these companies (often known as *subsidiaries*)—which include Frito-Lay, Gatorade, Quaker Oats, Sabra, and Tropicana Products—PepsiCo (the *parent*) forms a single business combination and single reporting entity.

The consolidation of financial information as exemplified by Cisco Systems and PepsiCo is one of the most complex procedures in all of accounting. Comprehending this process completely requires understanding the theoretical logic that underlies the creation of a business combination. Furthermore, a variety of procedural steps must be mastered to ensure that proper accounting is achieved for this single reporting entity. The following coverage introduces both of these aspects of the consolidation process.

The FASB *Accounting Standards Codification* (ASC) contains the current accounting standards for business combinations under the following topics:

- “Business Combinations” (Topic 805).
- “Consolidation” (Topic 810).



The ASC “Business Combinations” topic provides guidance on the accounting and reporting for business combinations using the *acquisition method*. The acquisition method embraces a *fair-value* measurement attribute. Adoption of this attribute reflects the FASB's increasing emphasis on fair value for measuring and assessing business activity. In the past, financial reporting standards embraced the cost principle to measure and report the

## Learning Objectives

After studying this chapter, you should be able to:

- LO 2-1 Discuss the motives for business combinations.
- LO 2-2 Recognize when consolidation of financial information into a single set of statements is necessary.
- LO 2-3 Define the term *business combination* and differentiate across various forms of business combinations.
- LO 2-4 Describe the valuation principles of the acquisition method.
- LO 2-5 Determine the fair value of the consideration transferred for an acquisition and allocate that fair value to specific assets acquired (including goodwill) and liabilities assumed or to a gain on bargain purchase.
- LO 2-6 Prepare an acquiring firm's journal entry to record
  - a. a business combination when dissolution takes place.
  - b. the various related costs involved in a business combination.
  - c. a business combination when the acquired firm retains its separate existence.
- LO 2-7 Prepare a worksheet to consolidate the financial statements of two companies that form a business combination in the absence of dissolution.
- LO 2-8 Describe the accounting treatment for the various intangible assets often acquired in a business combination.
- LO 2-9 Appendix 2A: Identify the general characteristics of the legacy purchase and pooling of interest methods of accounting for past business combinations. Understand the effects that persist today in financial statements from the use of these legacy methods.
- LO 2-10 Appendix 2B: Explain the rationale and procedures underlying a subsidiary's election to adopt pushdown accounting.

financial effects of business combinations. This fundamental change from a cost-based to a fair-value model has transformed the way we account for and report business combinations in our society.

The ASC “Consolidation” topic provides guidance on circumstances that require a firm to prepare consolidated financial reports and various other related reporting issues. Basically, consolidated financial reports must be prepared whenever one firm has a controlling financial interest in another. Although ownership of a majority voting interest is the usual condition for a controlling financial interest, the power to control may also exist with a lesser percentage of ownership through governance contracts, leases, or agreement with other stockholders.<sup>1</sup>

In this chapter, we first present expansion through corporate takeovers and present an overview of the consolidation process. Then we present the specifics of the acquisition method of accounting for business combinations where the acquirer obtains complete ownership of another firm. Later, beginning in Chapter 4, we introduce coverage of acquisitions with less than complete ownership.

Financial reporting for business combinations has experienced many changes over the past decade. Prior to the acquisition method requirement, accounting standards allowed either the purchase method or the earlier pooling of interests method of accounting for business combinations. Neither of these methods is now permitted for reporting the formation of new business combinations. However, because of the prospective application of the acquisition method beginning in 2009, legacy effects of these methods remain in many of today’s financial statements. Therefore, an appendix to this chapter provides a review of the purchase method and pooling of interests method.

### LO 2-1

Discuss the motives for business combinations.

## Expansion through Corporate Takeovers

### Reasons for Firms to Combine

A frequent economic phenomenon is the combining of two or more businesses into a single entity under common management and control. During recent decades, the United States and the rest of the world have experienced an enormous number of corporate mergers and takeovers, transactions in which one company gains control over another. According to Thomson Reuters, the number of mergers and acquisitions globally in 2015 exceeded 42,300, with a total value of more than \$4.7 trillion. Of these deals more than \$2.3 trillion involved a U.S. firm. As indicated by Exhibit 2.1, the magnitude of recent combinations continues to be large.

As with any other economic activity, business combinations can be part of an overall managerial strategy to maximize shareholder value. Shareholders—the owners of the firm—hire managers to direct resources so that the firm’s value grows over time. In this way, owners receive a return on their investment. Successful firms receive substantial benefits through enhanced share value. Importantly, the managers of successful firms also receive substantial benefits in salaries, especially if their compensation contracts are partly based on stock market performance of the firm’s shares.

If the goal of business activity is to maximize the firm’s value, in what ways do business combinations help achieve that goal? Clearly, the business community is moving rapidly toward business combinations as a strategy for growth and competitiveness. Size and scale are obviously becoming critical as firms compete in today’s markets. Importantly, valuable synergies often accompany business combinations. If large firms can be more efficient in delivering goods and services, they gain a competitive advantage and become more profitable for the owners. Increases in scale can produce larger profits from enhanced sales volume despite smaller (more competitive) profit margins. When two firms integrate successive stages of production and distribution of products, coordinating raw material purchases,

<sup>1</sup>We discuss entities controlled through contractual means (known as variable interest entities) in Chapter 6.

**EXHIBIT 2.1**  
**Recent Notable Business**  
**Combinations**

Acquirer	Target	Deal Value
AT&T	DirecTV	\$47.4B
Berkshire Hathaway, Inc.	Precision Castparts	\$32.0B
Visa, Inc.	Visa Europe Ltd	\$23.3B
Facebook, Inc.	WhatsApp	\$17.2B
MeadWestvaco	RockTenn	\$16.0B
Intel Corporation	Altera Corporation	\$15.0B
CVS Health Corporation	Omnicare, Inc.	\$12.9B
Marriott	Starwood Hotels Intl	\$12.2B
Merck	Cubist	\$ 9.5B
Weyerhaeuser	Plum Creek Timber	\$ 8.4B
Celgene Corporation	Receptos, Inc.	\$ 7.2B
Cox Automotive	Dealertrack Technologies	\$ 4.0B
FedEx	TNT Express	\$ 4.8B
Expedia	HomeAway	\$ 3.9B
Microsemi Corporation	PMC-Sierra, Inc.	\$ 2.5B
Constellation Brands	Ballast Point Brewing & Spirits	\$ 1.0B

manufacturing, and delivery, substantial savings can result. As an example, Oracle's acquisition of Sun Microsystems creates synergies by enabling Oracle to integrate its software product lines with Sun's hardware specifications. The acquisition further allows Oracle to offer complete systems made of chips, computers, storage devices, and software with an aim toward increased efficiency and quality.<sup>2</sup> Other cost savings resulting from elimination of duplicate efforts, such as data processing and marketing, can make a single entity more profitable than the separate parent and subsidiary had been in the past. Such synergies often accompany business combinations.

Although no two business combinations are exactly alike, many share one or more of the following characteristics that potentially enhance profitability:

- Vertical integration of one firm's output and another firm's distribution or further processing.
- Cost savings through elimination of duplicate facilities and staff.
- Quick entry for new and existing products into domestic and foreign markets.
- Economies of scale allowing greater efficiency and negotiating power.
- The ability to access financing at more attractive rates. As firm size increases, negotiating power with financial institutions can increase also.
- Diversification of business risk.

Business combinations also occur because many firms seek the continuous expansion of their organizations, often into diversified areas. Acquiring control over a vast network of different businesses has been a strategy utilized by a number of companies (sometimes known as *conglomerates*) for decades. Entry into new industries is immediately available to the parent without having to construct facilities, develop products, train management, or create market recognition. Many corporations have successfully employed this strategy to produce huge, highly profitable organizations. Unfortunately, others discovered that the task of managing a widely diverse group of businesses can be a costly learning experience. Even combinations that are designed to take advantage of operating synergies and cost savings will fail if the integration is not managed carefully.

Overall, the primary motivations for many business combinations can be traced to an increasingly competitive environment. Three recent business combinations provide interesting examples of distinct motivations to combine: Facebook and WhatsApp, AT&T and DirecTV, and Rock-Tenn and MeadwestVaco. Each is discussed briefly in turn.

<sup>2</sup> Ben Worthen, Cari Tuna, and Justin Scheck, "Companies More Prone to Go 'Vertical,'" *The Wall Street Journal*, November 30, 2009.



## Facebook and WhatsApp

On October 26, 2014, Facebook completed its acquisition of WhatsApp, the popular internet messaging service with over 600 million users. As stated in its 2014 annual 10-K report, Facebook paid a total of \$17.2B in what was one of the largest technology company acquisitions of the year.<sup>3</sup> According to the acquisition agreement, WhatsApp will retain all of its staff and will operate as an independent subsidiary of Facebook, similar to Facebook's 2012 acquisition of Instagram. The steep purchase price was based almost entirely on long-term potential, as in the first six months of 2014, WhatsApp reported just \$15M in revenue.<sup>4</sup> Facebook CEO Mark Zuckerberg indicated that his immediate focus was on growing WhatsApp, and that he would not attempt to monetize the service until the number of users reached 1 billion.<sup>5</sup>

Many analysts weighed in on why Facebook would spend over 10% of its net worth for a company with minimal revenue. Aileen Lee, from venture capital firm Klien Perkins Caulfield & Byers, noted that it was important for Facebook to beat out its competition in acquiring a fast growing messaging service like WhatsApp. "These big companies feel like they can't afford to lose mind share and time share to competitors, and they are willing to pay a lot of money for large user bases."<sup>6</sup> Other analysts cited the benefit of an expanded portfolio in protecting against inevitable shifts in online consumer behavior.<sup>7</sup>

Of the total \$17.2B purchase consideration, Facebook recognized \$15.3B in goodwill. According to Facebook's 2014 10-K, the goodwill value is "primarily attributable to expected synergies from future growth, from potential monetization opportunities, from strategic advantages provided in the mobile ecosystem, and from expansion of our mobile messaging offerings." As is common in high-tech acquisitions, much of the purchase price for WhatsApp was attributed to other intangibles. Facebook reported an additional \$2.8B in intangible assets (beyond goodwill) including acquired users, trade name, and acquired technology.

## AT&T and DirecTV

On July 24, 2015, AT&T acquired DirecTV for \$47.4 billion. According to AT&T's September 30, 2015 10-Q report, \$32.7 billion was paid in stock and \$14.7 billion in cash. The acquisition made AT&T the nation's leading TV provider, surpassing Comcast for first place.<sup>8</sup> In order to contend with changing consumer demands, many large media companies were turning to mergers as a way to expand offerings. CEO Randall Stephenson commented in a press release that AT&T will now "be able to meet consumers' future entertainment preferences . . . traditional TV service, . . . their favorite content on a mobile device, or video streamed over the Internet to any screen".<sup>9</sup> The acquisition will also provide AT&T access to millions of DirecTV customers in the Latin American market.

The DirecTV acquisition was subject to a series of conditions imposed by the FCC. These conditions included providing discounted broadband service to low-income households, and offering all-fiber access to at least 12.5 million small consumers.<sup>10</sup> Due to antitrust concerns, the FCC and other regulatory agencies had taken an increasingly active role in monitoring mergers in the media industry. Notably, in April of 2015, Comcast withdrew its \$45B bid for Time Warner due in large part to resistance from the FCC and Department of Justice.<sup>11</sup>

Intangible assets represented the majority of the value paid for DirecTV. According to its third quarter 2015 10-Q, AT&T reported \$35.3 billion in goodwill and \$34.7 billion coming

<sup>3</sup> Although some news releases cited prices as high as \$22 billion, the larger prices evidently included post-acquisition compensation for continuing employees.

<sup>4</sup> *TechCrunch*, Josh Constine, "WhatsApp's First Half of 2014 Revenue Was \$15M, Net Loss of \$232.5M Was Mostly Issuing Stock," October 28, 2014.

<sup>5</sup> Bloomberg Business, Sarah Frier, "Facebook \$22 Billion WhatsApp Deal Buys \$10 Million in Sales," October 28, 2014.

<sup>6</sup> *New York Times Dealbook*, David Gelles, "For Facebook, it's Users First and Profits Later," February 20, 2014.

<sup>7</sup> *ibid.*

<sup>8</sup> *New York Times*, Credit Jonathan Alcorn/Reuters, "F.C.C. Approves AT&T-DirecTV Deal," July 24, 2015.

<sup>9</sup> AT&T press release, "AT&T Completes Acquisition of DIRECTV," Dallas, TX, July 24, 2015.

<sup>10</sup> AT&T 10-Q report for the quarter ending September 30, 2015.

<sup>11</sup> *Los Angeles Times*, Meg James, "AT&T gets FCC approval, immediately completes \$49-billion takeover of DirecTV", July 24, 2015.

from other intangible assets such as customer relationships and satellite access rights. As also reflected in the 10-Q, AT&T expects significant synergies as a result of the acquisition, especially in the area of video content cost savings and expanded video service capabilities.

### MeadwestVaco and Rock-Tenn

On March 6, 2015, packaging companies MeadwestVaco (MWV) and Rock-Tenn finalized their business combination agreement to become wholly owned subsidiaries of WestRock, a newly formed parent company. WestRock manufactures a variety of consumer and commercial packaging materials, paperboard, and merchandising displays. The company is also one of the largest recyclers of paper.<sup>12</sup>

As part of the business combination, equity of WestRock was divided almost equally, with MWV shareholders owning 50.1% of the new company and Rock-Tenn shareholders getting 49.9%. According to its 2015 annual 10-K report, for financial reporting purposes, Rock-Tenn was treated as the acquiring party. The consideration transferred in the combination was \$8.3 billion and was allocated to assets of \$16 billion and liabilities of \$7.7 billion.<sup>13</sup>

Rock-Tenn had made acquisitions of \$7 billion in the 10 years prior to the business combination with MWV and wanted to continue expanding. MWV was attractive to Rock-Tenn because of its diverse and complimentary products as well as its global reach, with plants in Brazil and India. According to Barclay's analyst Scott Gaffner, Rock-Tenn was not in a position to acquire MWV due to its size, and that a "merger of equals" was the best option.<sup>14</sup> From MWV's standpoint, the business combination served as a means to penetrate new end markets and add to its set of global customers.<sup>15</sup>

The prospect of cost synergies was also a large factor for both companies in deciding to combine. In its presentation to investors, Rock-Tenn noted that \$550 million in cost savings were achieved related to its 2011 acquisition of Smurfit-Stone. WestRock expects to generate annual cost synergies of \$300M resulting from the business combination, to be realized by the third year of operations. Procurement and supply chain integration, production plant optimization, and corporate and overhead reduction are all expected to contribute to the savings.<sup>16</sup>

#### LO 2-2

Recognize when consolidation of financial information into a single set of statements is necessary.

## Business Combinations, Control, and Consolidated Financial Reporting

*The consolidation of financial information into a single set of statements becomes necessary when the business combination of two or more companies creates a single economic entity.* As stated in FASB ASC (810-10-10-1): "There is a presumption that consolidated financial statements are more meaningful than separate financial statements and that they are usually necessary for a fair presentation when one of the entities in the consolidated group directly or indirectly has a controlling financial interest in the other entities."

Thus, in producing financial statements for external distribution, the reporting entity transcends the boundaries of incorporation to encompass (i.e., consolidate) all companies for which control is present. Even though the various companies may retain their legal identities as separate corporations, the resulting information is more meaningful to outside parties when consolidated into a single set of financial statements.

To explain the process of preparing consolidated financial statements for a business combination, we address three questions:

1. How is a business combination formed?
2. What constitutes a controlling financial interest?
3. How is the consolidation process carried out?

<sup>12</sup> www.rocktenn.com/products

<sup>13</sup> Westrock Company 2015 annual 10-K report.

<sup>14</sup> *businessfinancenews.com*, Jason Gaul, Rock-Tenn Company, MeadWestvaco Corp. (MWV) Merger: Barclays Views Cost & Operational Synergies, July 15, 2015.

<sup>15</sup> MWV and RockTenn, Investor Presentation, "Creating a Global Packaging Leader," January 26, 2015.

<sup>16</sup> *Ibid*, footnote 11.

## LO 2-3

Define the term *business combination* and differentiate across various forms of business combinations.

## Business Combinations—Creating a Single Economic Entity

A business combination refers to a transaction or other event in which an acquirer obtains control over one or more businesses.

Business combinations are formed by a wide variety of transactions or events with various formats. For example, each of the following is identified as a business combination although it differs widely in legal form. In every case, two or more enterprises are being united into a single economic entity so that consolidated financial statements are required.

1. One company obtains the assets, and often the liabilities, of another company in exchange for cash, other assets, liabilities, stock, or a combination of these. The second organization normally dissolves itself as a legal corporation. Thus, only the acquiring company remains in existence, having absorbed the acquired net assets directly into its own operations. Any business combination in which only one of the original companies continues to exist is referred to in legal terms as a *statutory merger*.

2. One company obtains all of the capital stock of another in exchange for cash, other assets, liabilities, stock, or a combination of these. After gaining control, the acquiring company can decide to transfer all assets and liabilities to its own financial records with the second company being dissolved as a separate corporation.<sup>17</sup> The business combination is, once again, a statutory merger because only one of the companies maintains legal existence. This statutory merger, however, is achieved by obtaining equity securities rather than by buying the target company's assets. Because stock is obtained, the acquiring company must gain 100 percent control of all shares before legally dissolving the subsidiary.

3. Two or more companies transfer either their assets or their capital stock to a newly formed corporation. Both original companies are dissolved, leaving only the new organization in existence. A business combination effected in this manner is a *statutory consolidation*. The use here of the term *consolidation* should not be confused with the accounting meaning of that same word. In accounting, *consolidation* refers to the mechanical process of bringing together the financial records of two or more organizations to form a single set of statements. A statutory consolidation denotes a specific type of business combination that has united two or more existing companies under the ownership of a newly created company.

4. One company achieves legal control over another by acquiring a majority of voting stock. *Although control is present, no dissolution takes place; each company remains in existence as an incorporated operation.* NBC Universal, as an example, continues to retain its legal status as a corporation after being acquired by Comcast Corporation. Separate incorporation is frequently preferred to take full advantage of any intangible benefits accruing to the acquired company as a going concern. Better utilization of such factors as licenses, trade names, employee loyalty, and the company's reputation can be possible when the subsidiary maintains its own legal identity. Moreover, maintaining an independent information system for a subsidiary often enhances its market value for an eventual sale or initial public offering as a stand-alone entity.

Because the asset and liability account balances are not physically combined as in statutory mergers and consolidations, each company continues to maintain an independent accounting system. To reflect the combination, the acquiring company enters the takeover transaction into its own records by establishing a single investment asset account. However, the newly acquired subsidiary omits any recording of this event; its stock is simply transferred to the parent from the subsidiary's shareholders. Thus, the subsidiary's financial records are not directly affected by a takeover.

5. A final vehicle for control of another business entity does not involve a majority voting stock interest or direct ownership of assets. Control of a variable interest entity (VIE) by design often does not rest with its equity holders. Instead, control is exercised through contractual arrangements with a sponsoring firm that, although it technically may not own the VIE, becomes its "primary beneficiary" with rights to its residual profits. These contracts can take the form of leases, participation rights, guarantees, or other interests. Past use of VIEs

<sup>17</sup> Although the acquired company has been legally dissolved, it frequently continues to operate as a separate division within the surviving company's organization.

**EXHIBIT 2.2**  
**Business Combinations**

<b>Type of Combination</b>	<b>Action of Acquiring Company</b>	<b>Action of Acquired Company</b>
Statutory merger through asset acquisition.	Acquires assets and often liabilities.	Dissolves and goes out of business.
Statutory merger through capital stock acquisition.	Acquires all stock and then transfers assets and liabilities to its own books.	Dissolves as a separate corporation, often remaining as a division of the acquiring company.
Statutory consolidation through capital stock or asset acquisition.	Newly created entity receives assets or capital stock of original companies.	Original companies may dissolve while remaining as separate divisions of newly created company.
Acquisition of more than 50 percent of the voting stock.	Acquires stock that is recorded as an investment; controls decision making of acquired company.	Remains in existence as legal corporation, although now a subsidiary of the acquiring company.
Control through ownership of variable interests (see Chapter 6). Risks and rewards often flow to a sponsoring firm that may or may not hold equity shares.	Establishes contractual control over a variable interest entity to engage in a specific activity.	Remains in existence as a separate legal entity—often a trust or partnership.

was criticized because these structures provided sponsoring firms with off-balance sheet financing and sometimes questionable profits on sales to their VIEs. Prior to 2004, many sponsoring entities of VIEs did not technically meet the definition of a controlling financial interest (i.e., majority voting stock ownership) and thus did not consolidate their VIEs. Current GAAP, however, expands the notion of control and thus requires consolidation of VIEs by their primary beneficiary.

As you can see, business combinations are created in many distinct forms. The specific format is a critical factor in the subsequent consolidation of financial information. Exhibit 2.2 provides an overview of the various combinations.

### Control—An Elusive Quality

The definition of control is central to determining when two or more entities become one economic entity and therefore one reporting entity. Control of one firm by another is most often achieved through the acquisition of voting shares. The ASC (810-10-15-8) describes control as follows:

The usual condition for a controlling financial interest is ownership of a majority voting interest, and, therefore, as a general rule ownership by one reporting entity, directly or indirectly, of more than 50 percent of the outstanding voting shares of another entity is a condition pointing toward consolidation.

By exercising majority voting power, one firm can literally dictate the financing and operating activities of another firm. Accordingly, U.S. GAAP traditionally has pointed to a majority voting share ownership as a controlling financial interest that requires consolidation.

Notably, the power to control may also exist with less than 50 percent of the outstanding shares of another entity. The ASC (810-10-15-8) goes on to observe that:

The power to control may also exist with a lesser percentage of ownership, for example, by contract, lease, agreement with other stockholders, or by court decree.

Therefore, despite possessing less than 50 percent of the subsidiary's voting stock, one ownership group can enter into contractual arrangement with other ownership groups that provide control.

Alternatively, majority ownership does not always indicate an exclusive ability for one entity to exercise control over another. According to the FASB ASC Glossary, control can also be defined as,

The direct or indirect ability to determine the direction of management and policies through ownership, contract, or otherwise.

This description recognizes the complex profit-sharing agreements that sometimes accompany economic resource sharing. To reduce their risk, several parties may participate in directing the activities of another entity. For example, a parent with majority ownership may grant certain decision rights to noncontrolling shareholders in exchange for economic support. Such noncontrolling participation rights may be powerful enough to prevent the majority owners from controlling the entity.

As the complexity of ownership arrangements increases, defining when one firm controls another remains a continuing challenge for financial reporting standard setters. Nonetheless, the primary way U.S. firms exercise control remains through the acquisition of a majority of another firm's voting shares. Consequently, in this text, we largely focus on control relationships established through voting interests. In Chapter 6, however, we expand our coverage to include the consolidation of firms where control is exercised through variable interests.

### Consolidation of Financial Information

When one company gains control over another, a business combination is established. Financial data gathered from the individual companies are then brought together to form a single set of consolidated statements. Although this process can be complicated, the objectives of a consolidation are straightforward—to report the financial position, results of operations, and cash flows for the combined entity. As a part of this process, reciprocal accounts and intra-entity transactions must be adjusted or eliminated to ensure that all reported balances truly represent the single entity.

Applicable consolidation procedures vary significantly depending on the legal format employed in creating a business combination. *For a statutory merger or a statutory consolidation, when the acquired company (or companies) is (are) legally dissolved, only one accounting consolidation ever occurs.* On the date of the combination, the surviving company simply records the various account balances from each of the dissolving companies. Because the accounts are brought together permanently in this manner, no further consolidation procedures are necessary. After the balances have been transferred to the survivor, the financial records of the acquired companies are closed out as part of the dissolution.

Conversely, in a combination when all companies retain incorporation, a different set of consolidation procedures is appropriate. Because the companies preserve their legal identities, each continues to maintain its own independent accounting records. *Thus, no permanent consolidation of the account balances is ever made. Rather, the consolidation process must be carried out anew each time the reporting entity prepares financial statements for external reporting purposes.*

When separate record-keeping is maintained, the accountant faces a unique problem: The financial information must be brought together periodically without disturbing the accounting systems of the individual companies. Because these consolidations are produced outside the financial records, worksheets traditionally are used to expedite the process. Worksheets are a part of neither company's accounting records nor the resulting financial statements. Instead, they are an efficient structure for organizing and adjusting the information used to prepare externally reported consolidated statements.

Consequently, the legal characteristics of a business combination have a significant impact on the approach taken to the consolidation process:

#### What is to be consolidated?

- If dissolution takes place, appropriate account balances are physically consolidated in the surviving company's financial records.
- If separate incorporation is maintained, only the financial statement information (not the actual records) is consolidated.

**When does the consolidation take place?**

- If dissolution takes place, a permanent consolidation occurs at the date of the combination.
- If separate incorporation is maintained, the consolidation process is carried out at regular intervals whenever financial statements are to be prepared.

**How are the accounting records affected?**

- If dissolution takes place, the surviving company's accounts are adjusted to include appropriate balances of the dissolved company. The dissolved company's records are closed out.
- If separate incorporation is maintained, each company continues to retain its own records. Using worksheets facilitates the periodic consolidation process without disturbing the individual accounting systems.

**LO 2-4**

Describe the valuation principles of the acquisition method.

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## Financial Reporting for Business Combinations

### The Acquisition Method

Regardless of whether the acquired firm maintains its separate incorporation or dissolution takes place, current standards require the acquisition method to account for business combinations. Applying the acquisition method involves recognizing and measuring

- The consideration transferred for the acquired business and any noncontrolling interest.
- The separately identified assets acquired and liabilities assumed.
- Goodwill, or a gain from a bargain purchase.

Fair value is the measurement attribute used to recognize these and other aspects of a business combination. Therefore, prior to examining specific applications of the acquisition method, we present a brief discussion of the fair-value concept as applied to business combinations.

### Consideration Transferred for the Acquired Business

The fair value of the consideration transferred to acquire a business from its former owners is the starting point in valuing and recording a business combination. In describing the acquisition method, the FASB ASC states:

The consideration transferred in a business combination shall be measured at fair value, which shall be calculated as the sum of the acquisition-date fair values of the assets transferred by the acquirer, the liabilities incurred by the acquirer to former owners of the acquiree, and the equity interests issued by the acquirer. (ASC 805-30-30-7)

The acquisition method thus embraces the fair value of the consideration transferred in measuring the acquirer's interest in the acquired business.<sup>18</sup> Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Thus, market values are often the best source of evidence of the fair value of consideration transferred in a business combination. Items of consideration transferred can include cash, securities (either stocks or debt), and other property or obligations.

### Contingent Consideration: An Additional Element of Consideration Transferred

Contingent consideration, when present in a business combination, is an additional element of consideration transferred. Contingent consideration can be useful in negotiations when two parties disagree with each other's estimates of future cash flows for the target firm or when

<sup>18</sup> An occasional exception occurs in a bargain purchase in which the fair value of the net assets acquired serves as the valuation basis for the acquired firm. Other exceptions include situations in which control is achieved without a transfer of consideration, or determination of the fair value of the consideration transferred is less reliable than other measures of the business fair value.

valuation uncertainty is high.<sup>19</sup> Acquisition agreements often contain provisions to pay former owners (typically cash or additional shares of the acquirer's stock) upon achievement of specified future performance measures. For example, Walt Disney Company disclosed in its 2015 annual report its 2014 acquisition of 100 percent of the outstanding shares of common stock of Maker Studios, Inc. Disney's agreement with the former owners of Maker Studios provided for:

up to \$450 million of additional cash upon final determination of Maker's achievement of certain performance targets for calendar years 2014 and 2015. The [Walt Disney] Company recognized a \$198 million liability for the fair value of the contingent consideration (determined by a probability weighting of potential payouts), of which approximately \$100 million was paid in fiscal 2015 for calendar year 2014. Subsequent changes in the estimated fair value, if any, will be recognized in earnings.

Disney thus included the fair value of the contingent consideration as a component of the fair value of the consideration transferred for Maker Studios. The acquisition method treats contingent consideration obligations as a negotiated component of the fair value of the consideration transferred. As seen in the above Disney quote, determining the fair value of contingent future payments typically involves probability and risk assessments based on circumstances existing on the acquisition date.

Regardless of the elements that constitute the consideration transferred, the parent's financial statements must now incorporate its newly acquired ownership interest in a controlled entity. In Chapters 2 and 3, we focus exclusively on combinations that result in complete ownership by the acquirer (i.e., no noncontrolling interest in the acquired firm). As described in Chapter 4, in a less-than-100-percent acquisition, the noncontrolling interest also is measured initially at its fair value. Then, the combined fair values of the parent's consideration transferred and the noncontrolling interest comprise the valuation basis for the acquired firm in consolidated financial reports.

### Assets Acquired and Liabilities Assumed

A fundamental principle of the acquisition method is that an acquirer must identify the assets acquired and the liabilities assumed in the business combination. Further, once these have been identified, the acquirer measures the assets acquired and the liabilities assumed at their acquisition-date fair values, with only a few exceptions.<sup>20</sup> As demonstrated in subsequent examples, the principle of recognizing and measuring assets acquired and liabilities assumed at fair value applies across all business combinations.

Fair value, as defined by GAAP, is the price that would be received from selling an asset or paid for transferring a liability in an orderly transaction between market participants at the measurement date. However, determining the acquisition-date fair values of the individual assets acquired and liabilities assumed can prove challenging.<sup>21</sup> The ASC (820-10-35-28) points to three sets of valuation techniques typically employed: the market approach, the income approach, and the cost approach.

#### ***Market Approach***

The market approach estimates fair values using other market transactions involving similar assets or liabilities. In a business combination, assets acquired such as marketable securities and some tangible assets may have established markets that can provide comparable market values for estimating fair values. Similarly, the fair values of many liabilities assumed can be determined by reference to market trades for similar debt instruments.

#### ***Income Approach***

The income approach relies on multi-period estimates of future cash flows projected to be generated by an asset. These projected cash flows are then discounted at a required rate of

<sup>19</sup> Cain, Denis, and Denis, "Earnouts: A Study of Financial Contracting in Acquisition Agreements," *Journal of Accounting and Economics* 51 (2011), 151–170.

<sup>20</sup> Exceptions to the fair-value measurement principle include deferred taxes, certain employee benefits, indemnification assets, reacquired rights, share-based awards, and assets held for sale.

<sup>21</sup> Identifying and measuring the acquired firm's financial statement items can take some time. ASC (805-10-25-14) allows an acquirer to adjust the provisional amounts recognized for a business combination up to a year after the acquisition date.

return that reflects the time value of money and the risk associated with realizing the future estimated cash flows. The multi-period income approach is often useful for obtaining fair-value estimates of intangible assets and acquired in-process research and development.

### **Cost Approach**

The cost approach estimates fair values by reference to the current cost of replacing an asset with another of comparable economic utility. Used assets can present a particular valuation challenge if active markets only exist for newer versions of the asset. Thus, the cost to replace a particular asset reflects both its estimated replacement cost and the effects of obsolescence. In this sense obsolescence is meant to capture economic declines in value including both technological obsolescence and physical deterioration. The cost approach is widely used to estimate fair values for many tangible assets acquired in business combinations such as property, plant, and equipment.

### **Goodwill, and Gains on Bargain Purchases**

In a business combination, the parent must account for both the consideration transferred and the individual amounts of the identified assets acquired and liabilities assumed at their acquisition-date fair values. However, in many cases the respective collective amounts of these two values will differ. Current GAAP accounting for the difference requires one of two outcomes—in one the acquirer recognizes an asset (goodwill), in the other a gain.

When the consideration transferred exceeds the acquisition-date net amount of the identified assets acquired and the liabilities assumed, the acquirer recognizes the asset goodwill for the excess.<sup>22</sup> Goodwill is defined as an asset representing the future economic benefits arising in a business combination that are not individually identified and separately recognized. Goodwill often embodies the expected synergies that the acquirer expects to achieve through control of the acquired firm's assets. Goodwill may also capture non-recognized intangibles of the acquired firm such as employee expertise.

Conversely, if the collective fair value of the net identified assets acquired and liabilities assumed exceeds the consideration transferred, the acquirer recognizes a "gain on bargain purchase." In such cases, the fair value of the net assets acquired replaces the consideration transferred as the valuation basis for the acquired firm. Bargain purchases can result from business divestitures forced by regulatory agencies or other types of distress sales. Before recognizing a gain on bargain purchase, however, the acquirer must reassess whether it has correctly identified and measured all of the acquired assets and liabilities. Illustrations and further discussions of goodwill and of bargain purchase gains follow in the next section.

#### **LO 2-5**

Determine the total fair value of the consideration transferred for an acquisition, and allocate that fair value to specific subsidiary assets acquired (including goodwill) and liabilities assumed or to a gain on bargain purchase.

## **Procedures for Consolidating Financial Information**

To demonstrate an application of the acquisition method, assume BigNet Company specializes in communications equipment and business software that provide web-based applications for retail companies. BigNet seeks to expand its operations and plans to acquire Smallport on December 31. Smallport Company owns computers, telecommunications equipment, and software that customize website billing and ordering systems for their customers. BigNet hopes to expand Smallport's customer contracts, utilize its recently developed software, and create other synergies by combining with Smallport.

Exhibit 2.3 lists the December 31 account balances for both BigNet and Smallport. In addition, the estimated fair values of Smallport's assets and liabilities are shown. Although Smallport's computers and equipment have a \$400,000 book value, their current fair value is \$600,000. Smallport's software has only a \$100,000 value on its books; the internal development costs were primarily expensed. The software's observable fair value, however, is \$1,200,000. Similarly, although not reflected in its financial records, Smallport has several

<sup>22</sup> Assuming a 100% acquisition. For combinations with less than complete ownership, goodwill is computed as the excess of the consideration transferred plus the acquisition-date fair value of the noncontrolling interest over the collective fair values of the net identified assets acquired and liabilities assumed.



**EXHIBIT 2.3 Basic Consolidation Information**

	BigNet Company	Smallport Company	
	Book Values December 31	Book Values December 31	Fair Values December 31
Current assets .....	\$ 1,100,000	\$ 300,000	\$ 300,000
Computers and equipment (net) .....	1,300,000	400,000	600,000
Capitalized software (net) .....	500,000	100,000	1,200,000
Customer contracts .....	—0—	—0—	700,000
Notes payable .....	(300,000)	(200,000)	(250,000)
<b>Net assets</b>	<b>\$ 2,600,000</b>	<b>\$ 600,000</b>	<b>\$2,550,000</b>
Common stock—\$10 par value .....	\$ (1,600,000)		
Common stock—\$5 par value .....		\$ (100,000)	
Additional paid-in capital .....	(40,000)	(20,000)	
Retained earnings, 1/1 .....	(870,000)	(370,000)	
Dividends declared .....	110,000	10,000	
Revenues .....	(1,000,000)	(500,000)	
Expenses .....	800,000	380,000	
<b>Owners' equity 12/31</b>	<b>\$(2,600,000)</b>	<b>\$(600,000)</b>	
Retained earnings, 12/31 .....	(960,000)*	(480,000)*	

\*Retained earnings balance after closing out revenues, expenses, and dividends.

Note: Parentheses indicate a credit balance.

large ongoing customer contracts. BigNet estimates the fair value of the customer contracts at \$700,000. Smallport also has a \$200,000 note payable incurred to help finance the software development. Because interest rates are currently low, this liability (incurred at a higher rate of interest) has a present value of \$250,000.

Smallport's net assets (total assets less total liabilities) have a book value of \$600,000 but a fair value of \$2,550,000. Fair values for only the assets and liabilities are appraised here; the capital stock, retained earnings, dividend, revenue, and expense accounts represent historical measurements rather than any type of future values. Although these equity and income accounts can give some indication of the organization's overall worth, they are not property and thus not transferred in the combination.

Legal as well as accounting distinctions divide business combinations into several separate categories. To facilitate the introduction of consolidation accounting, we present the various procedures utilized in this process according to the following sequence:

1. Acquisition method when dissolution takes place.
2. Acquisition method when separate incorporation is maintained.

### Acquisition Method When Dissolution Takes Place

When the acquired firm's legal status is dissolved in a business combination, the continuing firm takes direct ownership of the former firm's assets and assumes its liabilities. Thus, the continuing firm will prepare a journal entry to record

- The fair value of the consideration transferred by the acquiring firm to the former owners of the acquiree, and
- The identified assets acquired and liabilities assumed at their individual fair values.

However, the entry to record the combination further depends on the relation between the consideration transferred and the net amount of the fair values assigned to the identified assets acquired and liabilities assumed. Therefore, we initially provide three illustrations that demonstrate the procedures to record a business combination, each with different amounts of consideration transferred relative to the acquired asset and liability fair values. Each example assumes a merger takes place and, therefore, the acquired firm is dissolved. In each situation, the consideration transferred is compared to the fair value of the net identifiable assets acquired and liabilities assumed to determine if goodwill or a bargain purchase gain should be recorded.

### ***Consideration Transferred Equals Net Fair Values of Identified Assets Acquired and Liabilities Assumed***

Assume that after negotiations with the owners of Smallport, BigNet agrees to pay cash of \$550,000 and to issue 20,000 previously unissued shares of its \$10 par value common stock (currently selling for \$100 per share) for all of Smallport's assets and liabilities. Following the acquisition, Smallport then dissolves itself as a legal entity. The consideration transferred from BigNet to Smallport is computed as follows and in this case, exactly equals the collective fair values of Smallport's assets less liabilities:

Cash payment .....	\$ 550,000
Common stock issued by BigNet (\$100 × 20,000 shares) .....	<u>2,000,000</u>
Total consideration transferred .....	<u>\$2,550,000</u>
Fair value of Smallport's net identifiable assets .....	<u>\$2,550,000</u>

The \$2,550,000 fair value of the consideration transferred by BigNet represents the fair value of the acquired Smallport business and serves as the basis for recording the combination in total.

BigNet also must record all of Smallport's identified assets and liabilities at their *individual* fair values. These two valuations present no difficulties because BigNet's consideration transferred exactly equals the \$2,550,000 collective net fair values of the individual assets and liabilities acquired as shown in Exhibit 2.3.

Because Smallport Company will be dissolved, BigNet (the surviving company) enters a journal entry in its financial records to record the combination. BigNet has directly acquired the assets and assumed the liabilities of Smallport. Under the acquisition method, BigNet records Smallport's assets and liabilities at fair value ignoring original book values. Revenue, expense, dividend, and equity accounts cannot be transferred to a parent and are not included in recording the business combination.

#### **LO 2-6a**

Prepare the journal entry to consolidate the accounts of a subsidiary if dissolution takes place.

### ***Acquisition Method: Consideration Transferred Equals Net Identified Asset Fair Values—Subsidiary Dissolved***

<b>BigNet Company's Financial Records—December 31</b>	
Current Assets .....	300,000
Computers and Equipment .....	600,000
Capitalized Software .....	1,200,000
Customer Contracts .....	700,000
Notes Payable .....	250,000
Cash (paid by BigNet) .....	550,000
Common Stock (20,000 shares issued by BigNet at \$10 par value) .....	200,000
Additional Paid-In Capital .....	1,800,000
To record acquisition of Smallport Company. Assets acquired and liabilities assumed are recorded at fair value.	

BigNet's financial records now show \$1,900,000 in the Computers and Equipment account (\$1,300,000 former balance + \$600,000 acquired), \$1,700,000 in Capitalized Software (\$500,000 + \$1,200,000), and so forth. Note that the customer contracts, despite being unrecorded on Smallport's books, are nonetheless identified and recognized on BigNet's financial records as part of the assets acquired in the combination. These items have been added into BigNet's balances (see Exhibit 2.3) at their fair values. Conversely, BigNet's revenue balance continues to report the company's own \$1,000,000 with expenses remaining at \$800,000 and dividends of \$110,000. Under the acquisition method, only the subsidiary's revenues, expenses, dividends, and equity transactions that occur subsequent to the takeover affect the business combination.

### ***Consideration Transferred Exceeds Net Amount of Fair Values of Identified Assets Acquired and Liabilities Assumed***

In this next illustration, BigNet transfers to the owners of Smallport consideration of \$1,000,000 in cash plus 20,000 shares of common stock with a fair value of \$100 per share in exchange for ownership of the company. The consideration transferred from BigNet to Smallport is now computed as follows and results in an excess amount exchanged over the fair value of the net assets acquired:

Cash payment . . . . .	\$1,000,000
Common stock issued by BigNet (\$100 × 20,000 shares) . . . . .	<u>2,000,000</u>
Total consideration transferred . . . . .	\$3,000,000
Fair value of Smallport's net identifiable assets . . . . .	<u>\$2,550,000</u>
Goodwill . . . . .	<u>\$ 450,000</u>

As presented in the above calculation, when the consideration transferred in an acquisition exceeds total net fair value of the identified assets and liabilities, the excess (\$450,000 in this case) is allocated to an unidentifiable asset known as goodwill.<sup>23</sup> Unlike other assets, we consider goodwill as unidentifiable because we presume it emerges from several other assets acting together to produce an expectation of enhanced profitability. Goodwill essentially captures all sources of profitability beyond what can be expected from simply summing the fair values of the acquired firm's assets and liabilities.

The resulting consideration paid is \$450,000 more than the \$2,550,000 fair value of Smallport's net identifiable assets and is assigned to the unidentifiable asset Goodwill.

Several factors may have affected BigNet's \$3,000,000 acquisition offer. First, BigNet may expect its assets to act in concert with those of Smallport, thus creating synergies that will produce profits beyond the total expected for the separate companies. In our earlier examples, Facebook, WestRock, and AT&T all clearly anticipated substantial synergies from their acquisitions. Other factors such as Smallport's history of profitability, its reputation, the quality of its personnel, and the current economic condition of the industry in which it operates may also affect the acquisition offer. In general, if a target company is projected to generate unusually high profits relative to its asset base, acquirers frequently are willing to pay a premium price.

### ***Acquisition Method: Consideration Transferred Exceeds Net Identified Asset Fair Values—Subsidiary Dissolved***

Returning to BigNet's \$3,000,000 consideration, \$450,000 is in excess of the fair value of Smallport's net assets. Thus, goodwill of that amount is entered into BigNet's accounting system along with the fair value of each individual asset and liability. BigNet makes the following journal entry at the date of acquisition:

<b>BigNet Company's Financial Records—December 31</b>	
Current Assets . . . . .	300,000
Computers and Equipment . . . . .	600,000
Capitalized Software . . . . .	1,200,000
Customer Contracts . . . . .	700,000
Goodwill . . . . .	450,000
Notes Payable . . . . .	250,000
Cash (paid by BigNet) . . . . .	1,000,000
Common Stock (20,000 shares issued by BigNet at \$10 par value) . . . . .	200,000
Additional Paid-In Capital . . . . .	1,800,000
To record acquisition of Smallport Company. Assets acquired and liabilities assumed are recorded at individual fair values with excess fair value attributed to goodwill.	

<sup>23</sup>In business combinations, such excess payments are not unusual and can be quite large. When Oracle acquired PeopleSoft, it initially assigned \$4.5 billion of its \$11 billion purchase price to the fair value of the acquired identified net assets. It assigned the remaining \$6.5 billion to goodwill.

Once again, BigNet's financial records now show \$1,900,000 in the Computers and Equipment account (\$1,300,000 former balance + \$600,000 acquired), \$1,700,000 in Capitalized Software (\$500,000 + \$1,200,000), and so forth. As the only change, BigNet records goodwill of \$450,000 for the excess consideration paid over the net identified asset fair values.<sup>24</sup>

***Bargain Purchase—Consideration Transferred Is Less Than Net Amount of Fair Values of Identified Assets Acquired and Liabilities Assumed***

Occasionally, the fair value of the consideration transferred by the acquirer is less than the fair value received in an acquisition. Such bargain purchases typically are considered anomalous. Businesses generally do not sell assets or businesses at prices below their fair values. Nonetheless, bargain purchases do occur—most often in forced or distressed sales.

For example, Westamerica Bank's acquisition of County Bank (California) from the FDIC resulted in a \$48.8 million "bargain purchase" gain. The FDIC sold the failed County Bank to Westamerica for \$0 and additional guarantees. As a result, Westamerica recorded the combination at the estimated fair value of the net assets acquired and recognized a gain of \$48.8 million. This gain treatment is consistent with the view that the acquiring firm is immediately better off by the amount that the fair value acquired in the business combination exceeds the consideration transferred.

To demonstrate accounting for a bargain purchase, our third illustration begins with BigNet transferring consideration of \$2,000,000 to the owners of Smallport in exchange for their business. BigNet conveys no cash and issues 20,000 shares of \$10 par common stock that has a \$100 per share fair value. The consideration transferred from BigNet to Smallport is now computed as follows and results in a gain on bargain purchase:

Cash payment .....	\$ -0-
Common stock issued by BigNet (\$100 × 20,000 shares) .....	2,000,000
Total consideration transferred .....	\$ 2,000,000
Fair value of Smallport's identifiable net assets .....	\$ 2,550,000
Gain on bargain purchase .....	<u>\$ 550,000</u>

In accounting for this acquisition, at least two competing fair values are present. First, the \$2,000,000 consideration transferred for Smallport represents a negotiated transaction value for the business. Second, the net amount of fair values individually assigned to the identified assets acquired and liabilities assumed produces \$2,550,000. Additionally, based on expected synergies with Smallport, BigNet's management may believe that the fair value of the business exceeds the net asset fair value. Nonetheless, because the consideration transferred is less than the net asset fair value, a bargain purchase has occurred.

*The acquisition method records the identified assets acquired and liabilities assumed at their individual fair values.* In a bargain purchase situation, this net asset fair value effectively replaces the consideration transferred as the acquired firm's valuation basis for financial reporting. The consideration transferred serves as the acquired firm's valuation basis only if the consideration equals or exceeds the net amount of fair values for the assets acquired and liabilities assumed (as in the first two examples). In this case, however, the \$2,000,000 consideration paid is less than the \$2,550,000 net asset fair value, indicating a bargain purchase. Thus, the \$2,550,000 net asset fair value serves as the valuation basis for the combination. A \$550,000 *gain on bargain purchase* results because the \$2,550,000 recorded value is accompanied by a payment of only \$2,000,000. The acquirer recognizes this gain on its income statement in the period the acquisition takes place.

<sup>24</sup> As discussed in Chapter 3, the assets and liabilities (including goodwill) acquired in a business combination are assigned to reporting units of the combined entity. A reporting unit is simply a line of business (often a segment) in which an acquired asset or liability will be employed. The objective of assigning acquired assets and liabilities to reporting units is to facilitate periodic goodwill impairment testing.

### *Acquisition Method: Consideration Transferred Is Less Than Net Identified Asset Fair Values—Subsidiary Dissolved*

<b>BigNet Company's Financial Records—December 31</b>	
Current Assets .....	300,000
Computers and Equipment .....	600,000
Capitalized Software .....	1,200,000
Customer Contracts .....	700,000
Notes Payable .....	250,000
Common Stock (20,000 shares issued by BigNet at \$10 par value) ..	200,000
Additional Paid-In Capital .....	1,800,000
Gain on Bargain Purchase .....	550,000
To record acquisition of Smallport Company. Assets acquired and liabilities assumed are each recorded at fair value. Excess net asset fair value is attributed to a gain on bargain purchase.	

#### **LO 2-6a**

Prepare the journal entry to consolidate the accounts of a subsidiary if dissolution takes place.

A consequence of implementing a fair-value concept to acquisition accounting is the recognition of an unrealized gain on the bargain purchase. A criticism of the gain recognition is that the acquirer recognizes profit from a buying activity that occurs prior to traditional accrual measures of earned income (i.e., selling activity). Nonetheless, an exception to the general rule of recording business acquisitions at fair value of the consideration transferred occurs in the rare circumstance of a bargain purchase. Thus, in a bargain purchase, the fair values of the assets received and all liabilities assumed in a business combination are considered more relevant for asset valuation than the consideration transferred.

#### **Summary: Acquisition Method When Dissolution Takes Place**

When the acquired firm is dissolved in a business combination, the acquiring firm prepares a journal entry to record the combination on its books. The fair value of the consideration transferred by the acquiring firm provides the starting point for recording the acquisition. With few exceptions, the separately identified assets acquired and liabilities assumed are recorded at their individual fair values. Goodwill is recognized if the fair value of the consideration transferred exceeds the net identified asset fair value. If the net identified asset fair value of the business acquired exceeds the consideration transferred, a gain on a bargain purchase is recognized and reported in current income of the combined entity. Exhibit 2.4 summarizes possible allocations using the acquisition method.

#### **LO 2-6b**

Prepare the journal entry to record the various related costs involved in a business combination.

#### **Related Costs of Business Combinations**

Three additional categories of costs typically accompany business combinations, regardless of whether dissolution takes place. First, firms often engage attorneys, accountants, investment bankers, and other professionals for combination-related services. The acquisition

#### **EXHIBIT 2.4** **Consolidation Values—The Acquisition Method**

<b>Consolidation Values</b>	<b>Acquisition Accounting</b>
Consideration transferred equals the fair values of net identified assets acquired.	Identified assets acquired and liabilities assumed are recorded at their fair values.
Consideration transferred is greater than the fair values of net identified assets acquired.	Identified assets acquired and liabilities assumed are recorded at their fair values. The excess consideration transferred over the net identified asset fair value is recorded as goodwill.
Bargain purchase—consideration transferred is less than the fair values of net identified assets acquired. The total of the individual fair values of the net identified assets acquired effectively becomes the acquired business fair value.	Identified assets acquired and liabilities assumed are recorded at their fair values. The excess amount of net identified asset fair value over the consideration transferred is recorded as a gain on bargain purchase.

**EXHIBIT 2.5**  
**Acquisition Method—**  
**Accounting for Costs**  
**Frequently Associated with**  
**Business Combinations**

Types of Combination Costs	Acquisition Accounting
Direct combination costs (e.g., accounting, legal, investment banking, appraisal fees, etc.)	Expense as incurred
Indirect combination costs (e.g., internal costs such as allocated secretarial or managerial time)	Expense as incurred
Amounts incurred to register and issue securities	Reduce the value assigned to the fair value of the securities issued (typically a debit to additional paid-in capital)

method does not consider such expenditures as part of the fair value received by the acquirer. Therefore, professional service fees are expensed in the period incurred. The second category concerns an acquiring firm's internal costs. Examples include secretarial and management time allocated to the acquisition activity. Such indirect costs are reported as current year expenses, too. Finally, amounts incurred to register and issue securities in connection with a business combination simply reduce the otherwise determinable fair value of those securities. Exhibit 2.5 summarizes the three categories of related payments that accompany a business combination and their respective accounting treatments.

To illustrate the accounting treatment of these costs that frequently accompany business combinations, assume the following in connection with BigNet's acquisition of Smallport.

- BigNet pays an additional \$100,000 in accounting and attorney fees.
- Internal secretarial and administrative costs of \$75,000 are indirectly attributable to BigNet's combination with Smallport.
- Costs to register and issue BigNet's securities issued in the combination total \$20,000.

Following the acquisition method, regardless of whether dissolution occurs or separate incorporation is maintained, BigNet would record these transactions as follows:

BigNet Company's Financial Records	
Professional Services Expense .....	100,000
Cash .....	100,000
To record as expenses of the current period any direct combination costs.	
Salaries and Administrative Expenses .....	75,000
Accounts Payable (or Cash) .....	75,000
To record as expenses of the current period any indirect combination costs.	
Additional Paid-In Capital .....	20,000
Cash .....	20,000
To record costs to register and issue stock in connection with the Smallport acquisition.	

### The Acquisition Method When Separate Incorporation Is Maintained

When each company retains separate incorporation in a business combination, many aspects of the consolidation process are identical to those demonstrated in the previous section. Fair value, for example, remains the basis for initially consolidating the subsidiary's assets and liabilities. Also, the acquiring firm records a journal entry on its books reflecting the investment and the consideration transferred in the combination.

However, several significant differences are evident in combinations in which each company remains a legally incorporated separate entity. Most noticeably, the consolidation of the financial information is only simulated; the acquiring company does not physically record the acquired assets and liabilities. *Because dissolution does not occur, each company maintains independent record-keeping.* To facilitate the preparation of consolidated financial statements, a worksheet and consolidation entries are employed using data gathered from these separate companies.

A worksheet provides the structure for generating financial reports for the single economic entity. An integral part of this process employs consolidation worksheet entries that either adjust or eliminate various account balances of the parent and subsidiary. These adjustments

and eliminations are entered on the worksheet to produce consolidated statements as if the financial records had been physically combined. *Because no actual union occurs, neither company ever records consolidation worksheet entries in its journals.* Instead, these adjustments and eliminations appear solely on the worksheet to derive consolidated balances for financial reporting purposes.

**Example: (includes stock issue, related combination costs, and contingent consideration)**

To illustrate the worksheet mechanics, we again use the Exhibit 2.3 example of BigNet and Smallport. We also include combination costs and contingent consideration. Assume that BigNet acquires Smallport Company on December 31 by issuing 26,000 shares of \$10 par value common stock valued at \$100 per share (or \$2,600,000 in total). BigNet pays fees of \$40,000 to a third party for its assistance in arranging the transaction.

Then, to settle a difference of opinion regarding Smallport's fair value, BigNet promises to pay an additional \$83,200 to the former owners if Smallport's earnings exceed \$300,000 during the next annual period. BigNet estimates a 25 percent probability that the \$83,200 contingent payment will be required. A discount rate of 4 percent (to represent the time value of money) yields an expected present value of \$20,000 for the contingent liability ( $\$83,200 \times 25\% \times 0.961538$ ). The fair-value approach of the acquisition method views such contingent payments as part of the consideration transferred. According to this view, contingencies have value to those who receive the consideration and represent measurable obligations of the acquirer.<sup>25</sup> Therefore, the fair value of the consideration transferred in this example consists of the following two elements:

Fair value of securities issued by BigNet.....	\$2,600,000
Fair value of contingent performance liability.....	<u>20,000</u>
Total fair value of consideration transferred.....	<u>\$2,620,000</u>

To facilitate a possible future spinoff, BigNet maintains Smallport as a separate corporation with its independent accounting information system intact. Therefore, whenever financial statements for the combined entity are prepared, BigNet utilizes a worksheet in simulating the consolidation of these two companies.

Although the assets and liabilities are not transferred, BigNet must still record the consideration provided to Smallport's owners. When the subsidiary remains separate, the parent establishes an investment account that initially reflects the acquired firm's acquisition-date fair value. Because Smallport maintains its separate identity, BigNet prepares the following journal entries on its books to record the business combination.

**LO 2-6c**

Prepare the journal entry to record a business combination when the acquired firm retains its separate existence.

**LO 2-7**

Prepare a worksheet to consolidate the accounts of two companies that form a business combination in the absence of dissolution.

**Acquisition Method—Subsidiary Is Not Dissolved**

**BigNet Company's Financial Records—December 31**

Investment in Smallport Company (consideration transferred).....	2,620,000
Contingent Performance Liability.....	20,000
Common Stock (26,000 shares issued by BigNet at \$10 par value)....	260,000
Additional Paid-In Capital (value of shares in excess of par value)....	2,340,000
To record acquisition of Smallport Company, which maintains its separate legal identity.	
Professional Services Expense.....	40,000
Cash (paid for third-party fees).....	40,000
To record combination costs.	

As Exhibit 2.6 demonstrates, a worksheet can be prepared on the date of acquisition to arrive at consolidated totals for this combination. The entire process consists of six steps.

<sup>25</sup> The ASC (805-30-35-1) notes several reasons for contingent consideration including meeting an earnings target, reaching a specified share price, or reaching a milestone on a research and development project.

**EXHIBIT 2.6 Acquisition Method—Date of Acquisition**

Accounts	BigNet	Smallport	Consolidation Entries		Consolidated Totals
			Debits	Credits	
<b>Income Statement</b>					
Revenues	(1,000,000)				(1,000,000)
Expenses	840,000*				840,000
Net income	(160,000)				(160,000)
<b>Statement of Retained Earnings</b>					
Retained earnings, 1/1	(870,000)				(870,000)
Net income (above)	(160,000)*				(160,000)
Dividends declared	110,000				110,000
Retained earnings, 12/31	(920,000)				(920,000)
<b>Balance Sheet</b>					
Current assets	1,060,000*	300,000			1,360,000
Investment in Smallport Company	2,620,000*	—0—		(S) 600,000	—0—
Computers and equipment	1,300,000	400,000	(A) 200,000	(A) 2,020,000	1,900,000
Capitalized software	500,000	100,000	(A) 1,100,000		1,700,000
Customer contracts	—0—	—0—	(A) 700,000		700,000
Goodwill	—0—	—0—	(A) 70,000		70,000
Total assets	5,480,000	800,000			5,730,000
Notes payable	(300,000)	(200,000)		(A) 50,000	(550,000)
Contingent performance liability	(20,000)*				(20,000)
Common stock	(1,860,000)*	(100,000)	(S) 100,000		(1,860,000)
Additional paid-in capital	(2,380,000)*	(20,000)	(S) 20,000		(2,380,000)
Retained earnings, 12/31 (above)	(920,000)	(480,000)	(S) 480,000		(920,000)
Total liabilities and equities	(5,480,000)	(800,000)	2,670,000	2,670,000	(5,730,000)

Note: Parentheses indicate a credit balance.

\*Balances have been adjusted for consideration transferred and payment of direct acquisition costs. Also note follow-through effects to net income and retained earnings from the expensing of the direct acquisition costs.

(S) Elimination of Smallport's stockholders' equity accounts as of December 31 and book value portion of the investment account.

(A) Allocation of BigNet's consideration fair value in excess of book value.

Note: Parentheses indicate a credit balance.

\*Balances have been adjusted for consideration transferred and payment of direct acquisition costs. Also note follow-through effects to net income and retained earnings from the expensing of the direct acquisition costs.

(S) Elimination of Smallport's stockholders' equity accounts as of December 31 and book value portion of the investment account.

(A) Allocation of BigNet's consideration fair value in excess of book value.

**Step 1**

Prior to constructing a worksheet, the parent prepares a formal allocation of the acquisition-date fair value similar to the equity method procedures presented in Chapter 1.<sup>26</sup> Thus, the following schedule is appropriate for BigNet's acquisition of Smallport:

Acquisition-Date Fair-Value Allocation Schedule	
Fair value of consideration transferred by BigNet . . . . .	\$2,620,000
Book value of Smallport (see Exhibit 2.3) . . . . .	600,000
Excess of fair value over book value . . . . .	\$2,020,000
Allocations made to specific accounts based on acquisition-date fair and book value differences (see Exhibit 2.3):	
Computers and equipment (\$600,000 – \$400,000) . . . . .	\$ 200,000
Capitalized software (\$1,200,000 – \$100,000) . . . . .	1,100,000
Customer contracts (\$700,000 – 0) . . . . .	700,000
Notes payable (\$250,000 – \$200,000) . . . . .	(50,000)
Excess fair value not identified with specific items—Goodwill . . . . .	\$ 70,000

<sup>26</sup> This allocation procedure is helpful but not critical if dissolution occurs. The asset and liability accounts are simply added directly into the parent's books at their acquisition-date fair value with any excess assigned to goodwill as shown in the previous sections of this chapter.



Note that this schedule initially subtracts Smallport's acquisition-date book value. The resulting \$2,020,000 difference represents the total amount needed on the Exhibit 2.6 worksheet to adjust Smallport's individual assets and liabilities from book value to fair value (and to recognize goodwill). Next, the schedule shows how this \$2,020,000 total is allocated to adjust each individual item to fair value. The fair-value allocation schedule thus effectively serves as a convenient supporting schedule for the Exhibit 2.6 worksheet and is routinely prepared for every consolidation.

No part of the \$2,020,000 excess fair value is attributed to the current assets because their book values equal their fair values. The Notes Payable account shows a negative allocation because the debt's present value exceeds its book value. An increase in debt decreases the fair value of the company's net assets.

### ***Step 2***

The consolidation process begins with preparing the first two columns of the worksheet (see Exhibit 2.6) containing the separate companies' acquisition-date book value financial figures (see Exhibit 2.3). BigNet's accounts have been adjusted for the journal entries recorded earlier for the investment and the combination costs. As another preliminary step, Smallport's revenue, expense, and dividend accounts have been closed into its Retained Earnings account. The subsidiary's operations prior to the December 31 takeover have no direct bearing on the operating results of the business combination. These activities occurred before Smallport was acquired; thus, the new owner should not include any precombination subsidiary revenues or expenses in the consolidated statements.

### ***Step 3***

Consolidation Entry S eliminates Smallport's stockholders' equity accounts (S is a reference to beginning subsidiary stockholders' equity) as follows:

#### ***Consolidation Entry S***

Common Stock (Smallport Company) . . . . .	100,000	
Additional Paid-In Capital (Smallport Company) . . . . .	20,000	
Retained Earnings (Smallport Company) . . . . .	480,000	
Investment in Smallport Company . . . . .		600,000

Consolidation Entry S is a worksheet entry and accordingly does not affect the financial records of either company. The subsidiary balances (Common Stock, Additional Paid-In Capital, and Retained Earnings) represent ownership interests that are now held by the parent—thus they are not represented as equity in the parent's consolidated balance sheet. Moreover, by removing these account balances on the worksheet, only Smallport's assets and liabilities remain to be combined with the parent company figures.

Consolidation Entry S also removes the \$600,000 component of the parent's Investment in Smallport Company account balance that equates to the book value of the subsidiary's net assets. For external reporting purposes, BigNet should include each of Smallport's assets and liabilities rather than a single investment balance. In effect, this portion of the parent's Investment in Smallport Company account balance is eliminated and replaced by the specific subsidiary assets and liabilities that are already listed in the second column of the worksheet.

### ***Step 4***

Consolidation Entry A removes the \$2,020,000 excess payment in the Investment in Smallport Company and assigns it to the specific accounts indicated by the fair-value allocation schedule as follows:

**Consolidation Entry A**

Computers and Equipment .....	200,000	
Capitalized Software .....	1,100,000	
Customer Contracts .....	700,000	
Goodwill .....	70,000	
Note Payable .....		50,000
Investment in Smallport Company .....		2,020,000

Consequently, Computers and Equipment is increased by \$200,000 to agree with Smallport's fair value: \$1,100,000 is attributed to Capitalized Software, \$700,000 to Customer Contracts, and \$50,000 to Notes Payable. The unidentified excess of \$70,000 is allocated to Goodwill. This entry for the consolidation worksheet is labeled Entry A to indicate that it represents the allocations made in connection with Smallport's acquisition-date fair value.

Consolidation Entry A also completes the Investment in Smallport Company account balance elimination on the worksheet. The investment remains on BigNet's books, but it does not appear on the consolidated balance sheet. Instead the investment account is replaced on the worksheet with Smallport's actual assets and liabilities as shown in Step 5.

**Step 5**

All accounts are extended into the Consolidated Totals column. For accounts such as Current Assets, this process simply adds Smallport and BigNet book values. However, when applicable, this extension also includes any allocations to establish the acquisition-date fair values of Smallport's assets and liabilities. Computers and Equipment, for example, is increased by \$200,000. By increasing the subsidiary's book value to fair value, the reported balances are the same as in the previous examples when dissolution occurred. The use of a worksheet does not alter the consolidated figures but only the method of deriving those numbers.

**Step 6**

We subtract consolidated expenses from revenues to arrive at a \$160,000 net income. Note that because this is an acquisition-date worksheet, we consolidate no amounts for Smallport's revenues and expenses. Having just been acquired, Smallport has not yet earned any income for BigNet owners. Consolidated revenues, expenses, and net income are identical to BigNet's balances. Subsequent to acquisition, of course, Smallport's revenue and expense accounts will be consolidated with BigNet's (coverage of this topic begins in Chapter 3).

**Worksheet Mechanics**

In general, totals (such as net income and ending retained earnings) are not directly consolidated across on the worksheet. Rather, the components (such as revenues and expenses) are extended across and then combined vertically to derive the appropriate figure. Net income is then carried down on the worksheet to the statement of retained earnings and used (along with beginning retained earnings and dividends) to compute the December 31 retained earnings balance. In the same manner, ending retained earnings of \$920,000 is entered into the balance sheet to arrive at total liabilities and equities of \$5,730,000, a number that reconciles with the total of consolidated assets.

Although it remains on BigNet's books, the Investment in Smallport account is eliminated entirely in consolidation. On the worksheet, the investment account is effectively replaced with the acquisition-date fair values of Smallport's assets and liabilities along with goodwill created by the combination.

The balances in the final column of Exhibit 2.6 are used to prepare consolidated financial statements for the business combination of BigNet Company and Smallport Company. The worksheet entries serve as a catalyst to bring together the two independent sets of financial information. The actual accounting records of both BigNet and Smallport remain unaltered by this consolidation process.

### ***Bargain Purchase of a Separately Incorporated Subsidiary***

Finally, although not addressed directly by the above example, bargain purchase gains can also occur in acquisitions of separately incorporated subsidiaries. If the consideration transferred is less than the fair value of a newly acquired subsidiary's identifiable net assets, then the parent records a bargain purchase gain on its books as part of the investment journal entry. The bargain purchase gain then appears on the consolidated income statement for the reporting period that contains the acquisition date.

#### **LO 2-8**

Describe the accounting treatment for the various intangible assets often acquired in a business combination.

## **Acquisition-Date Fair-Value Allocations— Additional Issues**

### **Intangibles**

An important element of acquisition accounting is the acquirer's recognition and measurement of the assets acquired and liabilities assumed in the combination. In particular, the advent of the information age brings new measurement challenges for a host of intangible assets that provide value in generating future cash flows. Intangible assets often comprise the largest proportion of an acquired firm. For example, when AT&T acquired AT&T Broadband, it allocated approximately \$19 billion of the \$52 billion purchase price to franchise costs. These franchise costs form an intangible asset representing the value attributed to agreements with local authorities that allow access to homes.

Intangible assets include both current and noncurrent assets (not including financial instruments) that lack physical substance. In determining whether to recognize an intangible asset in a business combination, two specific criteria are essential.

1. Does the intangible asset arise from contractual or other legal rights?
2. Is the intangible asset capable of being sold or otherwise separated from the acquired enterprise?

Intangibles arising from contractual or legal rights are commonplace in business combinations. Often identified among the assets acquired are trademarks, patents, copyrights, franchise agreements, and a number of other intangibles that derive their value from governmental protection (or other contractual agreements) that allow a firm exclusive use of the asset. Most intangible assets recognized in business combinations meet the contractual-legal criterion.

Also seen in business combinations are intangible assets meeting the separability criterion. An acquired intangible asset is recognized if it is capable of being separated or divided from the acquiree and sold, transferred, licensed, rented, or exchanged individually or together with a related contract, identifiable asset, or liability. The acquirer is not required to have the intention to sell, license, or otherwise exchange the intangible in order to meet the separability criterion. For example, an acquiree may have developed internally a valuable customer list or other noncontractual customer relationships. Although the value of these items may not have arisen from a specific legal right, they nonetheless convey benefits to the acquirer that may be separable through sale, license, or exchange.

Exhibit 2.7 provides an extensive listing of intangible assets with indications of whether they typically meet the legal/contractual or separability criteria.

The FASB (Exposure Draft, *Business Combinations and Intangible Assets*, para. 271) recognized the inherent difficulties in estimating the separate fair values of many intangibles and stated that:

difficulties may arise in assigning the acquisition cost to individual intangible assets acquired in a basket purchase such as a business combination. Measuring some of those assets is less difficult than measuring other assets, particularly if they are exchangeable and traded regularly in the marketplace. . . . Nonetheless, even those assets that cannot be measured on that basis may have more cash flow streams directly or indirectly associated with them than can be used as the basis for measuring them. While the resulting measures may lack the precision of other measures, they provide information that is more representationally faithful than would be the case if those assets were simply subsumed into goodwill on the grounds of measurement difficulties.

## EXHIBIT 2.7 Illustrative Examples of Intangible Assets That Meet the Criteria for Recognition Separately from Goodwill (FASB ASC paragraphs 805-20-55-11 through 45)

The following are examples of intangible assets that meet the criteria for recognition as an asset apart from goodwill. The following illustrative list is not intended to be all-inclusive; thus, an acquired intangible asset could meet the recognition criteria of this statement but not be included on that list. Assets designated by the symbol (c) are those that would generally be recognized separately from goodwill because they meet the contractual-legal criterion. Assets designated by the symbol (s) do not arise from contractual or other legal rights but should nonetheless be recognized separately from goodwill because they meet the separability criterion. The determination of whether a specific acquired intangible asset meets the criteria in this statement for recognition apart from goodwill should be based on the facts and circumstances of each individual business combination.\*

### Marketing-Related Intangible Assets

1. Trademarks, trade names.<sup>c</sup>
2. Service marks, collective marks, certification marks.<sup>c</sup>
3. Trade dress (unique color, shape, or package design).<sup>c</sup>
4. Newspaper mastheads.<sup>c</sup>
5. Internet domain names.<sup>c</sup>
6. Noncompetition agreements.<sup>c</sup>

### Customer-Related Intangible Assets

1. Customer lists.<sup>s</sup>
2. Order or production backlog.<sup>c</sup>
3. Customer contracts and related customer relationships.<sup>c</sup>
4. Noncontractual customer relationships.<sup>s</sup>

### Artistic-Related Intangible Assets

1. Plays, operas, and ballets.<sup>c</sup>
2. Books, magazines, newspapers, and other literary works.<sup>c</sup>
3. Musical works such as compositions, song lyrics, and advertising jingles.<sup>c</sup>
4. Pictures and photographs.<sup>c</sup>
5. Video and audiovisual material, including motion pictures, music videos, and television programs.<sup>c</sup>

### Contract-Based Intangible Assets

1. Licensing, royalty, standstill agreements.<sup>c</sup>
2. Advertising, construction, management, service, or supply contracts.<sup>c</sup>
3. Lease agreements.<sup>c</sup>
4. Construction permits.<sup>c</sup>
5. Franchise agreements.<sup>c</sup>
6. Operating and broadcast rights.<sup>c</sup>
7. Use rights such as landing, drilling, water, air, mineral, timber cutting, and route authorities.<sup>c</sup>
8. Servicing contracts such as mortgage servicing contracts.<sup>c</sup>
9. Employment contracts.<sup>c</sup>

### Technology-Based Intangible Assets

1. Patented technology.<sup>c</sup>
2. Computer software and mask works.<sup>c</sup>
3. Unpatented technology.<sup>s</sup>
4. Databases, including title plants.<sup>s</sup>
5. Trade secrets, including secret formulas, processes, and recipes.<sup>c</sup>

\*The intangible assets designated by the symbol (c) also could meet the separability criterion. However, separability is not a necessary condition for an asset to meet the contractual-legal criterion.

Undoubtedly, as our knowledge economy continues its rapid growth, asset allocations to items such as those identified in Exhibit 2.7 are expected to be frequent.

## Preexisting Goodwill on Subsidiary's Books

In our examples of business combinations so far, the assets acquired and liabilities assumed have all been specifically identifiable (e.g., current assets, capitalized software, computers and equipment, customer contracts, and notes payable). However, in many cases, an acquired firm has an unidentifiable asset (i.e., goodwill recorded on its books in connection with a previous business combination of its own). A question arises as to the parent's treatment of this preexisting goodwill on the newly acquired subsidiary's books.

By its very nature, such preexisting goodwill is not considered identifiable by the parent. Therefore, in calculating the new goodwill acquired in the combination, the new owner simply excludes the carrying amount of any preexisting goodwill from the subsidiary's acquisition-date book value. The new owner effectively reallocates any preexisting subsidiary goodwill via a credit in consolidation worksheet Entry A. This worksheet credit to the subsidiary's goodwill balance is then offset by worksheet entries to identifiable assets and liabilities, followed by a debit to the new goodwill from the combination. The logic is that the total business fair value is first allocated to the identified assets and liabilities. Only if an excess amount remains after recognizing the fair values of the net identified assets is any goodwill recognized. Thus, in all business combinations, only goodwill reflected in the current acquisition is brought forward in the consolidated entity's financial reports.

## Acquired In-Process Research and Development

The negotiations for a business combination begin with the identification of the tangible and intangible assets acquired and liabilities assumed by the acquirer. The fair values of the acquired individual assets and liabilities then provide the basis for financial statement valuations. Many firms—especially those in pharmaceutical and high-tech industries—have allocated significant portions of acquired businesses to in-process research and development (IPR&D).

Current accounting standards require that acquired IPR&D be measured at acquisition-date fair value and recognized in consolidated financial statements as an asset. However, this was not always the case. Past standards required immediate expense treatment for acquired IPR&D. Nonetheless, arguments about the future economic benefits of IPR&D ultimately persuaded the FASB to require asset recognition. For example, in commenting on the nature of IPR&D as an asset, Pfizer in an October 28, 2005, comment letter to the FASB observed that:

board members know that companies frame business strategies around IPR&D, negotiate for it, pay for it, fair value it, and nurture it and they view those seemingly rational actions as inconsistent with the notion that IPR&D has no probable future economic benefit.

Asset recognition for acquired IPR&D is now standard even though benefits must be estimated and may be uncertain. To illustrate, when ARCA Biopharma acquired a significant in-process research and development asset through a merger with Nuvelo, Inc., it disclosed the following in its financial statements:

A valuation firm was engaged to assist ARCA in determining the estimated fair values of these (IPR&D) assets as of the acquisition date. Discounted cash flow models are typically used in these valuations, and the models require the use of significant estimates and assumptions including but not limited to:

- Projecting regulatory approvals.
- Estimating future cash flows from product sales resulting from completed products and in-process projects.
- Developing appropriate discount rates and probability rates by project.

The IPR&D asset is initially considered an indefinite-lived intangible asset and is not subject to amortization. IPR&D is then tested for impairment annually or more frequently if events or changes in circumstances indicate that the asset might be impaired.

Recognizing acquired IPR&D as an asset is clearly consistent with the FASB's fair-value approach to acquisition accounting. Similar to costs that result in goodwill and other internally generated intangibles (e.g., customer lists, trade names, etc.), IPR&D costs are expensed as incurred in ongoing business activities. However, a business combination is considered a significant recognition event for which all fair values transferred in the transaction should be fully accounted for, including any values assigned to IPR&D. Moreover, because the acquirer paid for the IPR&D, an expectation of future economic benefit is assumed and, therefore, the amount is recognized as an asset.

To illustrate further, assume that ClearTone Company pays \$2,300,000 in cash for all assets and liabilities of Newave, Inc., in a merger transaction. ClearTone manufactures components for cell phones. The primary motivation for the acquisition is a particularly attractive research and development project under way at Newave that will extend a cell phone's battery life by up to 50 percent. ClearTone hopes to combine the new technology with its manufacturing process and projects a resulting substantial revenue increase. ClearTone is optimistic that Newave will finish the project in the next two years. At the acquisition date, ClearTone prepares the following schedule that recognizes the items of value it expects to receive from the Newave acquisition:

Consideration transferred . . . . .		\$2,300,000
Receivables . . . . .	\$ 55,000	
Patents . . . . .	220,000	
In-process research and development . . . . .	1,900,000	
Accounts payable . . . . .	(175,000)	
Fair value of identified net assets acquired . . . . .		<u>2,000,000</u>
Goodwill . . . . .		<u>\$ 300,000</u>

ClearTone records the transaction as follows:

Receivables .....	55,000	
Patents .....	220,000	
Research and Development Asset .....	1,900,000	
Goodwill .....	300,000	
Accounts Payable .....		175,000
Cash .....		2,300,000

Research and development expenditures incurred subsequent to the date of acquisition will continue to be expensed. Acquired IPR&D assets initially should be considered indefinite-lived until the project is completed or abandoned. As with other indefinite-lived intangible assets, an acquired IPR&D asset is tested for impairment and is not amortized until its useful life is determined to be no longer indefinite.

## Convergence between U.S. and International Accounting Standards

The FASB ASC Topics “Business Combinations” (805) and “Consolidation” (810) represent outcomes of a joint project between the FASB and the International Accounting Standards Board (IASB). The primary objective of the project was stated as follows:

to develop a single high-quality standard for business combinations that can be used for both domestic and cross-border financial reporting. The goal is to develop a standard that includes a common set of principles and related guidance that produces decision-useful information and minimizes exceptions to those principles. The standard should improve the completeness, relevance, and comparability of financial information about business combinations . . . (FASB Project Updates: *Business Combinations: Applying the Acquisition Method—Joint Project of the IASB and FASB*: October 25, 2007)

The IASB subsequently issued International Financial Reporting Standard 3 (*IFRS 3*) Revised (effective July 2009), which along with FASB ASC Topics 805, “Business Combinations,” and 810, “Consolidation,” effectively converged the accounting for business combinations internationally. The two standards are identical in most important aspects of accounting for business combinations although differences can result in noncontrolling interest valuation and some other limited applications.<sup>27</sup> The joint project on business combinations represents one of the first successful implementations of the agreement between the two standard-setting groups to coordinate efforts on future work with the goal of developing high-quality comparable standards for both domestic and cross-border financial accounting.

### Summary

1. Consolidation of financial information is required for external reporting purposes when one organization gains control of another, thus forming a single economic entity. In many combinations, all but one of the companies is dissolved as a separate legal corporation. Therefore, the consolidation process is carried out fully at the date of acquisition to bring together all accounts into a single set of financial records. In other combinations, the companies retain their identities as separate enterprises and continue to maintain their own separate accounting systems. For these cases, consolidation is a periodic process necessary whenever the parent produces external financial statements. This periodic procedure is frequently accomplished through the use of a worksheet and consolidation entries.
2. Current financial reporting standards require the acquisition method in accounting for business combinations. Under the acquisition method, the fair value of the consideration transferred provides the starting point for valuing the acquired firm. The fair value of the consideration transferred by the acquirer includes the fair value of any contingent consideration. The acquired company assets and liabilities are consolidated at their individual acquisition-date fair values. Direct combination costs are expensed as incurred because they are not part of the acquired business fair value. Also, the fair value of all acquired in-process research and development is recognized as an asset in business combinations and is subject to subsequent impairment reviews.

<sup>27</sup> Chapter 4 of this text provides further discussion of noncontrolling interest accounting differences across U.S. GAAP and IFRS. Other differences are presented in chapters where the applicable topics are covered.

3. If the consideration transferred for an acquired firm exceeds the total fair value of the acquired firm's net assets, the residual amount is recognized in the consolidated financial statements as goodwill, an intangible asset. When a bargain purchase occurs, individual assets and liabilities acquired continue to be recorded at their fair values and a gain on bargain purchase is recognized.
4. Particular attention should be given to the recognition of intangible assets in business combinations. An intangible asset must be recognized in an acquiring firm's financial statements if the asset arises from a legal or contractual right (e.g., trademarks, copyrights, artistic materials, royalty agreements). If the intangible asset does not represent a legal or contractual right, the intangible will still be recognized if it is capable of being separated from the firm (e.g., customer lists, noncontractual customer relationships, unpatented technology).

## Comprehensive Illustration

(Estimated Time: 45 to 65 Minutes) Following are the account balances of Miller Company and Richmond Company as of December 31. The fair values of Richmond Company's assets and liabilities are also listed.

### Problem

	Miller Company Book Values 12/31	Richmond Company Book Values 12/31	Richmond Company Fair Values 12/31
Cash . . . . .	\$ 600,000	\$ 200,000	\$ 200,000
Receivables . . . . .	900,000	300,000	290,000
Inventory . . . . .	1,100,000	600,000	820,000
Buildings and equipment (net) . . . . .	9,000,000	800,000	900,000
Unpatented technology . . . . .	—0—	—0—	500,000
In-process research and development . . . . .	—0—	—0—	100,000
Accounts payable . . . . .	(400,000)	(200,000)	(200,000)
Notes payable . . . . .	(3,400,000)	(1,100,000)	(1,100,000)
Totals . . . . .	<u>\$ 7,800,000</u>	<u>\$ 600,000</u>	<u>\$ 1,510,000</u>
Common stock—\$20 par value . . . . .	\$ (2,000,000)		
Common stock—\$5 par value . . . . .		\$ (220,000)	
Additional paid-in capital . . . . .	(900,000)	(100,000)	
Retained earnings, 1/1 . . . . .	(2,300,000)	(130,000)	
Revenues . . . . .	(6,000,000)	(900,000)	
Expenses . . . . .	3,400,000	750,000	
Totals . . . . .	<u>\$ (7,800,000)</u>	<u>\$ (600,000)</u>	

Note: Parentheses indicate a credit balance.

### Additional Information (not reflected in the preceding figures)

- On December 31, Miller issues 50,000 shares of its \$20 par value common stock for all of the outstanding shares of Richmond Company.
- As part of the acquisition agreement, Miller agrees to pay the former owners of Richmond \$250,000 if certain profit projections are realized over the next three years. Miller calculates the acquisition-date fair value of this contingency at \$100,000.
- In creating this combination, Miller pays \$10,000 in stock issue costs and \$20,000 in accounting and legal fees.

### Required

- a. Miller's stock has a fair value of \$32 per share. Using the acquisition method:
  1. Prepare the necessary journal entries if Miller dissolves Richmond so it is no longer a separate legal entity.
  2. Assume instead that Richmond will retain separate legal incorporation and maintain its own accounting systems. Prepare a worksheet to consolidate the accounts of the two companies.
- b. If Miller's stock has a fair value of \$26 per share, describe how the consolidated balances would differ from the results in requirement (a).

## Solution

- a. 1. In a business combination, the accountant first determines the total fair value of the consideration transferred. Because Miller's stock is valued at \$32 per share, the 50,000 issued shares are worth \$1,600,000 in total. Included in the consideration transferred is the \$100,000 acquisition-date fair value of the contingent performance obligation.

This \$1,700,000 total fair value is compared to the \$1,510,000 fair value of Richmond's assets and liabilities (including the fair value of IPR&D). Miller recognizes the \$190,000 excess fair value (\$1,700,000 – \$1,510,000) as goodwill. Because dissolution occurs, Miller records on its books the individual fair values of Richmond's identifiable assets and liabilities with the excess recorded as goodwill.

The \$10,000 stock issue cost reduces Additional Paid-In Capital. The \$20,000 direct combination costs (accounting and legal fees) are expensed when incurred.

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**Miller Company's Financial Records—December 31**


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Cash .....	200,000	
Receivables .....	290,000	
Inventory .....	820,000	
Buildings and Equipment .....	900,000	
Unpatented Technology .....	500,000	
Research and Development Asset .....	100,000	
Goodwill .....	190,000	
Accounts Payable .....		200,000
Notes Payable .....		1,100,000
Contingent Performance Obligation .....		100,000
Common Stock (Miller) (par value) .....		1,000,000
Additional Paid-In Capital (fair value in excess of par value) .....		600,000
To record acquisition of Richmond Company .....		
Professional Services Expense .....	20,000	
Cash (paid for combination costs) .....		20,000
To record legal and accounting fees related to the combination .....		
Additional Paid-In Capital .....	10,000	
Cash (stock issuance costs) .....		10,000
To record payment of stock issuance costs .....		

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2. Under this scenario, the acquisition fair value is equal to that computed in part (a1).

50,000 shares of stock at \$32.00 each .....	\$1,600,000
Contingent performance obligation .....	100,000
Acquisition-date fair value of consideration transferred .....	<u>\$1,700,000</u>

Because the subsidiary is maintaining separate incorporation, Miller establishes an investment account to reflect the \$1,700,000 acquisition consideration:

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**Miller's Financial Records—December 31**


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Investment in Richmond Company .....	1,700,000	
Contingent Performance Obligation .....		100,000
Common Stock (Miller) (par value) .....		1,000,000
Additional Paid-In Capital (fair value in excess of par value) .....		600,000
To record investment in Richmond Company .....		
Professional Services Expense .....	20,000	
Cash (paid for combination costs) .....		20,000
To record legal and accounting fees related to the combination .....		
Additional Paid-In Capital .....	10,000	
Cash (stock issuance costs) .....		10,000
To record payment of stock issuance costs .....		

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Because Richmond maintains separate incorporation and its own accounting system, Miller prepares a worksheet for consolidation. To prepare the worksheet, Miller first allocates Richmond's fair value to assets acquired and liabilities assumed based on their individual fair values:

Fair value of consideration transferred by Miller . . . . .	\$1,700,000
Book value of Richmond . . . . .	<u>600,000</u>
Excess fair value over book value . . . . .	\$1,100,000

Allocations are made to specific accounts based on differences in fair values and book values:

Receivables (\$290,000 – \$300,000) . . . . .	\$(10,000)	
Inventory (\$820,000 – \$600,000) . . . . .	220,000	
Buildings and equipment (\$900,000 – \$800,000) . . . . .	100,000	
Unpatented technology (\$500,000 – 0) . . . . .	500,000	
In-process research and development . . . . .	<u>100,000</u>	<u>910,000</u>
Goodwill . . . . .		<u>\$190,000</u>

The following steps produce the consolidated financial statements total in Exhibit 2.8:

### Exhibit 2.8 Comprehensive Illustration—Solution—Acquisition Method

#### MILLER COMPANY AND RICHMOND COMPANY Consolidation Worksheet For Period Ending December 31

Accounts	Miller Company	Richmond Company	Consolidation Entries		Consolidated Totals
			Debit	Credit	
<b>Income Statement</b>					
Revenues	(6,000,000)				(6,000,000)
Expenses	3,420,000*				3,420,000*
Net income	(2,580,000)				(2,580,000)
<b>Statement of Retained Earnings</b>					
Retained earnings, 1/1	(2,300,000)				(2,300,000)
Net income (above)	(2,580,000)				(2,580,000)
Retained earnings, 12/31	(4,880,000)				(4,880,000)
<b>Balance Sheet</b>					
Cash	570,000*	200,000			770,000
Receivables	900,000	300,000		(A) 10,000	1,190,000
Inventory	1,100,000	600,000	(A) 220,000		1,920,000
Investment in Richmond Company	1,700,000*	–0–		(A) 1,100,000 (S) 600,000	–0–
Buildings and equipment (net)	9,000,000	800,000	(A) 100,000		9,900,000
Goodwill	–0–	–0–	(A) 190,000		190,000
Unpatented technology	–0–	–0–	(A) 500,000		500,000
Research and development asset	–0–	–0–	(A) 100,000		100,000
Total assets	13,270,000	1,900,000			14,570,000
Accounts payable	(400,000)	(200,000)			(600,000)
Notes payable	(3,400,000)	(1,100,000)			(4,500,000)
Contingent performance obligation	(100,000)*	–0–			(100,000)
Common stock	(3,000,000)*	(220,000)	(S) 220,000		(3,000,000)
Additional paid-in capital	(1,490,000)*	(100,000)	(S) 100,000		(1,490,000)
Retained earnings, 12/31 (above)	(4,880,000)*	(280,000)†	(S) 280,000		(4,880,000)
Total liabilities and equities	(13,270,000)	(1,900,000)	1,710,000	1,710,000	(14,570,000)

Note: Parentheses indicate a credit balance.

\*Balances have been adjusted for issuance of stock, payment of combination expenses, and recognition of contingent performance obligation.

†Beginning retained earnings plus revenues minus expenses.

- Miller's balances have been updated on this worksheet to include the effects of both the newly issued shares of stock, the recognition of the contingent performance liability, and the combination expenses.
  - Richmond's revenue and expense accounts have been closed to Retained Earnings. The acquisition method consolidates only postacquisition revenues and expenses.
  - Worksheet Entry S eliminates the \$600,000 book value component of the Investment in Richmond Company account along with the subsidiary's stockholders' equity accounts. Entry A adjusts all of Richmond's assets and liabilities to fair value based on the allocations determined earlier.
- b. If the fair value of Miller's stock is \$26.00 per share, then the fair value of the consideration transferred in the Richmond acquisition is recomputed as follows:

Fair value of shares issued ( $\$26 \times 50,000$ shares) . . . . .	\$1,300,000
Fair value of contingent consideration . . . . .	<u>100,000</u>
Total consideration transferred at fair value . . . . .	<u>\$1,400,000</u>

Because the consideration transferred is \$110,000 less than the \$1,510,000 fair value of the net assets received in the acquisition, a bargain purchase has occurred. In this situation, Miller continues to recognize each of the separately identified assets acquired and liabilities assumed at their fair values. Resulting differences in the consolidated balances relative to the requirement (a) solution are as follows:

- The \$110,000 excess fair value recognized over the consideration transferred is recognized as a "gain on bargain purchase."
- Consolidated net income increases by the \$110,000 gain to \$2,690,000.
- No goodwill is recognized.
- Miller's additional paid-in capital decreases by \$300,000 to \$1,190,000.
- Consolidated retained earnings increase by the \$110,000 gain to \$4,990,000.

Also, because of the bargain purchase, the "Investment in Richmond Company" account balance on Miller's separate financial statements shows the \$1,510,000 fair value of the net identified assets received. This valuation measure is an exception to the general rule of using the consideration transferred to provide the valuation basis for the acquired firm.

## Appendix A

### LO 2-9

Identify the general characteristics of the legacy purchase and pooling of interest methods of accounting for past business combinations. Understand the effects that persist today in financial statements from the use of these legacy methods.

## Legacy Methods of Accounting For Business Combinations

The acquisition method provides the accounting for business combinations occurring in 2009 and thereafter. However, for decades, business combinations were accounted for using either the **purchase** or **pooling of interests** method. From 2002 through 2008, the purchase method was used exclusively for business combinations. Prior to 2002, financial reporting standards allowed two alternatives: the purchase method and the pooling of interests method. Because the FASB required prospective application of the acquisition method for 2009 and beyond, the purchase and pooling of interests methods continue to provide the basis for financial reporting for pre-2009 business combinations and thus will remain relevant for many years. Literally tens of thousands of past business combinations will continue to be reported in future statements under one of these legacy methods.

The following sections describe the purchase and pooling of interests methods along with comparisons to the acquisition method.

### The Purchase Method: An Application of the Cost Principle

A basic principle of the purchase method was to record a business combination at the cost to the new owners. For example, several years ago MGM Grand, Inc., acquired Mirage Resorts, Inc., for approximately \$6.4 billion. This purchase price continued to serve as the valuation basis for Mirage Resorts' assets and liabilities in the preparation of MGM Grand's consolidated financial statements.

Several elements of the purchase method reflect a strict application of the cost principle. The following items represent examples of how the cost-based purchase method differs from the fair-value-based acquisition method.

- Acquisition date allocations (including bargain purchases).
- Direct combination costs.
- Contingent consideration.
- In-process research and development.

We next briefly discuss the accounting treatment for these items across the current and previous financial reporting regimes.

**Purchase-Date Cost Allocations (Including Bargain Purchases)**

In pre-2009 business combinations, the application of the cost principle often was complicated because literally hundreds of separate assets and liabilities were acquired. Accordingly, for asset valuation and future income determination, firms needed a basis to allocate the total cost among the various assets and liabilities received in the bargained exchange. Similar to the acquisition method, the purchase method based its cost allocations on the combination-date fair values of the acquired assets and liabilities. Also closely related to the acquisition method procedures, any excess of cost over the sum of the net identified asset fair values was attributed to goodwill.

But the purchase method stands in marked contrast to the acquisition method in bargain purchase situations. Under the purchase method, a bargain purchase occurred when the sum of the individual fair values of the acquired net assets exceeded the purchase cost. To record a bargain purchase at cost, however, the purchase method required that certain long-term assets be recorded at amounts below their assessed fair values.

For example, assume Adams Co. paid \$520,000 for Brook Co. in 2008. Brook has the following assets with appraised fair values:

Accounts receivable . . . . .	\$ 15,000
Land . . . . .	200,000
Building . . . . .	400,000
Accounts payable . . . . .	<u>(5,000)</u>
Total net fair value . . . . .	<u>\$610,000</u>

However, to record the combination at its \$520,000 cost, Adams cannot use all of the above fair values. The purchase method solution was to require that Adams reduce the valuation assigned to the acquired long-term assets (land and building) proportionately by \$90,000 (\$610,000 – \$520,000). The total fair value of the long-term assets, in this case \$600,000, provided the basis for allocating the reduction. Thus, Adams would reduce the acquired land by  $(2/6 \times \$90,000) = \$30,000$  and the building by  $(4/6 \times \$90,000) = \$60,000$ . Adams’s journal entry to record the combination using the purchase method would then be as follows:

Accounts Receivable . . . . .	15,000	
Land (\$200,000 – \$30,000) . . . . .	170,000	
Building (\$400,000 – \$60,000) . . . . .	340,000	
Accounts Payable . . . . .		5,000
Cash . . . . .		520,000

Note that current assets and liabilities did not share in the proportionate reduction to cost. Long-term assets were subject to the reduction because their fair-value estimates were considered less reliable than current items and liabilities. Finally, in rare situations firms recognized an extraordinary gain on a purchase, but only in the very unusual case that the long-term assets were reduced to a zero valuation.

In contrast, the acquisition method embraces the fair-value concept and discards the consideration transferred as a valuation basis for the business acquired in a bargain purchase. Instead, the acquirer measures and recognizes the fair values of each of the assets acquired and liabilities assumed at the date of combination, regardless of the consideration transferred in the transaction. As a result, (1) no assets are recorded at amounts below their assessed fair values, as is the case with bargain purchases accounted for by the purchase method, and (2) a gain on bargain purchase is recognized at the acquisition date.

**Direct Combination Costs**

Almost all business combinations employ professional services to assist in various phases of the transaction. Examples include target identification, due diligence regarding the value of an acquisition, financing, tax planning, and preparation of formal legal documents. Prior to 2009, under the purchase

method, the investment cost basis included direct combination costs. In contrast, the acquisition method considers these costs as payments for services received, not part of the fair value exchanged for the business. Thus, under the acquisition method, direct combination costs are expensed as incurred.

### ***Contingent Consideration***

Often business combination negotiations result in agreements to provide additional payments to former owners if they meet specified future performance measures. The purchase method accounted for such contingent consideration obligations as postcombination adjustments to the purchase cost (or stockholders' equity if the contingency involved the parent's equity share value) upon resolution of the contingency. The acquisition method treats contingent consideration obligations as a negotiated component of the fair value of the consideration transferred, consistent with the fair-value measurement attribute.

### ***In-Process Research and Development (IPR&D)***

Prior to 2009, financial reporting standards required the immediate expensing of acquired IPR&D if the project had not yet reached technological feasibility and the assets had no future alternative uses. Expensing acquired IPR&D was consistent with the accounting treatment for a firm's ongoing research and development costs.

The acquisition method, however, requires tangible and intangible assets acquired in a business combination to be used in a particular research and development activity, including those that may have no alternative future use, to be recognized and measured at fair value at the acquisition date. These capitalized research and development costs are reported as intangible assets with indefinite lives subject to periodic impairment reviews. Moreover, because the acquirer identified and paid for the IPR&D, the acquisition method assumes an expectation of future economic benefit and therefore recognizes an asset.

### ***The Pooling of Interests Method: Continuity of Previous Ownership***

Historically, former owners of separate firms would agree to combine for their mutual benefit and continue as owners of a combined firm. It was asserted that the assets and liabilities of the former firms were never really bought or sold; former owners merely exchanged ownership shares to become joint owners of the combined firm. Combinations characterized by exchange of voting shares and continuation of previous ownership became known as pooling of interests. Rather than an exchange transaction with one ownership group replacing another, a pooling of interests was characterized by a continuity of ownership interests before and after the business combination. Prior to its elimination, this method was applied to a significant number of business combinations.<sup>26</sup> To reflect the continuity of ownership, two important steps characterized the pooling of interests method:

1. The book values of the assets and liabilities of both companies became the book values reported by the combined entity.
2. The revenue and expense accounts were combined retrospectively as well as prospectively. The idea of continuity of ownership gave support for the recognition of income accruing to the owners both before and after the combination.

Therefore, in a pooling, reported income was typically higher than under the contemporaneous purchase accounting. Under pooling, not only did the firms retrospectively combine incomes, but also the smaller asset bases resulted in smaller depreciation and amortization expenses. Because net income reported in financial statements often is used in a variety of contracts, including managerial compensation, managers considered the pooling method an attractive alternative to purchase accounting.

Prior to 2002, accounting and reporting standards allowed both the purchase and pooling of interest methods for business combinations. However, standard setters established strict criteria for use of the pooling method. The criteria were designed to prevent managers from engaging in purchase transactions and then reporting them as poolings of interests. Business combinations that failed to meet the pooling criteria had to be accounted for by the purchase method.

These criteria had two overriding objectives. First, to ensure the complete fusion of the two organizations, one company had to obtain substantially all (90 percent or more) of the voting stock of the other. The second general objective of these criteria was to prevent purchase combinations from being disguised as poolings. Past experience had shown that combination transactions were frequently manipulated so that they would qualify for pooling of interests treatment (usually to increase reported earnings). However, subsequent events, often involving cash being paid or received by the parties, revealed the true nature of the combination: One company was purchasing the other in a bargained exchange. A number of qualifying criteria for pooling of interests treatment were designed to stop this practice.

<sup>26</sup> Past prominent business combinations accounted for by the pooling of interests method include Exxon-Mobil, Pfizer-Warner Lambert, Yahoo!-Broadcast.com, and Pepsi-Quaker Oats, among thousands of others.

**EXHIBIT 2.9**  
**Precombination**  
**Information for Baker**  
**Company**

January 1	Book Values	Fair Values
Current assets	\$ 30,000	\$ 30,000
Internet domain name	160,000	300,000
Licensing agreements	–0–	500,000
In-process research and development	–0–	200,000
Notes payable	(25,000)	(25,000)
Total net assets	<u>\$165,000</u>	<u>\$1,005,000</u>

Note: Parentheses indicate a credit balance.

***Comparisons across the Pooling of Interests, Purchase, and Acquisition Methods***

To illustrate some of the differences across the purchase, pooling of interests, and acquisition methods, assume that on January 1, Archer Inc. acquired Baker Company in exchange for 10,000 shares of its \$1.00 par common stock having a fair value of \$1,200,000 in a transaction structured as a merger. In connection with the acquisition, Archer paid \$25,000 in legal and accounting fees. Also, Archer agreed to pay the former owners additional cash consideration contingent upon the completion of Baker's existing contracts at specified profit margins. The current fair value of the contingent obligation was estimated to be \$150,000. Exhibit 2.9 provides Baker's combination-date book values and fair values.

***Purchase Method Applied***

Archer's valuation basis for its purchase of Baker is computed and allocated as follows:

Fair value of shares issued . . . . .		\$1,200,000
Direct combination costs (legal and accounting fees) . . . . .		<u>25,000</u>
Cost of the Baker purchase . . . . .		\$1,225,000
Cost allocation:		
Current assets . . . . .	\$ 30,000	
Internet domain name . . . . .	300,000	
Licensing agreements . . . . .	500,000	
Research and development expense . . . . .	200,000	
Notes payable . . . . .	<u>(25,000)</u>	
Total net fair value of items acquired . . . . .		<u>1,005,000</u>
Goodwill . . . . .		<u>\$ 220,000</u>

Note the following characteristics of the purchase method from the above schedule.

- The valuation basis is cost and includes direct combination costs but excludes the contingent consideration.
- The cost is allocated to the assets acquired and liabilities assumed based on their individual fair values (unless a bargain purchase occurs and then the long-term items may be recorded as amounts less than their fair values).
- Goodwill is the excess of cost over the fair values of the net assets purchased.
- Acquired in-process research and development is expensed immediately at the purchase date.

**Pooling of Interests Method Applied**

Because a purchase sale was deemed not to occur, the pooling method relied on previously recorded values reflecting a continuation of previous ownership. Thus, the following asset would be recorded by Archer in a business combination accounted for as a pooling of interests.

	Values Assigned
Current assets . . . . .	\$ 30,000
Internet domain name . . . . .	160,000
Licensing agreements . . . . .	–0–
In-process research and development . . . . .	–0–
Notes payable . . . . .	<u>(25,000)</u>
Total value assigned within the combination . . . . .	<u>\$165,000</u>

Note the following characteristics of the pooling of interests method from the above schedule.

- Because a pooling of interests was predicated on a continuity of ownership, the accounting incorporated a continuation of previous book values and ignored fair values exchanged in a business combination.
- Previously unrecognized (typically internally developed) intangibles continue to be reported at a zero value postcombination.
- Because the pooling of interests method values an acquired firm at its previously recorded book value, no new amount for goodwill was ever recorded in a pooling.

### ***Acquisition Method Applied***

According to the acquisition method, Archer's valuation basis for its acquisition of Baker is computed as follows:

Fair value of shares issued . . . . .		\$1,200,000
Fair value of contingent performance obligation . . . . .		150,000
Total consideration transferred for the Baker acquisition . . . . .		<u>\$1,350,000</u>
Cost allocation:		
Current assets . . . . .	\$ 30,000	
Internet domain name . . . . .	300,000	
Licensing agreements . . . . .	500,000	
Research and development asset . . . . .	200,000	
Notes payable . . . . .	<u>(25,000)</u>	
Total net fair value of items acquired		1,005,000
Goodwill . . . . .		<u>\$ 345,000</u>

Note the following characteristics of the acquisition method from the above schedule.

- The valuation basis is fair value of consideration transferred and includes the contingent consideration but excludes direct combination costs.
- The assets acquired and liabilities assumed are recorded at their individual fair values.
- Goodwill is the excess of the consideration transferred over the fair values of the net assets acquired.
- Acquired in-process research and development is recognized as an asset.
- Professional service fees to help accomplish the acquisition are expensed.

The following table compares the amounts from Baker that Archer would include in its combination-date consolidated financial statements under the pooling of interests method, the purchase method, and the acquisition method.

<b>Values Incorporated in Archer's Consolidated Balance Sheet Resulting from the Baker Transaction</b>			
	<b>Pooling of Interests Method</b>	<b>Purchase Method</b>	<b>Acquisition Method</b>
Current assets	\$ 30,000	\$ 30,000	\$ 30,000
Internet domain name	160,000	300,000	300,000
Licensing agreements	–0–	500,000	500,000
In-process research and development asset*	–0–	–0–	200,000
Goodwill	–0–	220,000	345,000
Notes payable	(25,000)	(25,000)	(25,000)
Contingent performance obligation	–0–	–0–	(150,000)
Total net assets recognized by Archer	<u>\$165,000</u>	<u>\$1,025,000</u>	<u>\$1,200,000</u>

\*Acquired in-process research and development was expensed under the purchase method and not recognized at all under the pooling of interests method.

Several comparisons should be noted across these methods of accounting for business combinations:

- In consolidating Baker's assets and liabilities, the purchase and acquisition methods record fair values. In contrast, the pooling method uses previous book values and ignores fair values. Consequently, although a fair value of \$1,350,000 is exchanged, only a net value of \$165,000 (assets less liabilities) is reported in the pooling.
- The pooling method, as reflected in the preceding example, typically shows smaller asset values and consequently lowers future depreciation and amortization expenses. Thus, higher future net income was usually reported under the pooling method compared to similar situations that employed the purchase method.
- Under pooling, financial ratios such as Net Income/Total Assets were dramatically inflated. Not only was this ratio's denominator understated through failure to recognize internally developed assets acquired (and fair values in general), but the numerator was overstated through smaller depreciation and amortization expenses.
- Although not shown, the pooling method retrospectively combined the acquired firm's revenues, expenses, dividends, and retained earnings. The purchase and acquisition methods incorporate only postcombination values for these operational items. Also all costs of the combination (direct and indirect acquisition costs and stock issue costs) were expensed in the period of combination under the pooling of interests method.
- Finally, with adoption of the acquisition method, the FASB has moved clearly in the direction of increased management accountability for the fair values of all assets acquired and liabilities assumed in a business combination.

## Appendix B

### Pushdown Accounting

In the analysis of business combinations to this point, discussion has focused on (1) the recording of the combination by the parent company and (2) required consolidation procedures. An additional reporting issue, however, arises concerning the separate postacquisition financial statements of subsidiary companies than maintain separate incorporation.

This issue has become especially significant in recent years because of business acquisitions by private-equity firms. An organization, for example, might acquire a company, work to improve its business model, and subsequently offer the shares back to the public in hopes of making a large profit. What valuation basis should be used in reporting the subsidiary's financial statements that accompany the initial public offering? In other situations, a subsidiary company may need to provide its own separate financial statements in connection with a new public debt issue. Should the subsidiary's financial statements utilize the new basis of accounting that the parent company established in the acquisition or continue its financial statement carrying amounts established prior to the acquisition?

To illustrate, assume that Strand Company owns one asset: a production machine with a carrying amount of \$200,000 but a fair value of \$900,000. Parker Corporation pays exactly \$900,000 in cash to acquire Strand. Consolidation offers no real problem here: The machine will be reported by the business combination at \$900,000.

However, if Strand continues to issue separate financial statements (for example, to its creditors or potential stockholders), should the machine be reported at \$200,000 or \$900,000? If adjusted, should the \$700,000 increase be reported as a gain by the subsidiary or as an addition to contributed capital? Should depreciation be based on \$200,000 or \$900,000? If the subsidiary is to be viewed as a new entity with a new basis for its assets and liabilities, should Retained Earnings be returned to zero? If the parent acquires only 51 percent of Strand, does that change the answers to the previous questions?

Proponents of pushdown accounting argue that a change in ownership creates a new basis for subsidiary assets and liabilities. An unadjusted balance (\$200,000 in the preceding illustration) is a cost figure applicable to previous stockholders. That amount is no longer relevant information. Rather, according to this argument, the fair value at the date control of the company changes is now relevant, a figure best reflected by the consideration transferred to acquire the subsidiary. Balance sheet accounts should be reported at the asset's acquisition-date fair value. (\$900,000 in the illustration) rather than the cost incurred by the previous owners of the company. Moreover, the subsidiary can now recognize any previously unrecognized intangible assets as valued by its new owner concurrently with the acquisition.

## External Reporting Option for Pushdown Accounting

To address the valuation issues for a subsidiary's separately issued financial statements, the FASB issued Accounting Standards Update (ASU) No. 2014-17, *Business Combinations: Pushdown Accounting* in November 2014. The ASU does not require pushdown accounting, but instead provides an option to apply pushdown accounting following a business combination in which the acquirer obtains control of an acquired entity and the acquired entity maintains separate incorporation. A newly acquired entity (e.g., subsidiary firm) may elect the option to apply pushdown accounting in the reporting period immediately following the acquisition.<sup>27</sup> Alternatively, a newly acquired company may simply choose to continue using its previous accounting valuations in separately issued financial statements.

When an acquired entity elects to apply pushdown accounting, it reflects in its financial statements the valuations for the individual assets and liabilities used by the parent in allocating the consideration transferred in the acquisition. Thus, the parent's acquisition-date valuations for its newly acquired subsidiary are "pushed down" to the subsidiary's financial statements.

As discussed below, the FASB (ASC 805-50-30) provides particular guidance for three accounting issues: goodwill, bargain purchase gains, and acquisition-related liabilities. We then discuss other accounting issues including acquisition-date retained earnings and other owners' equity effects.

### Goodwill

When an entity elects pushdown accounting, any goodwill recognized in the combination is reported in the acquired entity's separate financial statements.

### Bargain Purchase Gains

An exception to pushdown accounting's general rule of using the parent's valuations for the subsidiary's separate financial statement occurs for bargain purchases. Recall that when the fair values assigned to the subsidiary's collective net assets exceeds the parent's consideration transferred, the parent recognizes a bargain purchase gain on its income statement. In this case, however, pushdown accounting requires that the acquired entity not recognize the gain in its income statement, but instead as an adjustment to its additional paid-in capital. The reflection of the bargain purchase gain in additional paid-in capital prevents income recognition by both the acquirer and the acquiree for the same event.

### Acquisition-Related Liabilities

When acquisition-related liabilities arise, pushdown accounting recognizes only the debt that the acquired firm must recognize under other generally accepted accounting principles. Thus if an acquired firm is either jointly or severally liable for repayment of the debt, such debt is pushed down to its separate financial statements, possibly including debt incurred by the acquirer.

### Acquisition-Date Subsidiary Retained Earnings

After recognizing the new basis for its assets and liabilities, the acquired firm must then report the effects of the acquisition in its owners' equity section. Because pushdown accounting treats the acquired firm as a new reporting entity, the acquired firm reports zero acquisition-date retained earnings. The elimination of acquisition-date subsidiary retained earnings is consistent with consolidated financial reporting.

### Additional Paid-In Capital from Pushdown Accounting

The overall effect of the combined pushdown accounting adjustments to the previous carrying amounts of the subsidiary's assets and liabilities then is reported as an adjustment to the subsidiary's additional paid-in capital attributable to the common shareholders. For example, a subsidiary may report "Additional paid-in capital from pushdown accounting" in its separate balance sheet. The total effect in the additional paid-in capital from pushdown accounting results from both the elimination of acquisition-date retained earnings and the revaluation of the acquired firm's assets and liabilities to the parent's basis.

<sup>27</sup> The acquired entity can also elect to apply pushdown accounting in periods subsequent to the acquisition, but must report the election as a retrospective change in accounting principle (ASC Topic 250, Accounting Changes and Error Corrections). Once made, the decision to apply pushdown accounting to a specific change-in-control event is irrevocable.



**EXHIBIT 2.10**  
**Pushdown Accounting—**  
**Date of Acquisition**

Current assets . . . . .	\$ 300,000
Computers and equipment . . . . .	600,000
Capitalized software . . . . .	1,200,000
Customer contracts . . . . .	700,000
Goodwill . . . . .	70,000
Total assets . . . . .	<u>\$ 2,870,000</u>
Liabilities . . . . .	\$ (250,000)
Common stock . . . . .	(100,000)
Additional paid-in capital excess over par . . . . .	(20,000)
Additional paid-in capital from pushdown accounting . . . . .	(2,500,000)
Retained earnings, 1/1 . . . . .	—0—
Total liabilities and equities . . . . .	<u>\$ 2,870,000</u>

### Example: Pushdown Accounting

To illustrate an application of pushdown accounting, we use the Exhibit 2.3 BigNet and Smallport Company example presented previously in this chapter. If Smallport Company applies pushdown accounting, its acquisition-date separately reported balance sheet would appear as presented in Exhibit 2.10:

Note that the values for each asset and liability in Smallport's separate balance sheet above are identical to those reported in BigNet's consolidated acquisition-date balance sheet.

### Internal Reporting

Pushdown accounting has several advantages for internal reporting. For example, it simplifies the consolidation process. If the subsidiary enters the acquisition-date fair value allocations into its records, worksheet Entry A (to recognize the allocations originating from the fair-value adjustments) is not needed. Amortizations of the excess fair value allocation (see Chapter 3) would be incorporated in subsequent periods as well.

Despite some simplifications to the consolidation process, pushdown accounting does not address the many issues in preparing consolidated financial statements that appear in subsequent chapters of this text. Therefore, it remains to be seen how many acquired companies will choose to elect pushdown accounting. For newly acquired subsidiaries that expect to issue new debt or eventually undergo an initial public offering, fair values may provide investors with a better understanding of the company.

In summary, pushdown accounting provides a newly acquired subsidiary the option to revalue its assets and liabilities to acquisition-date fair values in its separately reported financial statements. This valuation option may be useful when the parent expects to offer the subsidiary shares to the public following a period of planned improvements. Other benefits from pushdown accounting may arise when the subsidiary plans to issue debt and needs its separate financial statements to incorporate acquisition-date fair values and previously unrecognized intangibles in their standalone financial reports.

### Questions

1. What is a business combination?
2. Describe the different types of legal arrangements that can take place to create a business combination.
3. What does the term *consolidated financial statements* mean?
4. Within the consolidation process, what is the purpose of a worksheet?
5. Jones Company obtains all of the common stock of Hudson, Inc., by issuing 50,000 shares of its own stock. Under these circumstances, why might the determination of a fair value for the consideration transferred be difficult?
6. What is the accounting valuation basis for consolidating assets and liabilities in a business combination?
7. How should a parent consolidate its subsidiary's revenues and expenses?
8. Morgan Company acquires all of the outstanding shares of Jennings, Inc., for cash. Morgan transfers consideration more than the fair value of the company's net assets. How should the payment in excess of fair value be accounted for in the consolidation process?
9. Catron Corporation is having liquidity problems, and as a result, it sells all of its outstanding stock to Lambert, Inc., for cash. Because of Catron's problems, Lambert is able to acquire this stock at less than the fair value of the company's net assets. How is this reduction in price accounted for within the consolidation process?

10. Sloane, Inc., issues 25,000 shares of its own common stock in exchange for all of the outstanding shares of Benjamin Company. Benjamin will remain a separately incorporated operation. How does Sloane record the issuance of these shares?
11. To obtain all of the stock of Molly, Inc., Harrison Corporation issued its own common stock. Harrison had to pay \$98,000 to lawyers, accountants, and a stock brokerage firm in connection with services rendered during the creation of this business combination. In addition, Harrison paid \$56,000 in costs associated with the stock issuance. How will these two costs be recorded?

## Problems

LO 2-1

1. Which of the following does not represent a primary motivation for business combinations?
- Combinations are often a vehicle to accelerate growth and competitiveness.
  - Cost savings can be achieved through elimination of duplicate facilities and staff.
  - Synergies may be available through quick entry for new and existing products into markets.
  - Larger firms are less likely to fail.

LO 2-2

2. Which of the following is the best theoretical justification for consolidated financial statements?
- In form the companies are one entity; in substance they are separate.
  - In form the companies are separate; in substance they are one entity.
  - In form and substance the companies are one entity.
  - In form and substance the companies are separate. (AICPA)

LO 2-3

3. What is a statutory merger?
- A merger approved by the Securities and Exchange Commission.
  - An acquisition involving the purchase of both stock and assets.
  - A takeover completed within one year of the initial tender offer.
  - A business combination in which only one company continues to exist as a legal entity.

LO 2-4

4. FASB ASC 805, "Business Combinations," provides principles for allocating the fair value of an acquired business. When the collective fair values of the separately identified assets acquired and liabilities assumed exceed the fair value of the consideration transferred, the difference should be:
- Recognized as an ordinary gain from a bargain purchase.
  - Treated as negative goodwill to be amortized over the period benefited, not to exceed 40 years.
  - Treated as goodwill and tested for impairment on an annual basis.
  - Applied pro rata to reduce, but not below zero, the amounts initially assigned to specific non-current assets of the acquired firm.

LO 2-8

5. What is the appropriate accounting treatment for the value assigned to in-process research and development acquired in a business combination?
- Expense upon acquisition.
  - Capitalize as an asset.
  - Expense if there is no alternative use for the assets used in the research and development and technological feasibility has yet to be reached.
  - Expense until future economic benefits become certain and then capitalize as an asset.

LO 2-8

6. An acquired entity has a long-term operating lease for an office building used for central management. The terms of the lease are very favorable relative to current market rates. However, the lease prohibits subleasing or any other transfer of rights. In its financial statements, the acquiring firm should report the value assigned to the lease contract as
- An intangible asset under the contractual-legal criterion.
  - A part of goodwill.
  - An intangible asset under the separability criterion.
  - A building.

LO 2-4

7. When does gain recognition accompany a business combination?
- When a bargain purchase occurs.
  - In a combination created in the middle of a fiscal year.
  - In an acquisition when the value of all assets and liabilities cannot be determined.
  - When the amount of a bargain purchase exceeds the value of the applicable noncurrent assets (other than certain exceptions) held by the acquired company.

LO 2-6b

8. According to the acquisition method of accounting for business combinations, costs paid to attorneys and accountants for services in arranging a merger should be
- Capitalized as part of the overall fair value acquired in the merger.
  - Recorded as an expense in the period the merger takes place.

## LO 2-4

- c. Included in recognized goodwill.  
 d. Written off over a five-year maximum useful life.
9. When negotiating a business acquisition, buyers sometimes agree to pay extra amounts to sellers in the future if performance metrics are achieved over specified time horizons. How should buyers account for such contingent consideration in recording an acquisition?
- a. The amount ultimately paid under the contingent consideration agreement is added to goodwill when and if the performance metrics are met.  
 b. The fair value of the contingent consideration is expensed immediately at acquisition date.  
 c. The fair value of the contingent consideration is included in the overall fair value of the consideration transferred, and a liability or additional owners' equity is recognized.  
 d. The fair value of the contingent consideration is recorded as a reduction of the otherwise determinable fair value of the acquired firm.

## LO 2-5

10. An acquired firm's financial records sometimes show goodwill from previous business combinations. How does a parent company account for the preexisting goodwill of its newly acquired subsidiary?
- a. The parent tests the preexisting goodwill for impairment before recording the goodwill as part of the acquisition.  
 b. The parent includes the preexisting goodwill as an identified intangible asset acquired.  
 c. The parent ignores preexisting subsidiary goodwill and allocates the subsidiary's fair value among the separately identifiable assets acquired and liabilities assumed.  
 d. Preexisting goodwill is excluded from the identifiable assets acquired unless the subsidiary can demonstrate its continuing value.

## LO 2-5

11. On June 1, Cline Co. paid \$800,000 cash for all of the issued and outstanding common stock of Renn Corp. The carrying amounts for Renn's assets and liabilities on June 1 follow:

Cash .....	\$150,000
Accounts receivable .....	180,000
Capitalized software costs .....	320,000
Goodwill .....	100,000
Liabilities .....	<u>(130,000)</u>
Net assets .....	<u>\$620,000</u>

On June 1, Renn's accounts receivable had a fair value of \$140,000. Additionally, Renn's in-process research and development was estimated to have a fair value of \$200,000. All other items were stated at their fair values. On Cline's June 1 consolidated balance sheet, how much is reported for goodwill?

- a. \$320,000  
 b. \$120,000  
 c. \$80,000  
 d. \$20,000

**Problems 12 and 13 relate to the following:**

On May 1, Donovan Company reported the following account balances:

Current assets .....	\$ 90,000
Buildings & equipment (net) .....	<u>220,000</u>
Total assets .....	<u>\$310,000</u>
Liabilities .....	\$ 60,000
Common stock .....	150,000
Retained earnings .....	<u>100,000</u>
Total liabilities and equities .....	<u>\$310,000</u>

On May 1, Beasley paid \$400,000 in stock (fair value) for all of the assets and liabilities of Donovan, which will cease to exist as a separate entity. In connection with the merger, Beasley incurred \$15,000 in accounts payable for legal and accounting fees.

Beasley also agreed to pay \$75,000 to the former owners of Donovan contingent on meeting certain revenue goals during the following year. Beasley estimated the present value of its probability adjusted expected payment for the contingency at \$20,000. In determining its offer, Beasley noted the following:

- Donovan holds a building with a fair value \$30,000 more than its book value.

- Donovan has developed unpatented technology appraised at \$25,000, although it is not recorded in its financial records.
- Donovan has a research and development activity in process with an appraised fair value of \$45,000. The project has not yet reached technological feasibility.
- Book values for Donovan’s current assets and liabilities approximate fair values.

**LO 2-4, 2-5**

12. What should Beasley record as total liabilities incurred or assumed in connection with the Donovan merger?
- a. \$15,000
  - b. \$75,000
  - c. \$95,000
  - d. \$150,000

**LO 2-5, 2-8**

13. How much should Beasley record as total assets acquired in the Donovan merger?
- a. \$400,000
  - b. \$420,000
  - c. \$410,000
  - d. \$480,000

**LO 2-5**

14. Prior to being united in a business combination, Atkins, Inc., and Waterson Corporation had the following stockholders’ equity figures:

	Atkins	Waterson
Common stock (\$1 par value) . . . . .	\$ 180,000	\$ 45,000
Additional paid-in capital . . . . .	90,000	20,000
Retained earnings . . . . .	300,000	110,000

Atkins issues 51,000 new shares of its common stock valued at \$3 per share for all of the outstanding stock of Waterson. Immediately afterward, what are consolidated Additional Paid-In Capital and Retained Earnings, respectively?

- a. \$104,000 and \$300,000
- b. \$110,000 and \$410,000
- c. \$192,000 and \$300,000
- d. \$212,000 and \$410,000

**Problems 15 through 18 are based on the following information:**

On July 1, TruData Company issues 10,000 shares of its common stock with a \$5 par value and a \$40 fair value in exchange for all of Webstat Company’s outstanding voting shares. Webstat’s pre-combination book and fair values are shown below along with book values for TruData’s accounts.

	TruData Book Values	Webstat Book Values	Webstat Fair Values
Revenues (1/1 to 7/1) . . . . .	\$(250,000)	\$(130,000)	
Expenses (1/1 to 7/1) . . . . .	170,000	80,000	
Retained earnings, 1/1 . . . . .	(130,000)	(150,000)	
Cash and receivables . . . . .	140,000	60,000	\$ 60,000
Inventory . . . . .	190,000	145,000	175,000
Patented technology (net) . . . . .	230,000	180,000	200,000
Land . . . . .	400,000	200,000	225,000
Buildings and equipment (net) . . . . .	100,000	75,000	75,000
Liabilities . . . . .	(540,000)	(360,000)	(350,000)
Common stock . . . . .	(300,000)	(70,000)	
Additional paid-in capital . . . . .	(10,000)	(30,000)	

**LO 2-5, 2-9, 2-10**

15. On its acquisition-date consolidated balance sheet, what amount should TruData report as goodwill?
- a. –0–
  - b. \$15,000
  - c. \$35,000
  - d. \$100,000

## LO 2-5

16. On its acquisition-date consolidated balance sheet, what amount should TruData report as patented technology (net)?

- \$200,000
- \$230,000
- \$410,000
- \$430,000

## LO 2-5, 2-7

17. On its acquisition-date consolidated balance sheet, what amount should TruData report as common stock?

- \$70,000
- \$300,000
- \$350,000
- \$370,000

## LO 2-5, 2-7

18. On its acquisition-date consolidated balance sheet, what amount should TruData report as retained earnings as of July 1?

- \$130,000
- \$210,000
- \$260,000
- \$510,000

**Problems 19 and 20 are based on the following information.** The separate condensed balance sheets of Patrick Corporation and its wholly owned subsidiary, Sean Corporation, are as follows:

<b>BALANCE SHEETS</b>		
<b>December 31, 2017</b>		
	<i>Patrick</i>	<i>Sean</i>
Cash .....	\$ 80,000	\$ 60,000
Accounts receivable (net) .....	140,000	25,000
Inventories .....	90,000	50,000
Plant and equipment (net) .....	625,000	280,000
Investment in Sean .....	460,000	
Total assets	<u>\$1,395,000</u>	<u>\$415,000</u>
Accounts payable .....	\$ 160,000	\$ 95,000
Long-term debt .....	110,000	30,000
Common stock (\$10 par) .....	340,000	50,000
Additional paid-in capital .....		10,000
Retained earnings .....	785,000	230,000
Total liabilities and shareholders' equity	<u>\$1,395,000</u>	<u>\$415,000</u>

*Additional Information:*

- On December 31, 2017, Patrick acquired 100 percent of Sean's voting stock in exchange for \$460,000.
- At the acquisition date, the fair values of Sean's assets and liabilities equaled their carrying amounts, respectively, except that the fair value of certain items in Sean's inventory were \$25,000 more than their carrying amounts.

## LO 2-4, 2-5

19. In the December 31, 2017, consolidated balance sheet of Patrick and its subsidiary, what amount of total assets should be reported?

- \$1,375,000
- \$1,395,000
- \$1,520,000
- \$1,980,000

## LO 2-4, 2-5

20. In the December 31, 2017, consolidated balance sheet of Patrick and its subsidiary, what amount of total stockholders' equity should be reported?

- \$1,100,000
- \$1,125,000

- c. \$1,150,000  
d. \$1,355,000

## LO 2-8

21. Prycal Co. merges with InterBuy, Inc., and acquires several different categories of intangible assets including trademarks, a customer list, copyrights on artistic materials, agreements to receive royalties on leased intellectual property, and unpatented technology.
- Describe the criteria for determining whether an intangible asset acquired in a business combination should be separately recognized apart from goodwill.
  - For each of the acquired intangibles listed, identify which recognition criteria (separability and legal/contractual) may or may not apply in recognizing the intangible on the acquiring firm's financial statements.
22. The following book and fair values were available for Westmont Company as of March 1.

## LO 2-6a, 2-6b

	Book Value	Fair Value
Inventory	\$ 630,000	\$ 600,000
Land	750,000	990,000
Buildings	1,700,000	2,000,000
Customer relationships	—0—	800,000
Accounts payable	(80,000)	(80,000)
Common stock	(2,000,000)	
Additional paid-in capital	(500,000)	
Retained earnings, 1/1	(360,000)	
Revenues	(420,000)	
Expenses	280,000	

Arturo Company pays \$4,000,000 cash and issues 20,000 shares of its \$2 par value common stock (fair value of \$50 per share) for all of Westmont's common stock in a merger, after which Westmont will cease to exist as a separate entity. Stock issue costs amount to \$25,000 and Arturo pays \$42,000 for legal fees to complete the transaction. Prepare Arturo's journal entries to record its acquisition of Westmont.

## LO 2-6a, 2-6b, 2-8

23. Use the same facts as in problem (22), but assume instead that Arturo pays cash of \$4,200,000 to acquire Westmont. No stock is issued. Prepare Arturo's journal entries to record its acquisition of Westmont.
24. Following are preacquisition financial balances for Padre Company and Sol Company as of December 31. Also included are fair values for Sol Company accounts.

## LO 2-4, 2-5, 2-6a, 2-6b, 2-6c

	Padre Company Book Values 12/31	Sol Company	
		Book Values 12/31	Fair Values 12/31
Cash	\$ 400,000	\$ 120,000	\$ 120,000
Receivables	220,000	300,000	300,000
Inventory	410,000	210,000	260,000
Land	600,000	130,000	110,000
Building and equipment (net)	600,000	270,000	330,000
Franchise agreements	220,000	190,000	220,000
Accounts payable	(300,000)	(120,000)	(120,000)
Accrued expenses	(90,000)	(30,000)	(30,000)
Long-term liabilities	(900,000)	(510,000)	(510,000)
Common stock—\$20 par value	(660,000)		
Common stock—\$5 par value		(210,000)	
Additional paid-in capital	(70,000)	(90,000)	
Retained earnings, 1/1	(390,000)	(240,000)	
Revenues	(960,000)	(330,000)	
Expenses	920,000	310,000	

Note: Parentheses indicate a credit balance.

On December 31, Padre acquires Sol's outstanding stock by paying \$360,000 in cash and issuing 10,000 shares of its own common stock with a fair value of \$40 per share. Padre paid legal and accounting fees of \$20,000 as well as \$5,000 in stock issuance costs.

Determine the value that would be shown in Padre's consolidated financial statements for each of the accounts listed.

Accounts	
Inventory	Revenues
Land	Additional paid-in capital
Buildings and equipment	Expenses
Franchise agreements	Retained earnings, 1/1
Goodwill	Retained earnings, 12/31

**LO 2-5, 2-6a, 2-6b, 2-8**

25. On May 1, Soriano Co. reported the following account balances along with their estimated fair values:

	Carrying Amount	Fair Value
Receivables .....	\$ 90,000	\$ 90,000
Inventory .....	75,000	75,000
Copyrights .....	125,000	480,000
Patented technology .....	825,000	700,000
Total assets .....	<u>\$1,115,000</u>	<u>\$1,345,000</u>
Current liabilities .....	\$ 160,000	\$ 160,000
Long-term liabilities.....	645,000	635,000
Common stock .....	100,000	
Retained earnings.....	210,000	
Total liabilities and equities.....	<u>\$1,115,000</u>	

On that day, Zambrano paid cash to acquire all of the assets and liabilities of Soriano, which will cease to exist as a separate entity. To facilitate the merger, Zambrano also paid \$100,000 to an investment banking firm.

The following information was also available:

- Zambrano further agreed to pay an extra \$70,000 to the former owners of Soriano only if they meet certain revenue goals during the next two years. Zambrano estimated the present value of its probability adjusted expected payment for this contingency at \$35,000.
- Soriano has a research and development project in process with an appraised value of \$200,000. However, the project has not yet reached technological feasibility and the project's assets have no alternative future use.

Prepare Zambrano's journal entries to record the Soriano acquisition assuming its initial cash payment to the former owners was

- \$700,000.
- \$800,000.

**LO 2-4, 2-5, 2-6b, 2-7**

26. On June 30, 2017, Wisconsin, Inc., issued \$300,000 in debt and 15,000 new shares of its \$10 par value stock to Badger Company owners in exchange for all of the outstanding shares of that company. Wisconsin shares had a fair value of \$40 per share. Prior to the combination, the financial statements for Wisconsin and Badger for the six-month period ending June 30, 2017, were as follows:

	Wisconsin	Badger
Revenues .....	\$ (900,000)	\$ (300,000)
Expenses .....	660,000	200,000
Net income.....	<u>\$ (240,000)</u>	<u>\$ (100,000)</u>
Retained earnings, 1/1.....	\$ (800,000)	\$ (200,000)
Net income.....	(240,000)	(100,000)
Dividends declared.....	90,000	—
Retained earnings, 6/30 .....	<u>\$ (950,000)</u>	<u>\$ (300,000)</u>

(continued)

Cash .....	\$ 80,000	\$ 110,000
Receivables and inventory .....	400,000	170,000
Patented technology (net) .....	900,000	300,000
Equipment (net) .....	700,000	600,000
Total assets .....	<u>\$ 2,080,000</u>	<u>\$ 1,180,000</u>
Liabilities .....	\$ (500,000)	\$ (410,000)
Common stock .....	(360,000)	(200,000)
Additional paid-in capital .....	(270,000)	(270,000)
Retained earnings .....	(950,000)	(300,000)
Total liabilities and equities .....	<u>\$ (2,080,000)</u>	<u>\$ (1,180,000)</u>

Wisconsin also paid \$30,000 to a broker for arranging the transaction. In addition, Wisconsin paid \$40,000 in stock issuance costs. Badger's equipment was actually worth \$700,000, but its patented technology was valued at only \$280,000.

What are the consolidated balances for the following accounts?

- Net income.
- Retained earnings, 1/1/17.
- Patented technology.
- Goodwill.
- Liabilities.
- Common stock.
- Additional paid-in capital.

## LO 2-4, 2-7

27. On January 1, 2018 Casey Corporation exchanged \$3,300,000 cash for 100 percent of the outstanding voting stock of Kennedy Corporation. Casey plans to maintain Kennedy as a wholly owned subsidiary with separate legal status and accounting information systems.

At the acquisition date, Casey prepared the following fair-value allocation schedule:

Fair value of Kennedy (consideration transferred) .....		\$3,300,000
Carrying amount acquired .....		<u>2,600,000</u>
Excess fair value .....		\$ 700,000
to buildings (undervalued) .....	\$ 382,000	
to licensing agreements (overvalued) .....	<u>(108,000)</u>	<u>274,000</u>
to goodwill (indefinite life) .....		<u>\$ 426,000</u>

Immediately after closing the transaction, Casey and Kennedy prepared the following postacquisition balance sheets from their separate financial records.

Accounts	Casey	Kennedy
Cash .....	\$ 457,000	\$ 172,500
Accounts receivable .....	1,655,000	347,000
Inventory .....	1,310,000	263,500
Investment in Kennedy .....	3,300,000	—0—
Buildings (net) .....	6,315,000	2,090,000
Licensing agreements .....	—0—	3,070,000
Goodwill .....	347,000	—0—
Total assets .....	<u>\$ 13,384,000</u>	<u>\$ 5,943,000</u>
Accounts payable .....	\$ (394,000)	\$ (393,000)
Long-term debt .....	(3,990,000)	(2,950,000)
Common stock .....	(3,000,000)	(1,000,000)
Additional paid-in capital .....	—0—	(500,000)
Retained earnings .....	(6,000,000)	(1,100,000)
Total liabilities and equities .....	<u>\$ (13,384,000)</u>	<u>\$ (5,943,000)</u>



LO 2-4, 2-5, 2-6b, 2-6c, 2-7

eXcel

Prepare an acquisition-date consolidated balance sheet for Casey Corporation and its subsidiary Kennedy Corporation.

28. On January 1, 2018, Marshall Company acquired 100 percent of the outstanding common stock of Tucker Company. To acquire these shares, Marshall issued \$200,000 in long-term liabilities and 20,000 shares of common stock having a par value of \$1 per share but a fair value of \$10 per share. Marshall paid \$30,000 to accountants, lawyers, and brokers for assistance in the acquisition and another \$12,000 in connection with stock issuance costs.

Prior to these transactions, the balance sheets for the two companies were as follows:

	Marshall Company Book Value	Tucker Company Book Value
Cash .....	\$ 60,000	\$ 20,000
Receivables .....	270,000	90,000
Inventory .....	360,000	140,000
Land .....	200,000	180,000
Buildings (net) .....	420,000	220,000
Equipment (net) .....	160,000	50,000
Accounts payable .....	(150,000)	(40,000)
Long-term liabilities .....	(430,000)	(200,000)
Common stock—\$1 par value .....	(110,000)	
Common stock—\$20 par value .....		(120,000)
Additional paid-in capital .....	(360,000)	—0—
Retained earnings, 1/1/18 .....	(420,000)	(340,000)

Note: Parentheses indicate a credit balance.

In Marshall's appraisal of Tucker, it deemed three accounts to be undervalued on the subsidiary's books: Inventory by \$5,000, Land by \$20,000, and Buildings by \$30,000. Marshall plans to maintain Tucker's separate legal identity and to operate Tucker as a wholly owned subsidiary.

- a. Determine the amounts that Marshall Company would report in its postacquisition balance sheet. In preparing the postacquisition balance sheet, any required adjustments to income accounts from the acquisition should be closed to Marshall's retained earnings. Other accounts will also need to be added or adjusted to reflect the journal entries Marshall prepared in recording the acquisition.
- b. To verify the answers found in part (a), prepare a worksheet to consolidate the balance sheets of these two companies as of January 1, 2018.
29. Pratt Company acquired all of Spider, Inc.'s outstanding shares on December 31, 2018, for \$495,000 cash. Pratt will operate Spider as a wholly owned subsidiary with a separate legal and accounting identity. Although many of Spider's book values approximate fair values, several of its accounts have fair values that differ from book values. In addition, Spider has internally developed assets that remain unrecorded on its books. In deriving the acquisition price, Pratt assessed Spider's fair and book value differences as follows:

	Book Values	Fair Values
Computer software .....	\$ 20,000	\$ 70,000
Equipment .....	40,000	30,000
Client contracts .....	—0—	100,000
In-process research and development .....	—0—	40,000
Notes payable .....	(60,000)	(65,000)

At December 31, 2018, the following financial information is available for consolidation:

	Pratt	Spider
Cash .....	\$ 36,000	\$ 18,000
Receivables .....	116,000	52,000
Inventory .....	140,000	90,000
Investment in Spider .....	495,000	—0—
Computer software .....	210,000	20,000

(continued)

Buildings (net) .....	595,000	130,000
Equipment (net) .....	308,000	40,000
Client contracts .....	—0—	—0—
Goodwill .....	—0—	—0—
Total assets .....	<u>\$ 1,900,000</u>	<u>\$ 350,000</u>
Accounts payable .....	\$ (88,000)	\$ (25,000)
Notes payable .....	(510,000)	(60,000)
Common stock .....	(380,000)	(100,000)
Additional paid-in capital .....	(170,000)	(25,000)
Retained earnings .....	<u>(752,000)</u>	<u>(140,000)</u>
Total liabilities and equities .....	<u>\$(1,900,000)</u>	<u>\$(350,000)</u>

Prepare a consolidated balance sheet for Pratt and Spider as of December 31, 2018.

**LO 2-4, 2-5, 2-6a**

30. Allerton Company acquires all of Deluxe Company's assets and liabilities for cash on January 1, 2018, and subsequently formally dissolves Deluxe. At the acquisition date, the following book and fair values were available for the Deluxe Company accounts:

	<b>Book Values</b>	<b>Fair Values</b>
Current assets .....	\$ 60,000	\$ 60,000
Building .....	90,000	50,000
Land .....	10,000	20,000
Trademark .....	—0—	30,000
Goodwill .....	15,000	?
Liabilities .....	(40,000)	(40,000)
Common stock .....	(100,000)	
Retained earnings .....	(35,000)	

Prepare Allerton's entry to record its acquisition of Deluxe in its accounting records assuming the following cash exchange amounts:

- \$145,000.
- \$110,000.

**LO 2-4, 2-5, 2-6a, 2-6b**

31. On June 30, 2018, Streeter Company reported the following account balances:

Receivables	\$ 83,900	Current liabilities	\$ (12,900)
Inventory	70,250	Long-term liabilities	(54,250)
Buildings (net)	78,900	Common stock	(90,000)
Equipment (net)	24,100	Retained earnings	<u>(100,000)</u>
Total assets	<u>\$257,150</u>	Total liabilities and equities	<u>\$(257,150)</u>

On June 30, 2018, Princeton Company paid \$310,800 cash for all assets and liabilities of Streeter, which will cease to exist as a separate entity. In connection with the acquisition, Princeton paid \$15,100 in legal fees. Princeton also agreed to pay \$55,600 to the former owners of Streeter contingent on meeting certain revenue goals during 2019. Princeton estimated the present value of its probability adjusted expected payment for the contingency at \$17,900.

In determining its offer, Princeton noted the following pertaining to Streeter:

- It holds a building with a fair value \$43,100 more than its book value.
- It has developed a customer list appraised at \$25,200, although it is not recorded in its financial records.
- It has research and development activity in process with an appraised fair value of \$36,400. However, the project has not yet reached technological feasibility and the assets used in the activity have no alternative future use.
- Book values for the receivables, inventory, equipment, and liabilities approximate fair values.

Prepare Princeton's accounting entries to record the combination with Streeter.

## LO 2-4, 2-5, 2-8, 2-6b

32. SafeData Corporation has the following account balances and respective fair values on June 30:

	Book Values	Fair Values
Receivables . . . . .	\$ 80,000	\$ 80,000
Patented technology . . . . .	100,000	700,000
Customer relationships . . . . .	–0–	500,000
In-process research and development . . . . .	–0–	300,000
Liabilities . . . . .	(400,000)	(400,000)
Common stock . . . . .	(100,000)	
Additional paid-in capital . . . . .	(300,000)	
Retained earnings deficit, 1/1 . . . . .	700,000	
Revenues . . . . .	(300,000)	
Expenses . . . . .	220,000	

Privacy First, Inc., obtained all of the outstanding shares of SafeData on June 30 by issuing 20,000 shares of common stock having a \$1 par value but a \$75 fair value. Privacy First incurred \$10,000 in stock issuance costs and paid \$75,000 to an investment banking firm for its assistance in arranging the combination. In negotiating the final terms of the deal, Privacy First also agrees to pay \$100,000 to SafeData's former owners if it achieves certain revenue goals in the next two years. Privacy First estimates the probability adjusted present value of this contingent performance obligation at \$30,000.

- What is the fair value of the consideration transferred in this combination?
- How should the stock issuance costs appear in Privacy First's postcombination financial statements?
- How should Privacy First account for the fee paid to the investment bank?
- How does the issuance of these shares affect the stockholders' equity accounts of Privacy First, the parent?
- How is the fair value of the consideration transferred in the combination allocated among the assets acquired and the liabilities assumed?
- What is the effect of SafeData's revenues and expenses on consolidated totals? Why?
- What is the effect of SafeData's Common Stock and Additional Paid-In Capital balances on consolidated totals?
- If Privacy First's stock had been worth only \$50 per share rather than \$75, how would the consolidation of SafeData's assets and liabilities have been affected?

## LO 2-4, 2-5, 2-6a, 2-6b, 2-6c

33. On January 1, NewTune Company exchanges 15,000 shares of its common stock for all of the outstanding shares of On-the-Go, Inc. Each of NewTune's shares has a \$4 par value and a \$50 fair value. The fair value of the stock exchanged in the acquisition was considered equal to On-the-Go's fair value. NewTune also paid \$25,000 in stock registration and issuance costs in connection with the merger. Several of On-the-Go's accounts' fair values differ from their book values on this date:

## LO 2-7, 2-8

	Book Values	Fair Values
Receivables . . . . .	\$ 65,000	\$ 63,000
Trademarks . . . . .	95,000	225,000
Record music catalog . . . . .	60,000	180,000
In-process research and development . . . . .	–0–	200,000
Notes payable . . . . .	(50,000)	(45,000)

Precombination book values for the two companies are as follows:

	NewTune	On-the-Go
Cash . . . . .	\$ 60,000	\$ 29,000
Receivables . . . . .	150,000	65,000
Trademarks . . . . .	400,000	95,000
Record music catalog . . . . .	840,000	60,000
Equipment (net) . . . . .	320,000	105,000
Totals . . . . .	<u>\$1,770,000</u>	<u>\$354,000</u>

(continued)

Accounts payable . . . . .	\$ (110,000)	\$ (34,000)
Notes payable . . . . .	(370,000)	(50,000)
Common stock . . . . .	(400,000)	(50,000)
Additional paid-in capital . . . . .	(30,000)	(30,000)
Retained earnings . . . . .	<u>(860,000)</u>	<u>(190,000)</u>
Totals . . . . .	<u><u>\$(1,770,000)</u></u>	<u><u>\$(354,000)</u></u>

- a. Assume that this combination is a statutory merger so that On-the-Go's accounts will be transferred to the records of NewTune. On-the-Go will be dissolved and will no longer exist as a legal entity. Prepare a postcombination balance sheet for NewTune as of the acquisition date.
- b. Assume that no dissolution takes place in connection with this combination. Rather, both companies retain their separate legal identities. Prepare a worksheet to consolidate the two companies as of the combination date.
- c. How do the balance sheet accounts compare across parts (a) and (b)?

LO 2-4, 2-5, 2-6b, 2-6c, 2-7

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34. On December 31, Pacifica, Inc., acquired 100 percent of the voting stock of Seguros Company. Pacifica will maintain Seguros as a wholly owned subsidiary with its own legal and accounting identity. The consideration transferred to the owner of Seguros included 50,000 newly issued Pacifica common shares (\$20 market value, \$5 par value) and an agreement to pay an additional \$130,000 cash if Seguros meets certain project completion goals by December 31 of the following year. Pacifica estimates a 50 percent probability that Seguros will be successful in meeting these goals and uses a 4 percent discount rate to represent the time value of money.

Immediately prior to the acquisition, the following data for both firms were available:

	Pacifica	Seguros Book Values	Seguros Fair Values
Revenues . . . . .	\$(1,200,000)		
Expenses . . . . .	<u>875,000</u>		
Net income . . . . .	<u><u>\$ (325,000)</u></u>		
Retained earnings, 1/1 . . . . .	\$ (950,000)		
Net income . . . . .	(325,000)		
Dividends declared . . . . .	<u>90,000</u>		
Retained earnings, 12/31 . . . . .	<u><u>\$(1,185,000)</u></u>		
Cash . . . . .	\$ 110,000	\$ 85,000	\$ 85,000
Receivables and inventory . . . . .	750,000	190,000	180,000
Property, plant, and equipment . . . . .	1,400,000	450,000	600,000
Trademarks . . . . .	<u>300,000</u>	<u>160,000</u>	200,000
Total assets . . . . .	<u><u>\$ 2,560,000</u></u>	<u><u>\$ 885,000</u></u>	
Liabilities . . . . .	\$ (500,000)	\$(180,000)	\$(180,000)
Common stock . . . . .	(400,000)	(200,000)	
Additional paid-in capital . . . . .	(475,000)	(70,000)	
Retained earnings . . . . .	<u>(1,185,000)</u>	<u>(435,000)</u>	
Total liabilities and equities . . . . .	<u><u>\$(2,560,000)</u></u>	<u><u>\$(885,000)</u></u>	

In addition, Pacifica assessed a research and development project under way at Seguros to have a fair value of \$100,000. Although not yet recorded on its books, Pacifica paid legal fees of \$15,000 in connection with the acquisition and \$9,000 in stock issue costs.

Prepare the following:

- a. Pacifica's entries to account for the consideration transferred to the former owners of Seguros, the direct combination costs, and the stock issue and registration costs. (Use a 0.961538 present value factor where applicable.)
- b. A postacquisition column of accounts for Pacifica.
- c. A worksheet to produce a consolidated balance sheet as of the acquisition date.

## Appendix 2A Problems

## LO 2-9

35. In a pre-2009 business combination, Acme Company acquired all of Brem Company's assets and liabilities for cash. After the combination Acme formally dissolved Brem. At the acquisition date, the following book and fair values were available for the Brem Company accounts:

	Book Values	Fair Values
Current assets .....	\$ 80,000	\$ 80,000
Equipment .....	120,000	180,000
Trademark .....	–0–	320,000
Liabilities .....	(55,000)	(55,000)
Common stock .....	(100,000)	
Retained earnings .....	(45,000)	

In addition, Acme paid an investment bank \$25,000 cash for assistance in arranging the combination.

- a. Using the legacy purchase method for pre-2009 business combinations, prepare Acme's entry to record its acquisition of Brem in its accounting records assuming the following cash amounts were paid to the former owners of Brem:
1. \$610,000.
  2. \$425,000.
- b. How would these journal entries change if the acquisition occurred post-2009 and therefore Acme applied the acquisition method?
36. On February 1, Piscina Corporation completed a combination with Swimwear Company. At that date, Swimwear's account balances were as follows:

## LO 2-10

	Book Values	Fair Values
Inventory .....	\$ 600,000	\$ 650,000
Land .....	450,000	750,000
Buildings .....	900,000	1,000,000
Unpatented technology .....	–0–	1,500,000
Common stock (\$10 par value) .....	(750,000)	
Retained earnings, 1/1 .....	(1,100,000)	
Revenues .....	(600,000)	
Expenses .....	500,000	

Piscina issued 30,000 shares of its common stock with a par value of \$25 and a fair value of \$150 per share to the owners of Swimwear for all of their Swimwear shares. Upon completion of the combination, Swimwear Company was formally dissolved.

Prior to 2002, business combinations were accounted for using either purchase or pooling of interests accounting. The two methods often produced substantially different financial statement effects. For the scenario above,

- a. What are the respective consolidated values for Swimwear's assets under the pooling method and the purchase method?
- b. Under each of the following methods, how would Piscina account for Swimwear's current year, but prior to acquisition, revenues and expenses?
  - Pooling of interests method.
  - Purchase method.
- c. Explain the alternative impact of pooling versus purchase accounting on performance ratios such as return on assets and earnings per share in periods subsequent to the combination.

## Appendix 2B Problems

## LO 2-10

37. What is push-down accounting?
- a. A requirement that a subsidiary must use the same accounting principles as a parent company.
  - b. Inventory transfers made from a parent company to a subsidiary.
  - c. A subsidiary's recording of the fair-value allocations as well as subsequent amortization.
  - d. The adjustments required for consolidation when a parent has applied the equity method of accounting for internal reporting purposes.

## LO 2-10

38. On May 1, Burns Corporation acquired 100 percent of the outstanding ownership shares of Quigley Corporation in exchange for \$710,000 cash. At the acquisition date, Quigley's book and fair values were as follows:

	Book Values	Fair Values
Cash .....	\$ 95,000	\$ 95,000
Receivables .....	200,000	200,000
Inventory .....	210,000	260,000
Land .....	130,000	110,000
Building and equipment (net) .....	270,000	330,000
Patented technology .....	-0-	220,000
Total assets .....	<u>\$905,000</u>	<u>\$1,215,000</u>
Accounts payable .....	\$120,000	\$ 120,000
Long-term liabilities .....	510,000	510,000
Common stock (\$5 par value) .....	210,000	
Additional paid-in capital .....	90,000	
Retained earnings .....	(25,000)	
Total liabilities and stockholders equity .....	<u>\$905,000</u>	

Burns directs Quigley to seek additional financing for expansion through a new long-term debt issue. Consequently, Quigley will issue a set of financial statements separate from that of its parent to support its request for debt and accompanying regulatory filings. Quigley elects to apply pushdown accounting in order to show recent fair valuations for its assets.

Prepare a separate acquisition-date balance sheet for Quigley Corporation using pushdown accounting.

## Develop Your Skills

### FASB ASC RESEARCH AND ANALYSIS CASE—CONSIDERATION OR COMPENSATION?



NaviNow Company agrees to pay \$20 million in cash to the four former owners of TrafficEye for all of its assets and liabilities. These four owners of TrafficEye developed and patented a technology for real-time monitoring of traffic patterns on the nation's top 200 frequently congested highways. NaviNow plans to combine the new technology with its existing global positioning systems and projects a resulting substantial revenue increase.

As part of the acquisition contract, NaviNow also agrees to pay additional amounts to the former owners upon achievement of certain financial goals. NaviNow will pay \$8 million to the four former owners of TrafficEye if revenues from the combined system exceed \$100 million over the next three years. NaviNow estimates this contingent payment to have a probability adjusted present value of \$4 million.

The four former owners have also been offered employment contracts with NaviNow to help with system integration and performance enhancement issues. The employment contracts are silent as to service periods, have nominal salaries similar to those of equivalent employees, and specify a profit-sharing component over the next three years (if the employees remain with the company) that NaviNow estimates to have a current fair value of \$2 million. The four former owners of TrafficEye say they will stay on as employees of NaviNow for at least three years to help achieve the desired financial goals.

Should NaviNow account for the contingent payments promised to the former owners of TrafficEye as consideration transferred in the acquisition or as compensation expense to employees?

### ASC RESEARCH CASE—DEFENSIVE INTANGIBLE ASSET



Ahorita Company manufactures wireless transponders for satellite applications. Ahorita has recently acquired Zelltech Company, which is primarily known for its software communications development but also manufactures a specialty transponder under the trade name "Z-Tech" that competes with one

of Ahorita's products. Ahorita will now discontinue Z-Tech and projects that its own product line will see a market share increase. Nonetheless, Ahorita's management will maintain the rights to the Z-Tech trade name as a defensive intangible asset to prevent its use by competitors, despite the fact that its highest and best use would be to sell the trade name. Ahorita estimates that the trade name has an internal value of \$1.5 million, but if sold would yield \$2 million.

Answer the following with supporting citations from the FASB ASC:

- a. How does the FASB ASC Glossary define a defensive intangible asset?
- b. According to ASC Topic 805, "Business Combinations," what is the measurement principle that an acquirer should follow in recording identifiable assets acquired in a business combination?
- c. According to ASC Topic 820, "Fair Value Measurement," what value premise (in-use or in-exchange) should Ahorita assign to the Z-Tech trade name in its consolidated financial statements?
- d. According to ASC Topic 350, "General Intangibles Other Than Goodwill," how should Ahorita determine the estimated useful life of its defensive intangible asset?

## RESEARCH CASE—CELGENE'S ACQUISITION OF RECEPTOS, INC.



On August 27, 2015, Celgene Corporation acquired all of the outstanding stock of Receptos, Inc., in exchange for \$7.6 billion in cash. Referring to Celgene's 2015 financial statements and its July 14, 2015, press release announcing the acquisition, answer the following questions regarding the Receptos acquisition.

1. Why did Celgene acquire Receptos?
2. What accounting method was used, and for what amount, to record the acquisition?
3. What amount did Celgene include in pre-combination service compensation in the total consideration transferred? What support is provided for this treatment in the Accounting Standards Codification (see ASC 805-30-30, paragraphs 9-13)?
4. What allocations did Celgene make to the assets acquired and liabilities assumed in the acquisition? Provide a calculation showing how Celgene determined the amount allocated to goodwill.
5. Describe the nature of the in-process research and development product rights acquired by Celgene in its acquisition of Receptos.
6. How will Celgene account for the in-process research and development product rights acquired in the Receptos combination?

## RESEARCH CASE—ARCTIC CAT'S ACQUISITION OF MOTORFIST, LLC.

In February 2015, Arctic Cat, Inc., acquired the assets and liabilities of MotorFist, LLC, a privately owned company based in Idaho Falls, Idaho, in exchange for \$9.118 million in cash and contingent consideration. Referring to Arctic Cat's 2015 annual 10-K report, answer the following questions regarding the MotorFist acquisition.

1. Why did Arctic Cat acquire MotorFist?
2. How was the consideration transferred allocated between cash paid and the contingent consideration?
3. Provide a schedule showing Arctic Cat's allocations of the consideration transferred to the identifiable assets acquired and liabilities assumed with the remainder going to goodwill.
4. What is the maximum potential contingent payout (i.e., earnout) to the former owners of MotorFist? Although not explicitly stated in Arctic Cat's fiscal 2015 10-K report (for the year ended March 31, 2015), what may be some possible factors that entered into the determination of the acquisition-date fair value of the contingent consideration?

# Consolidations— Subsequent to the Date of Acquisition

In 1996, Berkshire Hathaway, Inc., acquired all of the outstanding stock of Geico, Inc., an insurance company. Although this transaction involved well-known companies, it was not unique; mergers and acquisitions have long been common in the business world.

Berkshire Hathaway's current financial statements indicate that Geico is still a component of this economic entity. However, Geico, Inc., continues as a separate legally incorporated concern long after its acquisition. As discussed in Chapter 2, a parent will often maintain separate legal status for a subsidiary corporation to better utilize its inherent value as a going concern.

For external reporting purposes, maintenance of incorporation creates an ongoing challenge for the accountant. In each subsequent period, consolidation must be simulated anew through the use of a worksheet and consolidation entries. Thus, for many years, the financial data for Berkshire Hathaway and Geico (along with dozens of other subsidiaries) have been brought together periodically to provide figures for the financial statements that represent this business combination.

As also discussed in Chapter 2, the acquisition method governs the way we initially record a business combination. In periods subsequent to acquisition, the fair-value bases (established at the acquisition date) for subsidiary assets acquired and liabilities assumed will be amortized (or tested for possible impairment) for proper income recognition. Additionally, some combinations require accounting for the eventual disposition of contingent consideration, which, as presented later in this chapter, continues to follow a fair-value model.

In the next several sections of this chapter, we present the procedures to prepare consolidated financial statements in the years subsequent to acquisition. We start by analyzing the relation between the parent's internal accounting method for its subsidiary investment and the adjustments required in consolidation. We also examine the specific procedures for amortizing the acquisition-date fair-value adjustments to the subsidiary's assets and liabilities. We then cover testing for goodwill impairment and post-acquisition accounting for contingent consideration. Finally, an appendix presents the alternative goodwill model available as a reporting option for private companies.

## Learning Objectives

**After studying this chapter, you should be able to:**

- LO 3-1** Recognize the complexities in preparing consolidated financial reports that emerge from the passage of time.
- LO 3-2** Identify and describe the various methods available to a parent company in order to maintain its investment in subsidiary account in its internal records.
- LO 3-3** Prepare consolidated financial statements subsequent to acquisition when the parent has applied in its internal records:
  - a. The equity method.
  - b. The initial value method.
  - c. The partial equity method.
- LO 3-4** Understand that a parent's internal accounting method for its subsidiary investments has no effect on the resulting consolidated financial statements.
- LO 3-5** Discuss the rationale for the goodwill impairment testing approach.
- LO 3-6** Describe the procedures for conducting a goodwill impairment test.
- LO 3-7** Describe the rationale and procedures for impairment testing for intangible assets other than goodwill.
- LO 3-8** Understand the accounting and reporting for contingent consideration subsequent to a business acquisition.
- LO 3-9** Appendix: Describe the alternative accounting treatments for goodwill and other intangible assets available for business combinations by private companies.



**LO 3-1**

Recognize the complexities in preparing consolidated financial reports that emerge from the passage of time.

## Consolidation—The Effects Created by the Passage of Time

In Chapter 2, consolidation accounting is analyzed at the date that a combination is created. The present chapter carries this process one step further by examining the consolidation procedures that must be followed in subsequent periods whenever separate incorporation of the subsidiary is maintained.

Despite complexities created by the passage of time, the basic objective of all consolidations remains the same: to combine asset, liability, revenue, expense, and equity accounts of a parent and its subsidiaries. From a mechanical perspective, a worksheet and consolidation entries continue to provide structure for the production of a single set of financial statements for the combined business entity.

### Consolidated Net Income Determination

Subsequent to an acquisition, the parent company must report consolidated net income. Consolidated income determination involves first combining the separately recorded revenues and expenses of the parent with those of the subsidiary on a consolidated worksheet. Because of separate record-keeping systems, however, the subsidiary's expenses typically are based on their original book values and not the acquisition-date values the parent must recognize. Consequently, adjustments are made that reflect the amortization of the excess of the parent's consideration transferred over the subsidiary book value. Additionally, the effects of any intra-entity transactions are removed.

### The Parent's Choice of Investment Accounting

The time factor introduces other complications into the consolidation process as well. For internal record-keeping purposes, the parent must select and apply an accounting method to monitor the relationship between the two companies. The investment balance recorded by the parent varies over time as a result of the method chosen, as does the income subsequently recognized. These differences affect the periodic consolidation process but not the figures to be reported by the combined entity. Regardless of the amount, the parent's investment account is eliminated (brought to a zero balance) on the worksheet so that the subsidiary's actual assets and liabilities can be consolidated. Likewise, the income figure accrued by the parent is removed each period so that the subsidiary's revenues and expenses can be included when creating an income statement for the combined business entity.

**LO 3-2**

Identify and describe the various methods available to a parent company in order to maintain its investment in subsidiary account in its internal records.

## Investment Accounting by the Acquiring Company

For a parent company's external financial reporting, consolidation of a subsidiary becomes necessary whenever control exists. For internal record-keeping, though, the parent has a choice for monitoring the activities of its subsidiaries. Although several variations occur in practice, three methods have emerged as the most prominent: the equity method, the initial value method,<sup>1</sup> and the partial equity method.

At the acquisition date, each investment accounting method (equity, initial value, and partial equity) begins with an identical value recorded in an investment account. Typically the fair value of the consideration transferred by the parent will serve as the recorded valuation basis on the parent's books.<sup>2</sup>

Subsequent to the acquisition date, the three methods produce different account balances for the parent's investment in subsidiary, income recognized from the subsidiary's activities, and retained earnings accounts. *Importantly, the selection of a particular method does not affect the totals ultimately reported for the combined companies.* However, the parent's

<sup>1</sup>The initial value method is sometimes referred to as the cost method.

<sup>2</sup>In the unusual case of a bargain purchase, the valuation basis for the investment account is the fair value of the net amount of the assets acquired and liabilities assumed.

choice of an internal accounting method does lead to distinct procedures for consolidating the financial information from the separate organizations.

### Internal Investment Accounting Alternatives—The Equity Method, Initial Value Method, and Partial Equity Method

The internal reporting philosophy of the acquiring company often determines the accounting method choice for its subsidiary investment. Depending on the measures a company uses to assess the ongoing performances of its subsidiaries, parent companies may choose their own preferred internal reporting method. Regardless of this choice, however, the investment balance will be eliminated in preparing consolidated financial statements for external reporting.

#### *The Equity Method*

The equity method embraces full accrual accounting in maintaining the investment account and related income over time. Under the equity method, the acquiring company accrues income when the subsidiary earns it. To match the additional fair value recorded in the combination against income, amortization expense stemming from the original excess fair-value allocations is recognized through periodic adjusting entries. Unrealized gains on intra-entity transactions are deferred; subsidiary dividends serve to reduce the investment balance. As discussed in Chapter 1, the equity method creates a parallel between the parent's investment accounts and changes in the underlying equity of the acquired company.<sup>3</sup>

When the parent has complete ownership, equity method earnings from the subsidiary, combined with the parent's other income sources, create a total income figure reflective of the entire combined business entity. Consequently, the equity method often is referred to as a single-line consolidation. The equity method is especially popular in companies where management periodically (e.g., monthly or quarterly) measures each subsidiary's profitability using accrual-based income figures.

#### *The Initial Value Method*

Under the initial value method, the parent recognizes income from its share of any subsidiary dividends when declared. Because little time typically elapses between dividend declaration and cash distribution, the initial value method frequently reflects the cash basis for income recognition. No recognition is given to the income earned by the subsidiary. The investment balance remains on the parent's financial records at the initial fair value assigned at the acquisition date.

The initial value method might be selected because the parent does not require an accrual-based income measure of subsidiary performance. For example, the parent may wish to assess subsidiary performance on its ability to generate cash flows, on revenues generated, or some other nonincome basis. Also, some firms may find the initial value method's ease of application attractive. Because the investment account is eliminated in consolidation, and the actual subsidiary revenues and expenses are eventually combined, firms may avoid the complexity of the equity method unless they need the specific information provided by the equity income measure for internal decision making.

#### *The Partial Equity Method*

A third method available to the acquiring company is a partial application of the equity method. Under this approach, the parent recognizes the reported income accruing from the subsidiary. Subsidiary dividends declared reduce the investment balance. However, no other equity adjustments (amortization or deferral of unrealized gains) are recorded. Thus, in many cases, earnings figures on the parent's books approximate consolidated totals but without the effort associated with a full application of the equity method.

<sup>3</sup>In Chapter 1, the equity method was introduced in connection with the external reporting of investments in which the owner held the ability to apply significant influence over the investee (usually by possessing 20 to 50 percent of the company's voting stock). Here, the equity method is utilized for the internal reporting of the parent for investments in which control is maintained. Although the accounting procedures are similar, the reason for using the equity method is different.

**EXHIBIT 3.1 Internal Reporting of Investment Accounts by Acquiring Company**

Method	Investment Account	Income Account	Advantages
Equity	Continually adjusted to reflect current owner's equity of acquired company.	Income accrued as earned; amortization and other adjustments are recognized.	Acquiring company totals give a true representation of consolidation figures.
Initial value	Remains at acquisition-date value assigned.	Dividends declared recorded as Dividend Income.	It is easy to apply; it often reflects cash flows from the subsidiary.
Partial equity	Adjusted only for accrued income and dividends declared by the acquired company.	Income accrued as earned; no other adjustments recognized.	It usually gives balances approximating consolidation figures, but it is easier to apply than equity method.

Moreover, some parent companies rely on internally designed performance measures (rather than GAAP net income) to evaluate subsidiary management or make resource allocation decisions. For such companies, a full equity method application may be unnecessary for internal purposes. In these cases, the partial equity method, although only approximating the GAAP income measure, may be sufficient for decision making.

**Summary of Internal Investment Accounting Methods**

Exhibit 3.1 provides a summary of these three internal accounting techniques. Importantly, the method the acquiring company adopts affects only its separate financial records and has no impact on the subsidiary's balances. Regardless of how the parent chooses to account internally for its subsidiary, the selection of a particular method (i.e., initial value, equity, or partial equity) does not affect the amounts ultimately reported on consolidated financial statements to external users.

Because specific worksheet procedures differ based on the investment method utilized by the parent, the consolidation process subsequent to the date of combination will be introduced twice. First, we review consolidations in which the acquiring company uses the equity method. Then we redevelop all procedures when the investment is recorded by one of the alternative methods.

**LO 3-3a**

Prepare consolidated financial statements subsequent to acquisition when the parent has applied the equity method in its internal records.

**Subsequent Consolidation—Investment Recorded by the Equity Method****Acquisition Made during the Current Year**

As a basis for this illustration, assume that Parrot Company obtains all of the outstanding common stock of Sun Company on January 1, 2017. Parrot acquires this stock for \$800,000 in cash.

The book values as well as the appraised fair values of Sun's accounts follow:

	Book Values 1/1/17	Fair Values 1/1/17	Difference
Current assets . . . . .	\$ 320,000	\$ 320,000	\$ 0–
Trademarks (indefinite life) . . . . .	200,000	220,000	+ 20,000
Patented technology (10-year remaining life) . . . . .	320,000	450,000	+130,000
Equipment (5-year remaining life) . . . . .	180,000	150,000	(30,000)
Liabilities . . . . .	(420,000)	(420,000)	0–
Net book value . . . . .	<u>\$ 600,000</u>	<u>\$ 720,000</u>	<u>\$ 120,000</u>
Common stock—\$40 par value . . . . .	\$ (200,000)		
Additional paid-in capital . . . . .	(20,000)		
Retained earnings, 1/1/17 . . . . .	(380,000)		

**EXHIBIT 3.2**  
**Excess Fair-Value**  
**Allocation**

<b>PARROT COMPANY</b>			
<b>100 Percent Acquisition of Sun Company</b>			
<b>Allocation of Acquisition-Date Subsidiary Fair Value</b>			
<b>January 1, 2017</b>			
Sun Company fair value (consideration transferred by Parrot Company) . . . . .			\$800,000
Book value of Sun Company: . . . . .			
Common stock . . . . .	\$200,000		
Additional paid-in capital . . . . .	20,000		
Retained earnings, 1/1/17 . . . . .	380,000	(600,000)	
Excess of fair value over book value. . . . .			200,000
Allocation to specific accounts based on fair values: . . . . .			
Trademarks . . . . .	\$ 20,000		
Patented technology . . . . .	130,000		
Equipment (overvalued). . . . .	(30,000)	120,000	
Excess fair value not identified with specific accounts—goodwill . . . . .			<u>\$ 80,000</u>

Parrot considers the economic life of Sun's trademarks as extending beyond the foreseeable future and thus having an indefinite life. Such assets are not amortized but are subject to periodic impairment testing.<sup>4</sup> For the definite lived assets acquired in the combination (patented technology and equipment), we assume that straight-line amortization and depreciation with no salvage value is appropriate.<sup>5</sup>

Parrot paid \$800,000 cash to acquire Sun Company, clear evidence of the fair value of the consideration transferred. As shown in Exhibit 3.2, individual allocations are used to adjust Sun's accounts from their book values to their acquisition-date fair values. Because the total value of these assets and liabilities was only \$720,000, goodwill of \$80,000 must be recognized for consolidation purposes.

Each of these allocated amounts (other than the \$20,000 attributed to trademarks and the \$80,000 for goodwill) represents a valuation associated with a definite life. As discussed in Chapter 1, Parrot must amortize each allocation over its expected life. The expense recognition necessitated by this fair-value allocation is calculated in Exhibit 3.3.

Two aspects of this amortization schedule warrant further explanation. First, we use the term *amortization* in a generic sense to include both the amortization of definite-lived intangibles and depreciation of tangible assets. Second, the acquisition-date fair value of Sun's equipment is \$30,000 *less* than its book value. Therefore, instead of attributing an additional amount to this asset, the \$30,000 allocation actually reflects a fair-value reduction. As such, the amortization shown in Exhibit 3.3 relating to Equipment is not an additional expense but instead is an expense reduction.

**EXHIBIT 3.3**  
**Annual Excess**  
**Amortization**

<b>PARROT COMPANY</b>			
<b>100 Percent Acquisition of Sun Company</b>			
<b>Excess Amortization Schedule—Allocation of Acquisition-Date Fair Values</b>			
<b>Account</b>	<b>Allocation</b>	<b>Remaining Useful Life</b>	<b>Annual Excess Amortizations</b>
Trademarks	\$ 20,000	Indefinite	\$ —0—
Patented technology	130,000	10 years	13,000
Equipment	(30,000)	5 years	(6,000)
Goodwill	80,000	Indefinite	—0—
			<u>\$ 7,000*</u>

\*Total excess amortizations will be \$7,000 annually for five years until the equipment allocation is fully removed. At the end of each asset's life, future amortizations will change.

<sup>4</sup> In other cases, trademarks can have a definite life and thus would be subject to regular amortization.

<sup>5</sup> Unless otherwise stated, all amortization and depreciation expense computations in this textbook are based on the straight-line method with no salvage value.

Having determined the allocation of the acquisition-date fair value in the previous example as well as the associated amortization, the parent's separate record-keeping for its first year of Sun Company ownership can be constructed. Assume that Sun earns income of \$100,000 during the year, declares a \$40,000 cash dividend on August 1, and pays the dividend on August 8.

In this first illustration, Parrot has adopted the equity method. Apparently, this company believes that the information derived from using the equity method is useful in its evaluation of Sun.

### *Application of the Equity Method*

Parrot's Financial Records			
1/1/17	Investment in Sun Company . . . . .	800,000	
	Cash . . . . .		800,000
	To record the acquisition of Sun Company.		
8/1/17	Dividend Receivable . . . . .	40,000	
	Investment in Sun Company . . . . .		40,000
	To record cash dividend declaration from subsidiary.		
8/8/17	Cash . . . . .	40,000	
	Dividend Receivable . . . . .		40,000
	To record receipt of the subsidiary cash dividend.		
12/31/17	Investment in Sun Company . . . . .	100,000	
	Equity in Subsidiary Earnings . . . . .		100,000
	To accrue income earned by 100 percent owned subsidiary.		
12/31/17	Equity in Subsidiary Earnings . . . . .	7,000	
	Investment in Sun Company . . . . .		7,000
	To recognize amortizations on allocations made in acquisition of subsidiary (see Exhibit 3.3).		

Parrot's application of the equity method, as shown in this series of entries, causes the Investment in Sun Company account balance to rise from \$800,000 to \$853,000 (\$800,000 – \$40,000 + \$100,000 – \$7,000). During the same period the parent recognizes a \$93,000 equity income figure (the \$100,000 earnings accrual less the \$7,000 excess amortization expenses).

The consolidation procedures for Parrot and Sun one year after the date of acquisition are illustrated next. For this purpose, Exhibit 3.4 presents the separate 2017 financial statements for these two companies. Parrot recorded both investment-related accounts (the \$853,000 asset balance and the \$93,000 income accrual) based on applying the equity method.

### Determination of Consolidated Totals

Before becoming immersed in the mechanical aspects of a consolidation, the objective of this process should be understood. As indicated in Chapter 2, in the preparation of consolidated financial reports, the subsidiary's revenue, expense, asset, and liability accounts are added to the parent company balances. Within this procedure, several important guidelines must be followed:

- Sun's assets and liabilities are adjusted to reflect the allocations originating from their acquisition-date fair values.
- Because of the passage of time, the income effects (e.g., amortizations) of these allocations must also be recognized within the consolidation process.
- Any reciprocal or intra-entity<sup>6</sup> accounts must be offset. If, for example, one of the companies owes money to the other, the receivable and the payable balances have no connection with an outside party. Thus, when the companies are viewed as a single consolidated entity, the receivable and the payable represent intra-entity balances that should be eliminated for external reporting purposes.

<sup>6</sup> The FASB Accounting Standards Codification (ASC) uses the term *intra-entity* to describe transfers of assets across business entities affiliated through common stock ownership or other control mechanisms. The phrase indicates that although such transfers occur across separate legal entities, they are nonetheless made within a commonly controlled entity. Prior to the use of the term *intra-entity*, such amounts were routinely referred to as intercompany balances.

**EXHIBIT 3.4** Separate  
Records—Equity Method  
Applied

<b>PARROT COMPANY AND SUN COMPANY</b>		
<b>Financial Statements</b>		
<b>For Year Ending December 31, 2017</b>		
	<b>Parrot Company</b>	<b>Sun Company</b>
<b>Income Statement</b>		
Revenues .....	\$ (1,500,000)	\$ (400,000)
Cost of goods sold .....	700,000	232,000
Amortization expense .....	120,000	32,000
Depreciation expense .....	80,000	36,000
Equity in subsidiary earnings .....	(93,000)	–0–
Net income .....	<u>\$ (693,000)</u>	<u>\$ (100,000)</u>
<b>Statement of Retained Earnings</b>		
Retained earnings, 1/1/17 .....	\$ (840,000)	\$ (380,000)
Net income (above) .....	(693,000)	(100,000)
Dividends declared* .....	120,000	40,000
Retained earnings, 12/31/17 .....	<u>\$ (1,413,000)</u>	<u>\$ (440,000)</u>
<b>Balance Sheet</b>		
Current assets .....	\$ 1,040,000	\$ 400,000
Investment in Sun Company (at equity) .....	853,000	–0–
Trademarks .....	600,000	200,000
Patented technology .....	370,000	288,000
Equipment (net) .....	250,000	220,000
Total assets .....	<u>\$ 3,113,000</u>	<u>\$ 1,108,000</u>
Liabilities .....	\$ (980,000)	\$ (448,000)
Common stock .....	(600,000)	(200,000)
Additional paid-in capital .....	(120,000)	(20,000)
Retained earnings, 12/31/17 (above) .....	<u>(1,413,000)</u>	<u>(440,000)</u>
Total liabilities and equity .....	<u>\$ (3,113,000)</u>	<u>\$ (1,108,000)</u>

Note: Parentheses indicate a credit balance.

\*Dividends declared, whether currently paid or not, provide the appropriate amount to include in a statement of retained earnings. To help keep the number of worksheet rows (i.e., dividends payable and receivable) at a minimum, throughout this text we assume that dividends are declared and paid in the same period.

The consolidation of the two sets of financial information in Exhibit 3.4 is a relatively uncomplicated task and can even be carried out without the use of a worksheet. Understanding the origin of each reported figure is the first step in gaining a knowledge of this process.

- *Revenues* = \$1,900,000. The revenues of the parent and the subsidiary are added together.
- *Cost of goods sold* = \$932,000. The cost of goods sold of the parent and subsidiary are added together.
- *Amortization expense* = \$165,000. The balances of the parent and of the subsidiary are combined along with the \$13,000 additional amortization from the recognition of the excess fair value over book value attributed to the subsidiary's patented technology, as shown in Exhibit 3.3.
- *Depreciation expense* = \$110,000. The depreciation expenses of the parent and subsidiary are added together along with the \$6,000 reduction in equipment depreciation, as indicated in Exhibit 3.3.
- *Equity in subsidiary earnings* = –0–. The investment income recorded by the parent is eliminated and replaced by adding across the subsidiary's revenues and expenses to the consolidated totals.
- *Net income* = \$693,000. Consolidated revenues less consolidated expenses.
- *Retained earnings, 1/1/17* = \$840,000. The parent figure only. This acquisition-date parent's balance has yet to be affected by any equity method adjustments.

- *Dividends declared* = \$120,000. The parent company balance only because the subsidiary's dividends are attributable intra-entity to the parent, not to an outside party.
- *Retained earnings, 12/31/17* = \$1,413,000. Consolidated retained earnings as of the beginning of the year plus consolidated net income less consolidated dividends declared.
- *Current assets* = \$1,440,000. The parent's book value plus the subsidiary's book value.
- *Investment in Sun Company* = -0-. The asset recorded by the parent is eliminated and replaced by adding the subsidiary's assets and liabilities across to the consolidated totals.
- *Trademarks* = \$820,000. The parent's book value plus the subsidiary's book value plus the \$20,000 acquisition-date fair-value allocation. Note that the trademark has an indefinite life and therefore is not amortized.
- *Patented technology* = \$775,000. The parent's book value plus the subsidiary's book value plus the \$130,000 acquisition-date fair-value allocation less current year amortization of \$13,000.
- *Equipment* = \$446,000. The parent's book value plus the subsidiary's book value less the \$30,000 fair-value reduction allocation plus the current year expense reduction of \$6,000.
- *Goodwill* = \$80,000. The residual allocation shown in Exhibit 3.2. Note that goodwill is considered to have an indefinite life and thus is not amortized.
- *Total assets* = \$3,561,000. A vertical summation of consolidated assets.
- *Liabilities* = \$1,428,000. The parent's book value plus the subsidiary's book value.
- *Common stock* = \$600,000. The parent's book value. Subsidiary shares owned by the parent are treated as if they are no longer outstanding.
- *Additional paid-in capital* = \$120,000. The parent's book value. Subsidiary shares owned by the parent are treated as if they are no longer outstanding.
- *Retained earnings, 12/31/17* = \$1,413,000. Computed previously.
- *Total liabilities and equities* = \$3,561,000. A vertical summation of consolidated liabilities and equities.

### Consolidation Worksheet

Although the consolidated figures to be reported can be computed as just shown, accountants normally prefer to use a worksheet. A worksheet provides an organized structure for this process, a benefit that becomes especially important in consolidating complex combinations.

For Parrot and Sun, only five consolidation entries are needed to arrive at the same figures previously derived for this business combination. As discussed in Chapter 2, *worksheet entries are the catalyst for developing totals to be reported by the entity but are not physically recorded in the individual account balances of either company.*

### Consolidation Entry S

Common Stock (Sun Company) . . . . .	200,000	
Additional Paid-In Capital (Sun Company) . . . . .	20,000	
Retained Earnings, 1/1/17 (Sun Company) . . . . .	380,000	
Investment in Sun Company . . . . .		600,000

As shown in Exhibit 3.2, Parrot's \$800,000 Investment account balance at January 1, 2017, reflects two components: (1) a \$600,000 amount equal to Sun's book value and (2) a \$200,000 figure attributed to the acquisition-date difference between the book value and fair value of Sun's assets and liabilities (with a residual allocation made to goodwill). Entry S removes the \$600,000 component of the Investment in Sun Company account which is then replaced by adding the *book values* of each subsidiary asset and liability across to the consolidated figures. A second worksheet entry (Entry A) eliminates the remaining \$200,000 portion of the January 1, 2017 Investment in Sun account and replaces it with the specific acquisition-date excess fair over book value allocations along with any goodwill. Importantly, worksheet entries S and A are part of the sequence of worksheet adjustments that bring the investment account to zero.

Entry **S** also removes Sun’s stockholders’ equity accounts as of the beginning of the year. Because consolidated statements are prepared for the parent company owners, the subsidiary equity accounts are not relevant to the business combination and should be eliminated for consolidation purposes. The elimination is made through this entry because the equity accounts and the \$600,000 component of the investment account represent reciprocal balances: Both provide a measure of Sun’s book value as of January 1, 2017.

Before moving to the next consolidation entry, a clarification point should be made. In actual practice, worksheet entries are usually identified numerically. However, as in the previous chapter, the label “Entry **S**” used in this example refers to the elimination of Sun’s beginning Stockholders’ Equity. As a reminder of the purpose being served, all worksheet entries are identified in a similar fashion. Thus, throughout this textbook, “Entry **S**” always refers to the removal of the subsidiary’s beginning stockholders’ equity balances for the year against the book value portion of the investment account.

**Consolidation Entry A**

Trademarks .....	20,000	
Patented Technology.....	130,000	
Goodwill .....	80,000	
Equipment .....		30,000
Investment in Sun Company.....		200,000

Consolidation Entry **A** adjusts the subsidiary balances from their book values to acquisition-date fair values (see Exhibit 3.2) and includes goodwill created by the acquisition. This entry is labeled “Entry **A**” to indicate that it represents the Allocations made in connection with the excess of the subsidiary’s fair values over its book values. Sun’s accounts are adjusted collectively by the \$200,000 excess of Sun’s \$800,000 acquisition-date fair value over its \$600,000 book value.

**Consolidation Entry I**

Equity in Subsidiary Earnings .....	93,000	
Investment in Sun Company.....		93,000

“Entry **I**” (for **I**ncome) removes from the worksheet the subsidiary income recognized by Parrot during the year. For reporting purposes, we must add the subsidiary’s individual revenue and expense accounts (and the current excess amortization expenses) to the parent’s respective amounts to arrive at consolidated totals. Worksheet entry **I** thus effectively removes the one-line Equity in Subsidiary Earnings which is then replaced with the addition of the subsidiary’s separate revenues and expenses (already listed on the worksheet in the subsidiary’s balances). The \$93,000 figure eliminated here represents the \$100,000 income accrual recognized by Parrot, reduced by the \$7,000 in excess amortizations. Observe that the entry originally recorded by the parent is simply reversed on the worksheet to remove its impact.

**Consolidation Entry D**

Investment in Sun Company.....	40,000	
Dividends Declared .....		40,000

The dividends declared by the subsidiary during the year also must be eliminated from the consolidated totals. The entire \$40,000 dividend goes to the parent, which from the viewpoint of the consolidated entity is simply an intra-entity transfer. The dividend declaration did not affect any outside party. Therefore, “Entry **D**” (for **D**ividends) is designed to offset the impact of this transaction by removing the subsidiary’s Dividends Declared account. Because the equity method has been applied, Parrot originally recorded these dividends as a decrease in the Investment in Sun Company account. To eliminate the impact of this reduction, the investment account is increased.



**Consolidation Entry E**

Amortization Expense .....	13,000	
Equipment .....	6,000	
Patented Technology.....		13,000
Depreciation Expense .....		6,000

This final worksheet entry recognizes the current year's excess amortization expenses relating to the adjustments of Sun's assets to acquisition-date fair values. Because the equity method amortization was eliminated within Entry I, "Entry E" (for Expense) now enters on the worksheet the current year expense attributed to each of the specific account allocations (see Exhibit 3.3). Note that we adjust depreciation expense for the tangible asset *equipment* and we adjust amortization expense for the intangible asset *patented technology*. As mentioned earlier, we refer to the adjustments to all expenses resulting from excess acquisition-date fair-value allocations collectively as *excess amortization expenses*.

Thus, the worksheet entries necessary for consolidation when the parent has applied the equity method are as follows:

**Entry S**—Eliminates the subsidiary's stockholders' equity accounts as of the beginning of the current year along with the equivalent book value component within the parent's investment account.

**Entry A**—Recognizes the unamortized allocations as of the beginning of the current year associated with the original adjustments to fair value.

**Entry I**—Eliminates the impact of intra-entity subsidiary income accrued by the parent.

**Entry D**—Eliminates the impact of intra-entity subsidiary dividends.

**Entry E**—Recognizes excess amortization expenses for the current period on the allocations from the original adjustments to fair value.

Exhibit 3.5 provides a complete presentation of the December 31, 2017, consolidation worksheet for Parrot Company and Sun Company. The series of entries just described brings together the separate financial statements of these two organizations. Note that the consolidated totals are the same as those computed previously for this combination.

Observe that Parrot separately reports net income of \$693,000 as well as ending retained earnings of \$1,413,000, figures that are identical to the totals generated for the consolidated entity. However, subsidiary income earned after the date of acquisition is to be *added* to that of the parent. Thus, a question arises in this example as to why the parent company figures alone equal the consolidated balances of both operations.

In reality, Sun's income for this period is contained in both Parrot's reported balances and the consolidated totals. Through the application of the equity method, the current year earnings of the subsidiary have already been accrued by Parrot along with the appropriate amortization expense. *The parent's Equity in Subsidiary Earnings account is, therefore, an accurate representation of Sun's effect on consolidated net income.* If the equity method is employed properly, the worksheet process simply replaces this single \$93,000 balance with the specific revenue and expense accounts that it represents. *Consequently, when the parent employs the equity method, its net income and retained earnings mirror consolidated totals.*

**Consolidation Subsequent to Year of Acquisition—Equity Method**

In many ways, every consolidation of Parrot and Sun prepared after the date of acquisition incorporates the same basic procedures outlined in the previous section. However, the continual financial evolution undergone by the companies prohibits an exact repetition of the consolidation entries demonstrated in Exhibit 3.5.

As a basis for analyzing the procedural changes necessitated by the passage of time, assume that Parrot Company continues to hold its ownership of Sun Company as of December 31, 2020. This date was selected at random; any date subsequent to 2017 would serve equally well to illustrate this process. As an additional factor, assume that Sun now has a \$40,000 liability that is payable to Parrot.

**EXHIBIT 3.5 Consolidation Worksheet—Equity Method Applied**

<b>PARROT COMPANY AND SUN COMPANY</b>					
<b>Consolidation Worksheet</b>					
<b>Investment: Equity Method For Year Ending December 31, 2017</b>					
<b>Accounts</b>	<b>Parrot Company</b>	<b>Sun Company</b>	<b>Consolidation Entries</b>		<b>Consolidated Totals</b>
			<b>Debit</b>	<b>Credit</b>	
<b>Income Statement</b>					
Revenues	(1,500,000)	(400,000)			(1,900,000)
Cost of goods sold	700,000	232,000			932,000
Amortization expense	120,000	32,000	(E) 13,000		165,000
Depreciation expense	80,000	36,000		(E) 6,000	110,000
Equity in subsidiary earnings	(93,000)	–0–	(I) 93,000		–0–
Net income	(693,000)	(100,000)			(693,000)
<b>Statement of Retained Earnings</b>					
Retained earnings, 1/1/17	(840,000)	(380,000)	(S) 380,000		(840,000)
Net income (above)	(693,000)	(100,000)			(693,000)
Dividends declared	120,000	40,000		(D) 40,000	120,000
Retained earnings, 12/31/17	(1,413,000)	(440,000)			(1,413,000)
<b>Balance Sheet</b>					
Current assets	1,040,000	400,000			1,440,000
Investment in Sun Company	853,000	–0–	(D) 40,000	(S) 600,000 (A) 200,000 (I) 93,000	–0–
Trademarks	600,000	200,000	(A) 20,000		820,000
Patented technology	370,000	288,000	(A) 130,000	(E) 13,000	775,000
Equipment (net)	250,000	220,000	(E) 6,000	(A) 30,000	446,000
Goodwill	–0–	–0–	(A) 80,000		80,000
Total assets	3,113,000	1,108,000			3,561,000
Liabilities	(980,000)	(448,000)			(1,428,000)
Common stock	(600,000)	(200,000)	(S) 200,000		(600,000)
Additional paid-in capital	(120,000)	(20,000)	(S) 20,000		(120,000)
Retained earnings, 12/31/17 (above)	(1,413,000)	(440,000)			(1,413,000)
Total liabilities and equities	(3,113,000)	(1,108,000)	982,000	982,000	(3,561,000)

Note: Parentheses indicate a credit balance.

Consolidation entries:

- (S) Elimination of Sun's stockholders' equity January 1 balances and the book value portion of the investment account.
- (A) Allocation of Sun's acquisition-date excess fair values over book values.
- (I) Elimination of parent's equity in subsidiary earnings accrual.
- (D) Elimination of intra-entity dividends.
- (E) Recognition of current year excess fair-value amortization and depreciation expenses.

For this consolidation, assume that the January 1, 2020, Sun Company's Retained Earnings balance has risen to \$600,000. Because that account had a reported total of only \$380,000 on January 1, 2017, Sun's book value apparently has increased by \$220,000 during the 2017–2019 period. Although knowledge of individual operating figures in the past is not required, Sun's reported totals help to clarify the consolidation procedures.

<b>Year</b>	<b>Sun Company Net Income</b>	<b>Dividends Declared</b>	<b>Increase in Book Value</b>	<b>Ending Retained Earnings</b>
2017	\$100,000	\$ 40,000	\$ 60,000	\$ 440,000
2018	140,000	50,000	90,000	530,000
2019	90,000	20,000	70,000	600,000
	<u>\$330,000</u>	<u>\$110,000</u>	<u>\$220,000</u>	

For 2020, the current year, we assume that Sun reports net income of \$160,000 and declares and pays cash dividends of \$70,000. Because it applies the equity method, Parrot recognizes earnings of \$160,000. Furthermore, as shown in Exhibit 3.3, amortization expense of \$7,000 applies to 2020 and must also be recorded by the parent. Consequently, Parrot reports an Equity in Subsidiary Earnings balance for the year of \$153,000 (\$160,000 – \$7,000).

Although this income figure can be reconstructed with little difficulty, the current balance in the Investment in Sun Company account is more complicated. Over the years, the initial \$800,000 acquisition price has been subjected to adjustments for

1. The annual accrual of Sun's income.
2. The receipt of dividends from Sun.
3. The recognition of annual excess amortization expenses.

Exhibit 3.6 analyzes these changes and shows the components of the Investment in Sun Company account balance as of December 31, 2020.

Following the construction of the Investment in Sun Company account, the consolidation worksheet developed in Exhibit 3.7 should be easier to understand. Current figures for both companies appear in the first two columns. The parent's investment balance and equity income accrual as well as Sun's income and stockholders' equity accounts correspond to the information given previously. Worksheet entries (lettered to agree with the previous illustration) are then utilized to consolidate all balances.

Several steps are necessary to arrive at these reported totals. The subsidiary's assets, liabilities, revenues, and expenses are added to those same accounts of the parent. The unamortized portion of the original acquisition-date fair-value allocations are included along with current excess amortization expenses. The investment and equity income balances are both eliminated as are the subsidiary's stockholders' equity accounts. Intra-entity dividends are removed as are the existing receivable and payable balances between the two companies.

### **Consolidation Entry S**

Once again, this first consolidation entry offsets reciprocal amounts representing the subsidiary's book value as of the beginning of the current year. Sun's January 1, 2020, stockholders'

#### **EXHIBIT 3.6** **Investment Account under** **Equity Method**

<b>PARROT COMPANY</b>		
<b>Investment in Sun Company Account</b>		
<b>As of December 31, 2020</b>		
<b>Equity Method Applied</b>		
Fair value of consideration transferred at date of acquisition		\$ 800,000
Entries recorded in prior years:		
Accrual of Sun Company's income		
2017	\$100,000	
2018	140,000	
2019	<u>90,000</u>	330,000
Sun Company—Dividends declared		
2017	\$ (40,000)	
2018	(50,000)	
2019	<u>(20,000)</u>	(110,000)
Excess amortization expenses		
2017	\$ (7,000)	
2018	(7,000)	
2019	<u>(7,000)</u>	(21,000)
Entries recorded in current year—2020		
Accrual of Sun Company's income	\$160,000	
Sun Company—Dividends declared	(70,000)	
Excess amortization expenses	<u>(7,000)</u>	83,000
Investment in Sun Company, 12/31/20		<u><u>\$1,082,000</u></u>

**EXHIBIT 3.7 Consolidation Worksheet Subsequent to Year of Acquisition—Equity Method Applied**

<b>PARROT COMPANY AND SUN COMPANY</b>					
<b>Consolidation Worksheet</b>					
<b>Investment: Equity Method</b>					
<b>For Year Ending December 31, 2020</b>					
<b>Accounts</b>	<b>Parrot Company</b>	<b>Sun Company</b>	<b>Consolidation Entries</b>		<b>Consolidation Totals</b>
			<b>Debit</b>	<b>Credit</b>	
<b>Income Statement</b>					
Revenues	(2,100,000)	(600,000)			(2,700,000)
Cost of goods sold	1,000,000	380,000			1,380,000
Amortization expense	200,000	20,000	(E) 13,000		233,000
Depreciation expense	100,000	40,000		(E) 6,000	134,000
Equity in subsidiary earnings	(153,000)	–0–	(I) 153,000		–0–
Net income	(953,000)	(160,000)			(953,000)
<b>Statement of Retained Earnings</b>					
Retained earnings, 1/1/20	(2,044,000)	(600,000)	(S) 600,000		(2,044,000)
Net income (above)	(953,000)	(160,000)			(953,000)
Dividends declared	420,000	70,000		(D) 70,000	420,000
Retained earnings, 12/31/20	(2,577,000)	(690,000)			(2,577,000)
<b>Balance Sheet</b>					
Current assets	1,705,000	500,000		(P) 40,000	2,165,000
Investment in Sun Company	1,082,000	–0–	(D) 70,000	(S) 820,000 (A) 179,000 (I) 153,000	–0–
Trademarks	600,000	240,000	(A) 20,000		860,000
Patented technology	540,000	420,000	(A) 91,000	(E) 13,000	1,038,000
Equipment (net)	420,000	210,000	(E) 6,000	(A) 12,000	624,000
Goodwill	–0–	–0–	(A) 80,000		80,000
Total assets	4,347,000	1,370,000			4,767,000
Liabilities	(1,050,000)	(460,000)	(P) 40,000		(1,470,000)
Common stock	(600,000)	(200,000)	(S) 200,000		(600,000)
Additional paid-in capital	(120,000)	(20,000)	(S) 20,000		(120,000)
Retained earnings, 12/31/20 (above)	(2,577,000)	(690,000)			(2,577,000)
Total liabilities and equities	(4,347,000)	(1,370,000)	1,293,000	1,293,000	(4,767,000)

Note: Parentheses indicate a credit balance.

Consolidation entries:

- (S) Elimination of Sun's stockholders' equity January 1 balances and the book value portion of the investment account.
- (A) Allocation of Sun's acquisition-date excess fair values over book values, unamortized balance as of beginning of year.
- (I) Elimination of parent's equity in subsidiary earnings accrual.
- (D) Elimination of intra-entity dividends.
- (E) Recognition of current year excess fair-value amortization and depreciation expenses.
- (P) Elimination of intra-entity receivable/payable.

equity accounts are eliminated against the book value portion of the parent's investment account. Here, though, the amount eliminated is \$820,000 rather than the \$600,000 shown in Exhibit 3.5 for 2017. Both balances have changed during the 2017–2019 period. Sun's operations caused a \$220,000 increase in retained earnings. Parrot's application of the equity method created a parallel effect on its Investment in Sun Company account (the income accrual of \$330,000 less dividends collected of \$110,000).

Although Sun's Retained Earnings balance is removed in this entry, the income this company earned since the acquisition date is still included in the consolidated figures. Parrot accrues these profits annually through application of the equity method. Thus, elimination of the subsidiary's entire Retained Earnings is necessary; a portion was earned prior to the acquisition and the remainder has already been recorded by the parent.

Entry **S** removes these balances as of the first day of 2020 rather than at the end of the year. The consolidation process is made a bit simpler by segregating the effect of preceding operations from the transactions of the current year. Thus, *all worksheet entries relate specifically to either the previous years (S and A) or the current period (I, D, E, and P)*.

### **Consolidation Entry A**

In the initial consolidation (2017), fair-value allocations amounting to \$200,000 were entered, but these balances have now undergone three years of amortization. As computed in Exhibit 3.8, expenses for these prior years totaled \$21,000, leaving a balance of \$179,000. Allocation of this amount to the individual accounts is also determined in Exhibit 3.8 and reflected in worksheet Entry **A**. As with Entry **S**, these balances are calculated as of January 1, 2020, and replaced by current year expenses as shown in Entry **E**.

### **Consolidation Entry I**

As before, this entry eliminates the equity income recorded currently by Parrot (\$153,000) in connection with its ownership of Sun. The subsidiary's revenue and expense accounts are left intact so they can be included in the consolidated figures.

### **Consolidation Entry D**

This worksheet entry offsets the \$70,000 intra-entity dividends (from Sun to Parrot) during the current period.

### **Consolidation Entry E**

Excess amortization expenses relating to acquisition-date fair-value adjustments are individually recorded for the current period.

Before progressing to the final worksheet entry, note the close similarity of these entries with the five entries incorporated in the 2017 consolidation (Exhibit 3.5). Except for the numerical changes created by the passage of time, the entries are identical.

### **Consolidation Entry P**

This last entry (labeled "Entry **P**" because it eliminates an intra-entity Payable) introduces a new element to the consolidation process. As noted earlier, intra-entity reciprocal accounts do not relate to outside parties. Therefore, Sun's \$40,000 payable and Parrot's \$40,000 receivable must be removed on the worksheet because the companies are being reported as a single entity.

In reviewing Exhibit 3.7, note several aspects of the consolidation process:

- The stockholders' equity accounts of the subsidiary are removed.
- The Investment in Sun Company and the Equity in Subsidiary Earnings are both removed.
- The parent's Retained Earnings balance is not adjusted. Because the parent applies the equity method this account should be correct.
- The acquisition-date fair-value adjustments to the subsidiary's assets are recognized but only after adjustment for prior periods' annual excess amortization expenses.
- Intra-entity balances such as dividends and receivables/payables are offset.

**EXHIBIT 3.8**  
Excess Amortizations  
Relating to Individual  
Accounts as of  
January 1, 2020

Accounts	Original Allocation	Annual Excess Amortizations			Balance 1/1/20
		2017	2018	2019	
Trademarks	\$ 20,000	\$ -0-	\$ -0-	\$ -0-	\$ 20,000
Patented technology	130,000	13,000	13,000	13,000	91,000
Equipment	(30,000)	(6,000)	(6,000)	(6,000)	(12,000)
Goodwill	80,000	-0-	-0-	-0-	80,000
	\$200,000	\$ 7,000	\$ 7,000	\$ 7,000	\$179,000
		\$21,000			

**LO 3-3b**

Prepare consolidated financial statements subsequent to acquisition when the parent has applied **the initial value method** in its internal records.

**LO 3-3c**

Prepare consolidated financial statements subsequent to acquisition when the parent has applied **the partial equity method** in its internal records.

## Subsequent Consolidations—Investment Recorded Using Initial Value or Partial Equity Method

### Acquisition Made during the Current Year

As discussed at the beginning of this chapter, the parent company may opt to use the initial value method or the partial equity method for internal record-keeping rather than the equity method. Application of either alternative changes the balances recorded by the parent over time and, thus, the procedures followed in creating consolidations. However, *choosing one of these other approaches does not affect any of the final consolidated figures to be reported.*

When a company utilizes the equity method, it eliminates all reciprocal accounts, assigns unamortized fair-value allocations to specific accounts, and records amortization expense for the current year. Application of either the initial value method or the partial equity method has no effect on this basic process. For this reason, a number of the consolidation entries remain the same regardless of the parent's investment accounting method.

In reality, just three of the parent's accounts actually vary because of the method applied:

- The investment account.
- The income recognized from the subsidiary.
- The parent's retained earnings (in periods after the initial year of the combination).

Only the differences found in these balances affect the consolidation process when another method is applied. Thus, any time after the acquisition date, accounting for these three balances is of special importance.

To illustrate the modifications required by the adoption of an alternative accounting method, the consolidation of Parrot and Sun as of December 31, 2017, is reconstructed. Only one differing factor is introduced: the method by which Parrot accounts for its investment. Exhibit 3.9 presents the 2017 consolidation based on Parrot's use of the initial value method. Exhibit 3.10 demonstrates this same process assuming that the parent applied the partial equity method. Each entry on these worksheets is labeled to correspond with the 2017 consolidation in which the parent used the equity method (Exhibit 3.5). Furthermore, differences with the equity method (both on the parent company records and with the consolidation entries) are highlighted on each of the worksheets.

### *Initial Value Method Applied—2017 Consolidation*

Although the initial value method theoretically stands in marked contrast to the equity method, few reporting differences actually exist. In the year of acquisition, Parrot's income and investment accounts relating to the subsidiary are the only accounts affected.

Under the initial value method, income recognition in 2017 is limited to the \$40,000 dividend received by the parent; no equity income accrual is made. At the same time, the investment account retains its \$800,000 initial value. Unlike the equity method, no adjustments are recorded in the parent's investment account in connection with the current year operations, subsidiary dividends, or amortization of any fair-value allocations.

After the composition of the dividend income and investment accounts has been established, worksheet entries can be used to produce the consolidated figures found in Exhibit 3.9 as of December 31, 2017.

### *Consolidation Entry S*

As with the previous Entry **S** in Exhibit 3.5, the \$600,000 component of the investment account is eliminated against the beginning stockholders' equity account of the subsidiary. Both are equivalent to Sun's net assets at January 1, 2017, and are, therefore, reciprocal balances that must be offset. This entry is not affected by the accounting method in use.

### *Consolidation Entry A*

Sun's \$200,000 excess acquisition-date fair value over book value is allocated to Sun's assets and liabilities based on their fair values at the date of acquisition. The \$80,000 residual is

**EXHIBIT 3.9 Consolidation Worksheet—Initial Value Method Applied**

<b>PARROT COMPANY AND SUN COMPANY</b>					
<b>Consolidation Worksheet</b>					
<b>Investment: Initial Value Method For Year Ending December 31, 2017</b>					
<b>Accounts</b>	<b>Parrot Company</b>	<b>Sun Company</b>	<b>Consolidation Entries</b>		<b>Consolidation Totals</b>
			<b>Debit</b>	<b>Credit</b>	
<b>Income Statement</b>					
Revenues	(1,500,000)	(400,000)			(1,900,000)
Cost of goods sold	700,000	232,000			932,000
Amortization expense	120,000	32,000	(E) 13,000		165,000
Depreciation expense	80,000	36,000		(E) 6,000	110,000
Dividend income	<span style="border: 1px solid black;">(40,000)*</span>	–0–	<span style="border: 1px solid black;">(I) 40,000*</span>		–0–
Net income	(640,000)	(100,000)			(693,000)
<b>Statement of Retained Earnings</b>					
Retained earnings, 1/1/17	(840,000)	(380,000)	(S) 380,000		(840,000)
Net income (above)	(640,000)	(100,000)			(693,000)
Dividends declared	120,000	40,000		<span style="border: 1px solid black;">(I) 40,000*</span>	120,000
Retained earnings, 12/31/17	(1,360,000)	(440,000)			(1,413,000)
<b>Balance Sheet</b>					
Current assets	1,040,000	400,000			1,440,000
Investment in Sun Company	<span style="border: 1px solid black;">800,000*</span>	–0–		(S) 600,000 (A) 200,000	–0–
Trademarks	600,000	200,000	(A) 20,000		820,000
Patented technology	370,000	288,000	(A) 130,000	(E) 13,000	775,000
Equipment (net)	250,000	220,000	(E) 6,000	(A) 30,000	446,000
Goodwill	–0–	–0–	(A) 80,000		80,000
Total assets	3,060,000	1,108,000			3,561,000
Liabilities	(980,000)	(448,000)			(1,428,000)
Common stock	(600,000)	(200,000)	(S) 200,000		(600,000)
Additional paid-in capital	(120,000)	(20,000)	(S) 20,000		(120,000)
Retained earnings, 12/31/17 (above)	(1,360,000)	(440,000)			(1,413,000)
Total liabilities and equities	(3,060,000)	(1,108,000)	889,000	889,000	(3,561,000)

Note: Parentheses indicate a credit balance.

\*Boxed items highlight differences with consolidation in Exhibit 3.5.

Consolidation entries:

- (S) Elimination of Sun's stockholders' equity January 1 balances and the book value portion of the investment account.
- (A) Allocation of Sun's acquisition-date excess fair values over book values.
- (I) Elimination of intra-entity dividend income and dividends declared by Sun.
- (E) Recognition of current year excess fair-value amortization and depreciation expenses.

Note: Consolidation entry (D) is not needed when the parent applies the initial value method because entry (I) eliminates the intra-entity dividend effects.

attributed to goodwill. This procedure is identical to the corresponding entry in Exhibit 3.5 in which the equity method was applied.

### **Consolidation Entry I**

Under the initial value method, the parent records dividends declared by the subsidiary as income. Entry **I** removes this Dividend Income account along with Sun's Dividends Declared. From a consolidated perspective, these two \$40,000 balances represent an intra-entity transfer that had no financial impact outside of the entity. In contrast to the equity method, Parrot has not accrued subsidiary income, nor has amortization been recorded; thus, no further income elimination is needed.

**EXHIBIT 3.10 Consolidation Worksheet—Partial Equity Method Applied**

<b>PARROT COMPANY AND SUN COMPANY</b>					
<b>Consolidation Worksheet</b>					
<b>Investment: Partial Equity Method For Year Ending December 31, 2017</b>					
<b>Accounts</b>	<b>Parrot Company</b>	<b>Sun Company</b>	<b>Consolidation Entries</b>		<b>Consolidation Totals</b>
			<b>Debit</b>	<b>Credit</b>	
<b>Income Statement</b>					
Revenues	(1,500,000)	(400,000)			(1,900,000)
Cost of goods sold	700,000	232,000			932,000
Amortization expense	120,000	32,000	(E) 13,000		165,000
Depreciation expense	80,000	36,000		(E) 6,000	110,000
Equity in subsidiary earnings	<span style="border: 1px solid black;">(100,000)*</span>	—0—	<span style="border: 1px solid black;">(I) 100,000*</span>		—0—
Net income	(700,000)	(100,000)			(693,000)
<b>Statement of Retained Earnings</b>					
Retained earnings, 1/1/17	(840,000)	(380,000)	(S) 380,000		(840,000)
Net income (above)	(700,000)	(100,000)			(693,000)
Dividends declared	120,000	40,000		(D) 40,000	120,000
Retained earnings, 12/31/17	(1,420,000)	(440,000)			(1,413,000)
<b>Balance Sheet</b>					
Current assets	1,040,000	400,000			1,440,000
Investment in Sun Company	<span style="border: 1px solid black;">860,000*</span>	—0—	(D) 40,000	(S) 600,000 (A) 200,000 <span style="border: 1px solid black;">(I) 100,000*</span>	—0—
Trademarks	600,000	200,000	(A) 20,000		820,000
Patented technology	370,000	288,000	(A) 130,000	(E) 13,000	775,000
Equipment (net)	250,000	220,000	(E) 6,000	(A) 30,000	446,000
Goodwill	—0—	—0—	(A) 80,000		80,000
Total assets	3,120,000	1,108,000			3,561,000
Liabilities	(980,000)	(448,000)			(1,428,000)
Common stock	(600,000)	(200,000)	(S) 200,000		(600,000)
Additional paid-in capital	(120,000)	(20,000)	(S) 20,000		(120,000)
Retained earnings, 12/31/17 (above)	(1,420,000)	(440,000)			(1,413,000)
Total liabilities and equities	(3,120,000)	(1,108,000)	989,000	989,000	(3,561,000)

Note: Parentheses indicate a credit balance.

\*Boxed items highlight differences with consolidation in Exhibit 3.5.

Consolidation entries:

- (S) Elimination of Sun’s stockholders’ equity January 1 balances and the book value portion of the investment account.
- (A) Allocation of Sun’s acquisition-date excess fair values over book values.
- (I) Elimination of parent’s equity in subsidiary earnings accrual.
- (D) Elimination of intra-entity dividends.
- (E) Recognition of current year excess fair-value amortization and depreciation expenses.

Dividend Income . . . . .	40,000	
Dividends Declared . . . . .		40,000
To eliminate intra-entity income . . . . .		

**Consolidation Entry D**

When the initial value method is applied, the parent records intra-entity dividends as income. Because these dividends were already removed from the consolidated totals by Entry I, no separate Entry D is required.



### Consolidation Entry E

Regardless of the parent's method of accounting, the reporting entity must recognize excess amortizations for the current year in connection with the original fair-value allocations. Thus, Entry **E** serves to bring the current year expenses into the consolidated financial statements.

Consequently, using the initial value method rather than the equity method changes only Entries **I** and **D** in the year of acquisition. Despite the change in methods, reported figures are still derived by (1) eliminating all reciprocals, (2) allocating the excess portion of the acquisition-date fair values, and (3) recording amortizations on these allocations. As indicated previously, the consolidated totals appearing in Exhibit 3.9 are identical to the figures produced previously in Exhibit 3.5. Although the income and the investment accounts on the parent company's separate statements vary, the consolidated balances are not affected.

One significant difference between the initial value method and equity method does exist: The parent's separate statements do not reflect consolidated income totals when the initial value method is used. Because equity adjustments (such as excess amortizations) are not recorded, neither Parrot's reported net income of \$640,000 nor its retained earnings of \$1,360,000 provides an accurate portrayal of consolidated figures.

### Partial Equity Method Applied—2017 Consolidation

Exhibit 3.10 presents a worksheet to consolidate these two companies for 2017 (the year of acquisition) based on the assumption that Parrot applied the partial equity method. Again, the only changes from previous examples are found in (1) the parent's separate records for this investment and its related income and (2) worksheet Entries **I** and **D**.

As discussed earlier, under the partial equity approach, the parent's record-keeping is limited to two periodic journal entries: the annual accrual of subsidiary income and the recognition of dividends. Hence, within the parent's records, only a few differences exist when the partial equity method is applied rather than the initial value method. The entries recorded by Parrot in connection with Sun's 2017 operations illustrate both of these approaches.

Therefore, by applying the partial equity method, the investment account on the parent's balance sheet rises to \$860,000 by the end of 2017. This total is composed of the original \$800,000 acquisition-date fair value for Sun adjusted for the \$100,000 income recognition and the \$40,000 cash dividend. The same \$100,000 equity income figure appears within the parent's income statement. These two balances are appropriately found in Parrot's records in Exhibit 3.10.

Because of differences in income recognition and the effects of subsidiary dividends, Entries **I** and **D** again differ on the worksheet. For the partial equity method, the \$100,000 equity income is eliminated (Entry **I**) by reversing the parent's entry. Removing this accrual allows the individual revenue and expense accounts of the subsidiary to be reported without double-counting. The \$40,000 intra-entity dividend must also be removed (Entry **D**). The Dividends Declared account is simply deleted. However, elimination of the dividend from the

Parrot Company Initial Value Method 2017		Parrot Company Partial Equity Method 2017	
Dividend Receivable . . . . .	40,000	Dividend Receivable . . . . .	40,000
Dividend Income . . . . .		Investment in Sun Company . . . . .	40,000
Subsidiary dividends declared.		Subsidiary dividends declared.	
Cash . . . . .	40,000	Cash . . . . .	40,000
Dividend Receivable . .		Dividend Receivable . .	40,000
To record the receipt of the cash dividend.	40,000	To record the receipt of the cash dividend.	
		Investment in Sun Company . . . . .	100,000
		Equity in Subsidiary Earnings . . . . .	100,000
		Accrual of subsidiary income.	

Investment in Sun Company actually causes an increase because the dividend was recorded by Parrot as a reduction in that account. All other consolidation entries (Entries **S**, **A**, and **E**) are the same for all three methods.

**LO 3-4**

Understand that a parent's internal accounting method for its subsidiary investments has no effect on the resulting consolidated financial statements.

### Comparisons across Internal Investment Methods

Consolidated financial worksheets have now been completed when the parent uses the equity, initial value, and partial equity methods. At this point it is instructive to compare the final consolidated balances in Exhibits 3.5, 3.9, and 3.10. Note the identical final consolidated column balances across the three internal methods of investment accounting. Thus, the parent's internal investment method choice has no effect on the resulting consolidated financial statements.

### Consolidation Subsequent to Year of Acquisition—Initial Value and Partial Equity Methods

By again incorporating the December 31, 2020, financial data for Parrot and Sun (presented in Exhibit 3.7), consolidation procedures for the initial value method and the partial equity method are examined for years subsequent to the date of acquisition. *In both cases, establishment of an appropriate beginning retained earnings figure becomes a significant goal of the consolidation.*

### Conversion of the Parent's Retained Earnings to a Full-Accrual (Equity) Basis

Consolidated financial statements require a *full accrual-based measurement of both income and retained earnings*. The initial value method, however, recognizes income when the subsidiary declares a dividend thus ignoring when the underlying income was earned. The partial equity method only partially accrues subsidiary income. Thus, neither provides a full accrual-based measure of the subsidiary activities on the parent's income. As a result, over time the parent's retained earnings account fails to show a full accrual-based amount. Therefore, new worksheet adjustments are required to convert the parent's beginning of the year retained earnings balance to a full-accrual basis. These adjustments are made to *beginning of the year retained earnings* because current year earnings are readily converted to full-accrual basis by simply combining current year revenue and expenses. The resulting current year combined income figure is then added to the adjusted beginning of the year retained earnings to arrive at a full-accrual ending retained earnings balance.

This concern was not faced previously when the equity method was adopted. Under that approach, the parent's Retained Earnings account balance already reflects a full-accrual basis so that no adjustment is necessary. In the earlier illustration, the \$330,000 income accrual for the 2017–2019 period as well as the \$21,000 amortization expense was recognized by the parent in applying the equity method (see Exhibit 3.6). Having been recorded in this manner, these two balances form a permanent part of Parrot's retained earnings and are included automatically in the consolidated total. Consequently, if the equity method is applied, the process is simplified; no worksheet entries are needed to adjust the parent's Retained Earnings account to record subsidiary operations or amortization for past years.

Conversely, if a method other than the equity method is used, a worksheet change must be made to the parent's beginning Retained Earnings account (in every subsequent year) to equate this balance with a full-accrual amount. To quantify this adjustment, the parent's recognized income for these past three years under each method is first determined (Exhibit 3.11). For consolidation purposes, the beginning retained earnings account must then be increased or decreased to create the same effect as the equity method.

#### EXHIBIT 3.11 Retained Earnings Differences

PARROT COMPANY AND SUN COMPANY Previous Years—2017–2019			
	Equity Method	Initial Value Method	Partial Equity Method
Equity accrual	\$330,000	\$ 0–	\$330,000
Dividend income	0–	110,000	0–
Excess amortization expenses	(21,000)	0–	0–
Increase in parent's retained earnings	<u>\$309,000</u>	<u>\$110,000</u>	<u>\$330,000</u>

### ***Initial Value Method Applied—Subsequent Consolidation***

As shown in Exhibit 3.11, if Parrot applied the initial value method during the 2017–2019 period, it recognizes \$199,000 less income than under the equity method (\$309,000 – \$110,000). Two items cause this difference. First, Parrot has not accrued the \$220,000 increase in the subsidiary’s book value across the periods prior to the current year. Although the \$110,000 in dividends was recorded as income, the parent never recognized the remainder of the \$330,000 earned by the subsidiary.<sup>7</sup> Second, no accounting has been made of the \$21,000 excess amortization expenses. Thus, the parent’s beginning Retained Earnings account is \$199,000 (\$220,000 – \$21,000) below the appropriate consolidated total and must be adjusted.<sup>8</sup>

To simulate the equity method so that the parent’s beginning Retained Earnings account reflects a full-accrual basis, this \$199,000 increase is recorded through a worksheet entry. The initial value method figures reported by the parent effectively are converted into equity method balances.

Investment in Sun Company.....	199,000	
Retained Earnings, 1/1/20 (Parrot Company) .....		199,000
To convert parent’s beginning retained earnings from the initial value method to equity method.		

This adjustment is labeled Entry **\*C**. The *C* refers to the conversion being made to equity method (full-accrual) totals. The asterisk indicates that this equity simulation relates solely to transactions of prior periods. Thus, *Entry \*C should be recorded before the other worksheet entries to align the beginning balances for the year.*

Exhibit 3.12 provides a complete presentation of the consolidation of Parrot and Sun as of December 31, 2020, based on the parent’s application of the initial value method. After Entry **\*C** has been recorded on the worksheet, the remainder of this consolidation follows the same pattern as previous examples. Sun’s stockholders’ equity accounts are eliminated (Entry **S**) while the allocations stemming from the \$800,000 initial fair value are recorded (Entry **A**) at their unamortized balances as of January 1, 2020 (see Exhibit 3.8). Intra-entity dividend income is removed (Entry **I**) and current year excess amortization expenses are recognized (Entry **E**). To complete this process, the intra-entity receivable and payable of \$40,000 are offset (Entry **P**).

In retrospect, the only new element introduced here is the adjustment of the parent’s beginning Retained Earnings. For a consolidation produced after the initial year of acquisition, an Entry **\*C** is required if the parent has not applied the equity method.

### ***Partial Equity Method Applied—Subsequent Consolidation***

Exhibit 3.13 demonstrates the worksheet consolidation of Parrot and Sun as of December 31, 2020, when the investment accounts have been recorded by the parent using the partial equity method. This approach accrues subsidiary income each year but records no other equity adjustments. Therefore, as of December 31, 2020, Parrot’s Investment in Sun Company account has a balance of \$1,110,000:

<sup>7</sup>Two different calculations are available for determining the \$220,000 in nonrecorded income for prior years: (1) subsidiary income less dividends declared and (2) the change in the subsidiary’s book value as of the first day of the current year. The second method works only if the subsidiary has had no other equity transactions such as the issuance of new stock or the purchase of treasury shares. Unless otherwise stated, the assumption is made that no such transactions have occurred.

<sup>8</sup>Because neither the income in excess of dividends nor excess amortization is recorded by the parent under the initial value method, its beginning Retained Earnings account is \$199,000 less than the \$2,044,000 reported under the equity method (Exhibit 3.7). Thus, a \$1,845,000 balance is shown in Exhibit 3.12 (\$2,044,000 less \$199,000). Conversely, if the partial equity method had been applied, Parrot’s absence of amortization would cause the Retained Earnings account to be \$21,000 higher than the figure derived by the equity method. For this reason, Exhibit 3.13 shows the parent with a beginning Retained Earnings account of \$2,065,000 rather than \$2,044,000.

Fair value of consideration transferred for Sun Company 1/1/17		\$ 800,000	
Sun Company's 2017–2019 increase in book value:			
Accrual of Sun Company's income	\$ 330,000		
Sun Company's dividends	<u>(110,000)</u>	220,000	
Sun Company's 2020 operations:			
Accrual of Sun Company's income	\$ 160,000		
Sun Company's dividends	<u>(70,000)</u>	90,000	
Investment in Sun Company, 12/31/20 (Partial equity method)			<u>\$1,110,000</u>

**EXHIBIT 3.12 Consolidation Worksheet Subsequent to Year of Acquisition—Initial Value Method Applied**

<b>PARROT COMPANY AND SUN COMPANY</b>					
<b>Consolidation Worksheet</b>					
<b>Investment: Initial Value Method</b>					
<b>For Year Ending December 31, 2020</b>					
Accounts	Parrot Company	Sun Company	Consolidation Entries		Consolidation Totals
			Debit	Credit	
<b>Income Statement</b>					
Revenues	(2,100,000)	(600,000)			(2,700,000)
Cost of goods sold	1,000,000	380,000			1,380,000
Amortization expense	200,000	20,000	(E) 13,000		233,000
Depreciation expense	100,000	40,000		(E) 6,000	134,000
Dividend income	<u>(70,000)*</u>	—0—	(I) 70,000*		—0—
Net income	<u>(870,000)</u>	<u>(160,000)</u>			<u>(953,000)</u>
<b>Statement of Retained Earnings</b>					
Retained earnings, 1/1/20					
Parrot Company	<u>(1,845,000)†*</u>			(*C) 199,000*	(2,044,000)
Sun Company		(600,000)	(S) 600,000		—0—
Net income (above)	(870,000)	(160,000)			(953,000)
Dividends declared	420,000	70,000		(I) 70,000*	420,000
Retained earnings, 12/31/20	<u>(2,295,000)</u>	<u>(690,000)</u>			<u>(2,577,000)</u>
<b>Balance Sheet</b>					
Current assets	1,705,000	500,000		(P) 40,000	2,165,000
Investment in Sun Company	<u>800,000*</u>	—0—	(*C) 199,000	(S) 820,000	—0—
				(A) 179,000	
Trademarks	600,000	240,000	(A) 20,000		860,000
Patented technology	540,000	420,000	(A) 91,000	(E) 13,000	1,038,000
Equipment (net)	420,000	210,000	(E) 6,000	(A) 12,000	624,000
Goodwill	—0—	—0—	(A) 80,000		80,000
Total assets	<u>4,065,000</u>	<u>1,370,000</u>			<u>4,767,000</u>
Liabilities	(1,050,000)	(460,000)	(P) 40,000		(1,470,000)
Common stock	(600,000)	(200,000)	(S) 200,000		(600,000)
Additional paid-in capital	(120,000)	(20,000)	(S) 20,000		(120,000)
Retained earnings, 12/31/20 (above)	(2,295,000)	(690,000)			(2,577,000)
Total liabilities and equities	<u>(4,065,000)</u>	<u>(1,370,000)</u>	1,339,000	1,339,000	<u>(4,767,000)</u>

Note: Parentheses indicate a credit balance.

\*Boxed items highlight differences with consolidation in Exhibit 3.7.

†See footnote 8.

Consolidation entries:

(\*C) To convert parent's beginning retained earnings to full accrual basis.

(S) Elimination of Sun's stockholders' equity January 1 balances and the book value portion of investment account.

(A) Allocation of Sun's excess acquisition-date fair value over book value, unamortized balance as of beginning of year.

(I) Elimination of intra-entity dividend income and dividends declared by Sun.

(E) Recognition of current year excess fair-value amortization and depreciation expenses.

(P) Elimination of intra-entity receivable/payable.

Note: Consolidation entry (D) is not needed when the parent applies the initial value method because entry (I) eliminates the intra-entity dividend effects.

**EXHIBIT 3.13 Consolidation Worksheet Subsequent to Year of Acquisition—Partial Equity Method Applied**

<b>PARROT COMPANY AND SUN COMPANY</b>					
<b>Consolidation Worksheet</b>					
<b>Investment: Partial Equity Method</b>					
<b>For Year Ending December 31, 2020</b>					
<b>Accounts</b>	<b>Parrot Company</b>	<b>Sun Company</b>	<b>Consolidation Entries</b>		<b>Consolidation Totals</b>
			<b>Debit</b>	<b>Credit</b>	
<b>Income Statement</b>					
Revenues	(2,100,000)	(600,000)			(2,700,000)
Cost of goods sold	1,000,000	380,000			1,380,000
Amortization expense	200,000	20,000	(E) 13,000		233,000
Depreciation expense	100,000	40,000		(E) 6,000	134,000
Equity in subsidiary earnings	<span style="border: 1px solid black;">160,000</span> *	–0–	<span style="border: 1px solid black;">(I) 160,000</span> *		–0–
Net income	(960,000)	(160,000)			(953,000)
<b>Statement of Retained Earnings</b>					
Retained earnings, 1/1/20					
Parrot Company	<span style="border: 1px solid black;">(2,065,000)</span> *		(*C) 21,000*		(2,044,000)
Sun Company		(600,000)	(S) 600,000		–0–
Net income (above)	(960,000)	(160,000)			(953,000)
Dividends declared	420,000	70,000		(D) 70,000*	420,000
Retained earnings, 12/31/20	(2,605,000)	(690,000)			(2,577,000)
<b>Balance Sheet</b>					
Current assets	1,705,000	500,000		(P) 40,000	2,165,000
Investment in Sun Company	<span style="border: 1px solid black;">1,110,000</span> *	–0–	(D) 70,000	<span style="border: 1px solid black;">(*C) 21,000</span> *	–0–
				(S) 820,000	
				(A) 179,000	
				<span style="border: 1px solid black;">(I) 160,000</span> *	
Trademarks	600,000	240,000	(A) 20,000		860,000
Patented technology	540,000	420,000	(A) 91,000	(E) 13,000	1,038,000
Equipment (net)	420,000	210,000	(E) 6,000	(A) 12,000	624,000
Goodwill	–0–	–0–	(A) 80,000		80,000
Total assets	4,375,000	1,370,000			4,767,000
Liabilities	(1,050,000)	(460,000)	(P) 40,000		(1,470,000)
Common stock	(600,000)	(200,000)	(S) 200,000		(600,000)
Additional paid-in capital	(120,000)	(20,000)	(S) 20,000		(120,000)
Retained earnings, 12/31/20 (above)	(2,605,000)	(690,000)			(2,577,000)
Total liabilities and equities	(4,375,000)	(1,370,000)	1,321,000	1,321,000	(4,767,000)

Note: Parentheses indicate a credit balance.

\*Boxed items highlight differences with consolidation in Exhibit 3.7.

†See footnote 8.

Consolidation entries:

- (\*C) To convert parent's beginning retained earnings to full accrual basis.
- (S) Elimination of Sun's stockholders' equity January 1 balances and the book value portion of investment account.
- (A) Allocation of Sun's excess acquisition-date fair over book value, unamortized balance as of beginning of year.
- (I) Elimination of parent's equity in subsidiary earnings accrual.
- (D) Elimination of intra-entity dividends.
- (E) Recognition of current year excess fair-value amortization and depreciation expenses.
- (P) Elimination of intra-entity receivable/payable.

As indicated here and in Exhibit 3.11, Parrot has recognized the yearly equity income accrual but not amortization. When the parent employs the partial equity method, the parent's beginning Retained Earnings account must be adjusted to include this expense. Therefore, Entry \*C provides the three-year \$21,000 amortization total to simulate the equity method and, hence, consolidated totals.



## Discussion Question

**In consolidation worksheet entry \*C, we adjust the parent's beginning of the year retained earnings to a full accrual basis. Why don't we adjust to the parent's end of the year retained earnings balance on the consolidated worksheet?**

Clearly, in a consolidated balance sheet, we wish to report the parent's end-of-period consolidated retained earnings at its full accrual GAAP basis. To accomplish this goal, we utilize the following separate individual components of end-of-period retained earnings available on the worksheet.

Beginning of the year balance (after \*C adjustment if parent does not employ equity method)  
 + Net income (parent's share of consolidated net income adjusted to full accrual by combining revenues and expenses—including excess acquisition-date fair value amortizations)  
 – Dividends (parent's dividends)  
 = End of the year balance

The worksheet provides for the computation of current year full accrual consolidated net income via the income statement section. Dividends are already provided in the retained earnings section of the consolidated worksheet. The only component of the ending balance of retained earnings that requires a special adjustment (\*C) is the beginning balance.

How does the consolidation worksheet entry \*C differ when the parent uses the initial value method versus the partial equity method? Why is no \*C adjustment needed when consolidated statements are prepared for the first fiscal year-end after the business combination?

### Consolidation Entry \*C

Retained Earnings, 1/1/20 (Parrot Company).....	21,000	
Investment in Sun Company.....		21,000
To convert parent's beginning Retained Earnings from partial equity method to equity method by including excess amortizations.		

By recording Entry \*C on the worksheet, all of the subsidiary's operational results for the 2017–2019 period are included in the consolidation. As shown in Exhibit 3.13, the remainder of the worksheet entries follow the same basic pattern as that illustrated previously for the year of acquisition (Exhibit 3.10).

### Summary of Worksheet Procedures

Having three investment methods available to the parent means that three sets of entries must be understood to arrive at reported figures appropriate for a business combination. The process can initially seem to be a confusing overlap of procedures. However, at this point in the coverage, only three worksheet entries actually are affected by the choice of either the equity method, partial equity method, or initial value method: Entries \*C, I, and D. Furthermore, accountants should never get so involved with a worksheet and its entries that they lose sight of the balances that this process is designed to calculate. Exhibit 3.14 provides a summary of the final consolidated totals and how they are calculated. These figures are never affected by the parent's choice of an accounting method.

After the appropriate balance for each account is understood, worksheet entries assist the accountant in deriving these figures. To help clarify the consolidation process required under each of the three accounting methods, Exhibit 3.14 describes the purpose of each worksheet entry: first during the year of acquisition and second for any period following the year of acquisition.



## Discussion Question

### HOW DOES A COMPANY REALLY DECIDE WHICH INVESTMENT METHOD TO APPLY?

Pilgrim Products, Inc., buys a controlling interest in the common stock of Crestwood Corporation. Shortly after the acquisition, a meeting of Pilgrim's accounting department is convened to discuss the internal reporting procedures required by the ownership of this subsidiary. Each member of the staff has a definite opinion as to whether the equity method, initial value method, or partial equity method should be adopted. To resolve this issue, Pilgrim's chief financial officer outlines several of her concerns about the decision.

I already understand how each method works. I know the general advantages and disadvantages of all three. I realize, for example, that the equity method provides more detailed information whereas the initial value method is much easier to apply. What I need to know are the factors specific to our situation that should be considered in deciding which method to adopt. I must make a recommendation to the president on this matter, and he will want firm reasons for my favoring a particular approach. I don't want us to select a method and then find out in six months that the information is not adequate for our needs or that the cost of adapting our system to monitor Crestwood outweighs the benefits derived from the data.

What are the factors that Pilgrim's officials should evaluate when making this decision?

### EXHIBIT 3.14 Consolidated Totals Subsequent to Acquisition\*

Current revenues	Parent revenues are included. Subsidiary revenues are included but only for the period since the acquisition.
Current expenses	Parent expenses are included. Subsidiary expenses are included but only for the period since the acquisition. Amortization expenses of the excess fair-value allocations are included by recognition on the worksheet.
Investment (or dividend) income	Income recognized by parent is eliminated and effectively replaced by the subsidiary's revenues and expenses.
Retained earnings, beginning balance	Parent balance is included. The change in the subsidiary balance since acquisition is included either as a regular accrual by the parent or through a worksheet entry to increase parent balance. Past amortization expenses of the excess fair-value allocations are included either as a part of parent balance or through a worksheet entry.
Assets and liabilities	Parent balances are included. Subsidiary balances are included after adjusting for acquisition-date fair values less amortization to beginning of current period. Intra-entity receivable/payable balances are eliminated.
Goodwill Investment in subsidiary	Original fair-value allocation is included unless reduced by impairment. Asset account recorded by parent is eliminated on the worksheet so that the balance is not included in consolidated figures.
Capital stock and additional paid-in capital	Parent balances only are included although they will have been adjusted at acquisition date if stock was issued.

\*The next few chapters discuss the necessity of altering some of these balances for consolidation purposes. Thus, this table is not definitive but is included only to provide a basic overview of the consolidation process as it has been described to this point.

**EXHIBIT 3.15 Consolidation Worksheet Entries**

Equity Method Applied	Initial Value Method Applied	Partial Equity Method Applied
<b>Any Time during Year of Acquisition</b>		
Entry <b>S</b> Beginning stockholders' equity of subsidiary is eliminated against book value portion of investment account.	Same as equity method.	Same as equity method.
Entry <b>A</b> Excess fair value is allocated to assets and liabilities based on difference in book values and fair values; residual is assigned to goodwill.	Same as equity method.	Same as equity method.
Entry <b>I</b> Equity income accrual (including amortization expense) is eliminated.	Dividend income is eliminated.	Equity income accrual is eliminated.
Entry <b>D</b> Intra-entity dividends declared by subsidiary are eliminated.	No entry—intra-entity dividends are eliminated in Entry <b>I</b> .	Same as equity method.
Entry <b>E</b> Current year excess amortization expenses of fair-value allocations are recorded.	Same as equity method.	Same as equity method.
Entry <b>P</b> Intra-entity payable/receivable balances are offset.	Same as equity method.	Same as equity method.
<b>Any Time Following Year of Acquisition</b>		
Entry <b>*C</b> No entry—equity income for prior years has already been recognized along with amortization expenses.	Increase in subsidiary's book value during prior years and excess amortization expenses are recognized (conversion is made to equity method).	Excess amortization expenses for prior years are recognized (conversion is made to equity method).
Entry <b>S</b> Same as initial year.	Same as initial year.	Same as initial year.
Entry <b>A</b> Unamortized excess fair value at beginning of year is allocated to specific accounts and to goodwill.	Same as equity method.	Same as equity method.
Entry <b>I</b> Same as initial year.	Same as initial year.	Same as initial year.
Entry <b>D</b> Same as initial year.	Same as initial year.	Same as initial year.
Entry <b>E</b> Same as initial year.	Same as initial year.	Same as initial year.
Entry <b>P</b> Same as initial year.	Same as initial year.	Same as initial year.

## Excess Fair Value Attributable to Subsidiary Long-Term Debt: Post-Acquisition Procedures

In the previous consolidation examples for Parrot and Sun Company, the acquisition-date excess fair values were attributed solely to long-term assets. Similarly, however, the acquisition-date fair value of subsidiary long-term debt may also differ from its carrying amount. Although the long-term debt adjustment to fair value is relatively straightforward, the adjustments to interest expense in periods subsequent to acquisition require additional analysis.

In subsequent periods, the acquisition-date fair value adjustment to long-term debt is amortized to interest expense over the remaining life of the debt. When the acquisition-date fair value of subsidiary long-term debt exceeds its carrying amount on the subsidiary's books, the parent increases the value of the debt reported on its consolidated balance sheet (and vice-versa). Consequently, when the parent reflects the increased value of the subsidiary's long-term debt valuation, it must reduce interest expense recognized on the consolidated income statement over the debt's remaining life. When the long-term debt valuation is decreased, interest expense increases.

Exhibit 3.16 summarizes the worksheet effects when acquisition-date long-term debt's carrying amount differs from its fair value.



**EXHIBIT 3.16 Long-Term Debt: Consolidation Worksheet Adjustments**

Long-Term Debt Valuation at Acquisition Date	Worksheet Adjustment to Long-Term Debt	Worksheet Adjustment to Interest Expense
Fair value > Carrying amount	Increase long-term debt to adjust to fair value (less previous periods interest amortization)	Debit Long-Term Debt and credit Interest Expense
Fair value < Carrying amount	Decrease long-term debt to adjust to fair value (less previous periods interest amortization)	Debit Interest Expense and credit Long-Term Debt

At first glance, it may seem counterintuitive that when long-term debt is *increased*, interest expense is *decreased*. Certainly for plant assets like equipment, when we increase their carrying amounts to acquisition-date fair values on the worksheet, we increase the related depreciation expense. Why do we seem to do the opposite for long-term liabilities?

The answer can be seen in the fact that even though the acquisition-date value of the subsidiary's long-term debt exceeds its carrying amount, the acquisition does not affect the subsidiary's contractual obligation for repaying the debt. The ultimate amount of debt to be repaid at maturity remains the same. For example, assume Pax Company acquires Sax Company on January 1, 2017. Exhibit 3.17 provides information about Sax Company's long-term debt:

**EXHIBIT 3.17 Acquisition-Date Long-Term Debt Valuation**

	Long-Term Debt January 1, 2017	Long-Term Debt Maturity Value January 1, 2022
Fair value	\$105,000	\$100,000
Carrying amount	100,000	100,000

By acquiring Sax, Pax has taken on \$105,000 of fair value debt, but will only have to pay back \$100,000 at the debt's maturity date. As shown in Exhibit 3.18, the additional \$5,000 excess fair over book value (that will not be repaid) is recognized as a reduction in overall interest expense, similar to amortizing a bond premium. Therefore, when consolidated statements are prepared, interest expense is reduced over the life of the long-term debt.

**EXHIBIT 3.18 Worksheet Adjustments for Excess Acquisition-Date Fair Value Attributable to Subsidiary Long-Term Debt**

December 31, 2017, Consolidation Worksheet		
<b>Consolidation Entry A</b>		
Investment in Sax Company	5,000	
Long-term debt		5,000
To adjust the subsidiary's long-term debt to acquisition-date fair value.		
<b>Consolidation Entry E</b>		
Long-term debt	1,000	
Interest expense		1,000
To recognize the reduction in current year interest expense		
<b>December 31, 2018, Consolidation Worksheet</b>		
<b>Consolidation Entry A</b>		
Investment in Sax Company	4,000	
Long-term debt		4,000
To adjust the subsidiary's long-term debt to unamortized balance as of the beginning of the year (\$5,000 – \$1,000 from year 2017).		
<b>Consolidation Entry E</b>		
Long-term debt	1,000	
Interest expense		1,000
To recognize the reduction in current year interest expense		

To complete this example, we assume the sole acquisition-date excess fair value adjustment made by Pax Company is to long-term debt, and straight-line amortization is used for the interest adjustments.

Finally, the carrying amount of a subsidiary's long-term debt may exceed its fair value. In that case, a consolidation entry is required to decrease the long-term debt reported in the consolidated balance sheet. Then, in periods subsequent to acquisition, worksheet entries are also needed to increase the amount of interest expense to be recognized in the consolidated income statement.

**LO 3-5**

Discuss the rationale for the goodwill impairment testing approach.

## Goodwill Impairment

FASB ASC Topic 350, “Intangibles—Goodwill and Other,” provides accounting standards for determining, measuring, and reporting goodwill impairment losses. Because goodwill is considered to have an indefinite life, an impairment approach is used rather than amortization. The FASB reasoned that although goodwill can decrease over time, it does not do so in the “rational and systematic” manner that periodic amortization suggests. Only upon recognition of an impairment loss (or partial sale of a subsidiary) will goodwill decline from one period to the next. Goodwill impairment losses are reported as operating items in the consolidated income statement.

The notion of an indefinite life allows many firms to report the original amount of goodwill recognized in a business combination. However, goodwill can become impaired, requiring loss recognition and a reduction in the amount reported in the consolidated balance sheet. Evidence shows that goodwill impairment losses can be substantial. Exhibit 3.19 provides examples of some recent goodwill impairment losses. Unlike amortization, which periodically reduces asset values, impairment must first be revealed before a write-down is justified. Accounting standards therefore require periodic tests for goodwill impairment.

Goodwill impairment tests are performed at the reporting unit level within a combined entity. As discussed next, all assets acquired (including goodwill) and liabilities assumed in a business combination must be assigned to *reporting units* within a consolidated enterprise. The goodwill residing in each reporting unit is then separately subjected to periodic impairment reviews. Current financial reporting standards require, at a minimum, an annual assessment for potential goodwill impairment.

Because impairment testing procedures can be costly, the FASB provides firms the option to first conduct a *qualitative* analysis to assess whether further testing procedures are appropriate. If circumstances indicate a potential decline in the fair value of a reporting unit below its carrying amount, then further tests are required to see if goodwill is the source of the decline. Our coverage of goodwill impairment addresses the following:

- The assignment of acquired goodwill to reporting units.
- The option to conduct an annual qualitative test for potential goodwill impairment.
- Goodwill impairment testing procedures.
- A FASB proposal to simplify goodwill impairment testing.
- Comparison with international accounting standards.

### EXHIBIT 3.19 Recent Goodwill Impairments

Microsoft	\$5.1 billion
Yahoo!	4.5 billion
Devon Energy	1.9 billion
Rent-a-Center	1.2 billion
Time, Inc.	952 million
J. Crew	676 million
Staples	410 million
The Hershey Company	31 million
Pep Boys	23.9 million

## Assigning Goodwill to Reporting Units

Combined companies typically organize themselves into separate *units* along distinct operating lines. Each individual operating unit has responsibility for managing its assets and liabilities to earn profits for the combined entity. These operating units report information about their earnings activities to top management to support decision making. Such operating units are known as *reporting units*.

Following a business combination, the identifiable assets and liabilities acquired are assigned to the firm's reporting units based on where they will be employed. Any amount assigned to goodwill also is assigned to reporting units expected to benefit from the synergies of the combination. Thus, any individual reporting unit where goodwill resides is the appropriate level for goodwill impairment testing.

In practice, firms often assign goodwill to reporting units either at the level of a reporting segment—as described in ASC Topic 280, “Segment Reporting”—or at a lower level within a segment of a combined enterprise. Reporting units may thus include the following:

- A component of an operating segment at a level below that operating segment. Segment management should review and assess performance at this level. Also, the component should be a business in which discrete financial information is available and should differ economically from other components of the operating segment.
- The segments of an enterprise.
- The entire enterprise.

For example, Qorvo, Inc. is a wireless technology firm serving the mobile device, networks infrastructure, and defense and aerospace markets. In its recent annual report Qorvo identified its two business segments, MP and IDP (Mobile Products and Infrastructure and Defense Products), as its reporting units:

For fiscal 2015, we have determined that our reporting units are MP and IDP for purposes of allocating and testing goodwill. . . Goodwill is allocated to our reporting units based on the expected benefit from the synergies of the business combinations generating the underlying goodwill.

Thus, all goodwill impairment testing is performed at the reporting unit level, rather than collectively at the combined entity level. Separate testing of goodwill within individual reporting units also prevents the masking of goodwill impairment in one reporting unit with contemporaneous increases in the value of goodwill in other reporting units.

### LO 3-6

Describe the procedures for conducting a goodwill impairment test.

## Qualitative Assessment Option

Because goodwill impairment tests require firms to calculate fair values for their reporting units each year, such a comprehensive measurement exercise can be costly. To help reduce costs, FASB ASC Topic 305 allows an entity the option to first assess qualitative factors to determine whether more rigorous testing for goodwill impairment is needed. The qualitative approach assesses the *likelihood* that a reporting unit's fair value is less than its carrying amount. The more-likely-than-not threshold is defined as having a likelihood of more than 50 percent.

In assessing whether a reporting unit's fair value exceeds its carrying amount, a firm must examine all relevant facts and circumstances, including

- Macroeconomic conditions such as a deterioration in general economic conditions, limitations on accessing capital, fluctuations in foreign exchange rates, or other developments in equity and credit markets.
- Industry and market considerations such as a deterioration in the environment in which an entity operates, an increased competitive environment, a decline (both absolute and relative to its peers) in market-dependent multiples or metrics, a change in the market for an entity's products or services, or a regulatory or political development.
- Cost factors such as increases in raw materials, labor, or other costs that have a negative effect on earnings.
- Overall financial performance such as negative or declining cash flows or a decline in actual or planned revenue or earnings.

- Other relevant entity-specific events such as changes in management, key personnel, strategy, or customers; contemplation of bankruptcy; or litigation.
- Events affecting a reporting unit such as a change in the carrying amount of its net assets, a more-likely-than-not expectation of selling or disposing all, or a portion of, a reporting unit, the testing for recoverability of a significant asset group within a reporting unit, or recognition of a goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit.
- If applicable, a sustained decrease (both absolute and relative to its peers) in share price. (FASB ASC para. 350-20-35-3C)

The underlying rationale for comparing a reporting unit's fair value and carrying amount is as follows. If a reporting unit's fair value is deemed greater than its carrying amount, then its collective net assets are maintaining their value. It then can be argued that a decline in any particular asset (i.e., goodwill) within the reporting unit is also unlikely and no further impairment tests are necessary. On the other hand, if the relevant facts and circumstances listed above suggest that a reporting unit's fair value is likely less than its carrying amount, then more rigorous testing for goodwill impairment is appropriate. Nonetheless, a qualitative assessment of a sufficient fair value for a reporting unit circumvents further goodwill impairment testing.

The FASB ASC (paragraph 350-20-35-28) requires an entity to assess its goodwill for impairment annually for each of its reporting units where goodwill resides. Moreover, more frequent impairment assessment is required if events or circumstances change that make it more likely than not that a reporting unit's fair value has fallen below its carrying amount.

## Testing Goodwill for Impairment

Goodwill impairment testing and measurement involves a two-step process.<sup>9</sup> In contrast to the qualitative assessment, Steps 1 and 2 rely on quantitative fair-value measures for reporting units as a whole and for their underlying individual assets and liabilities. If, after performing the qualitative assessment described above, an entity concludes that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, then the entity is required to proceed to the first step of the two-step impairment test.<sup>10</sup>

### ***Step 1: Is the Carrying Amount of a Reporting Unit More Than Its Fair Value?***

In the first step of impairment testing, the consolidated entity calculates fair values for each of its reporting units with allocated goodwill. Each reporting unit's fair value is then compared with its carrying amount (*including goodwill*). If an individual reporting unit's fair value exceeds its carrying amount, its goodwill is not considered impaired, and the second step in testing is not performed—goodwill remains at its current carrying amount. However, if the fair value of a reporting unit has fallen below its carrying amount, a potential for goodwill impairment exists. In this case, a second step must be performed to determine whether goodwill has been impaired and to measure the amount of impairment.

### ***Step 2: Is Goodwill's Implied Value Less Than Its Carrying Amount?***

If Step 1 indicates potential goodwill impairment, Step 2 then compares the fair value of goodwill to its carrying amount. Because, by definition, goodwill is not separable from other assets, it is not possible to directly observe its fair value. Therefore, an *implied fair value* for goodwill is calculated in a similar manner to the determination of goodwill in a business combination. As stated in the FASB ASC (para. 350-20-35-14):

The implied fair value of goodwill shall be determined in the same manner as the amount of goodwill recognized in a business combination . . . That is, an entity shall assign the fair value of a reporting unit to all of the assets and liabilities of that unit (including any unrecognized intangible assets) as if the reporting unit had been acquired in a business combination . . .

<sup>9</sup> As discussed later in this chapter, FASB has proposed the elimination of step 2 of the goodwill impairment measurement procedure.

<sup>10</sup> An entity, on the basis of its discretion, may bypass the qualitative assessment for any reporting unit in any period and proceed directly to performing the first step of the impairment test. An entity may resume performing the qualitative assessment in any subsequent period (FASB ASC para. 350-20-35-3B).

The current fair value of the reporting unit is allocated across that unit's identifiable assets and liabilities with any remaining excess considered as the implied value of goodwill.<sup>11</sup> If the implied value of goodwill is less than its carrying amount, impairment has occurred and a loss is recognized. The loss equals the excess of the carrying amount of the reporting unit's goodwill over its implied fair value.<sup>12</sup>

### Illustration—Accounting and Reporting for a Goodwill Impairment Loss

To illustrate the testing procedures for goodwill impairment, assume that on January 1, 2017, investors form Newcall Corporation to consolidate the telecommunications operations of DSM, Inc., and VisionTalk Company in a deal valued at \$2.2 billion. Newcall organizes each former firm as an operating segment. Additionally, DSM comprises two divisions—DSM Wired and DSM Wireless—that along with VisionTalk are treated as independent reporting units for internal performance evaluation and management reviews. Newcall recognizes \$215 million as goodwill at the merger date and allocates this entire amount to its reporting units. That information and each reporting unit's acquisition-date fair values are as follows:

Newcall's Reporting Units	Goodwill	Acquisition-Date Fair Values January 1, 2017
DSM Wired	\$22,000,000	\$950,000,000
DSM Wireless	155,000,000	748,000,000
VisionTalk	38,000,000	502,000,000

In December 2017, Newcall performs a qualitative analysis for each of its three reporting units to assess potential goodwill impairment. Accordingly, Newcall examines the relevant events and circumstances that may affect the fair values of its reporting units. The analysis reveals that the fair value of each reporting unit likely exceeds its carrying amount except for DSM Wireless. Step 1 of the goodwill impairment test then reveals that DSM Wireless's fair value has fallen to \$600 million, well below its current carrying amount. Newcall attributes the decline in value to a failure to realize expected cost-saving synergies with VisionTalk. Then, in Step 2, Newcall compares the implied fair value of the DSM Wireless goodwill to its carrying amount. Newcall derived the implied fair value of goodwill through the following allocation of the December 31, 2017, fair value of DSM Wireless:

DSM Wireless December 31, 2017, fair value	\$600,000,000
Fair values of DSM Wireless net assets at December 31, 2017:	
Current assets	\$ 50,000,000
Property	125,000,000
Equipment	265,000,000
Subscriber list	140,000,000
Patented technology	185,000,000
Current liabilities	(44,000,000)
Long-term debt	<u>(125,000,000)</u>
Value assigned to identifiable net assets	<u>\$596,000,000</u>
Implied fair value of goodwill	\$ 4,000,000
Goodwill carrying amount before impairment	<u>155,000,000</u>
Impairment loss	<u><u>\$151,000,000</u></u>

Thus, Newcall reports a \$151,000,000 goodwill impairment loss as a separate line item in the operating section of its consolidated income statement. Additional disclosures are required describing (1) the facts and circumstances leading to the impairment and (2) the method of determining the fair value of the associated reporting unit (e.g., market prices, comparable business, present value technique, etc.). The reported amounts for the other

<sup>11</sup> This procedure serves only to measure an implied fair value for goodwill. None of the other values allocated to assets and liabilities in the testing comparison are used to adjust their reported amounts.

<sup>12</sup> The loss cannot exceed the carrying amount of goodwill.

assets and liabilities of DSM Wireless remain the same and are not changed based on the goodwill testing procedure.

## Reporting Units with Zero or Negative Carrying Amounts

One final issue regarding goodwill impairment testing deserves mentioning. When a reporting unit has a zero or negative carrying amount, the ASC requires a special application of the testing procedure. An exception is needed because a zero or negative carrying amount for a reporting unit accompanied by a positive fair value would always permit an entity to forgo Step 2 of the impairment test even though its underlying goodwill might be impaired. Therefore, in such circumstances, the ASC requires an entity to perform Step 2 of the impairment test when it is more likely than not that a goodwill impairment exists. In judging the likelihood of goodwill impairment, an entity must consider the same factors as in the qualitative assessment for individual reporting units.

## Goodwill Impairment Simplified—Proposed Accounting Standards Update (ASU)

In May, 2016, the FASB issued a proposed ASU entitled, “Simplifying the Accounting for Goodwill Impairment.”<sup>13</sup> The stated objective of the proposed ASU was “to remove Step 2 from the goodwill impairment test, which includes determining the implied fair value of goodwill and comparing it with the carrying amount of that goodwill.” The proposed changes would greatly simplify the accounting procedures previously described. The changes would also save companies the cost involved in determining fair values for each of the assets and liabilities residing in their reporting units. However, the FASB would continue to require a determination of the fair value of its reporting units, should any fail (or elect to forego) the qualitative goodwill impairment assessment.

The FASB’s recommendation partially stems from a post-implementation review of accounting for business combinations. That review concluded that current goodwill accounting produces more complexity and costs than the FASB anticipated. Further, the board concluded that eliminating Step 2 would not significantly reduce the usefulness of the goodwill impairment information provided to users of financial statements.

The proposed ASU changes accounting for goodwill impairment as follows:

... an entity would perform its annual, or any interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An entity generally would recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit’s fair value. However, that amount should not exceed the carrying amount of goodwill allocated to that reporting unit. An entity would still have the option to perform the qualitative assessment for a reporting unit to determine if the quantitative impairment test is necessary.<sup>14</sup>

Thus, assuming a reporting unit failed (or elected to forego) the qualitative assessment (a likelihood of more than 50 percent that a reporting unit’s fair value is less than its carrying amount), a quantitative comparison would be employed to measure the amount of goodwill impairment. For example, assume the following December 31, 2018 values for Quality Road Company’s RNT reporting unit:

<b>December 31, 2018</b>	<b>Fair Value</b>	<b>Carrying Amount</b>
RNT reporting unit as a whole	\$1,500,000	\$1,625,000*
Goodwill	?	148,000

\* Reporting unit’s assets (including goodwill) – liabilities.

The December 31, 2018 goodwill impairment loss would be measured simply as follows:

RNT reporting unit fair value	\$1,500,000
–RNT reporting unit carrying amount	<u>1,625,000</u>
Goodwill impairment loss	<u>\$ 125,000</u>

<sup>13</sup> Financial Accounting Standards Board, Exposure Draft: Proposed Accounting Standards Update, Intangibles—Goodwill and Other (Topic 350), “Simplifying the Accounting for Goodwill Impairment,” May 12, 2016.

<sup>14</sup> *Ibid.*

By eliminating Step 2 of the impairment test, Quality Road Company would benefit by avoiding costs of determining fair values for the RNT reporting unit's identifiable assets and liabilities. Moreover, no fair values would need to be determined for any unrecorded intangibles of the reporting unit.

The only exception to the previously mentioned impairment measurement occurs when the initially computed goodwill impairment loss exceeds the carrying amount of goodwill. In the earlier example, the RNT reporting unit's goodwill carrying amount is \$148,000, sufficient to absorb the \$125,000 impairment. However, if the reporting unit's goodwill carrying amount was less than \$125,000, the goodwill impairment loss would be limited to the lower carrying amount. Thus, the impairment loss cannot exceed the carrying amount of any particular reporting unit's goodwill.

Another change to goodwill accounting would be the elimination of the differential impairment analysis required for reporting units with zero or negative carrying amounts. According to the proposed ASU, "the same impairment assessment would apply to all reporting units. An entity would be required to disclose the existence of any reporting units with zero or negative carrying amounts and the amount of goodwill allocated to those reporting units."<sup>15</sup> Therefore, if the proposed ASU is ultimately approved, all reporting units would follow an identical model for assessing goodwill impairment.

### Comparisons with International Accounting Standards

International Financial Reporting Standards (IFRS) and U.S. GAAP both require goodwill recognition in a business combination when the fair value of the consideration transferred exceeds the net fair values of the assets acquired and liabilities assumed. Subsequent to acquisition, both IFRS and U.S. GAAP require an assessment for goodwill impairment at least annually and more frequently in the presence of indicators of possible impairment. Also for both sets of standards, goodwill impairments, once recognized, are not recoverable. However, differences exist across the two sets of standards in the way goodwill impairment is tested for and recognized. In particular, goodwill allocation, impairment testing, and determination of the impairment loss differ across the two reporting regimes and are discussed below.

#### *Goodwill Allocation*

- *U.S. GAAP.* Goodwill acquired in a business combination is allocated to reporting units expected to benefit from the goodwill. Reporting units are operating segments or a business component one level below an operating segment.
- *IFRS.* International Accounting Standard (*IAS*) 36 requires goodwill acquired in a business combination to be allocated to cash-generating units or groups of cash-generating units that are expected to benefit from the synergies of the business combination. Cash-generating groups represent the lowest level within the entity at which the goodwill is monitored for internal management purposes and are not to be larger than an operating segment or determined in accordance with *IFRS* 8, "Operating Segments."

#### *Impairment Testing*

- *U.S. GAAP.* Firms have the option to perform a qualitative assessment to evaluate possible goodwill impairment based on a greater than 50 percent likelihood that a reporting unit's fair value is less than its carrying amount. If such a likelihood exists, then a two-step testing procedure is performed. In step one, a reporting unit's total fair value is compared to its carrying amount. If the carrying amount exceeds fair value, then a second step comparing goodwill's implied fair value to its carrying amount is performed.
- *IFRS.* A one-step approach compares the fair and carrying amounts of each cash-generating unit with goodwill. If the carrying amount exceeds the fair value of the cash-generating unit, then goodwill (and possibly other assets of the cash-generating unit) is considered impaired.

#### *Determination of the Impairment Loss*

- *U.S. GAAP.* In step two, a reporting unit's implied fair value for goodwill is computed as the excess of the reporting unit's fair value over the fair value of its identifiable net assets.

<sup>15</sup> *Ibid.*

If the carrying amount of goodwill is greater than its implied fair value, an impairment loss is recognized for the difference.

- *IFRS*. Any excess carrying amount over fair value for a cash-generating unit is first assigned to reduce goodwill. If goodwill is reduced to zero, then the other assets of the cash-generating unit are reduced pro-rata based on the carrying amounts of the assets.

Finally, the FASB and IASB have agreed to include impairment recognition and reporting as one of their future convergence projects.

### LO 3-7

Describe the rationale and procedures for impairment testing for intangible assets other than goodwill.

## Amortization and Impairment of Other Intangibles

As discussed in Chapter 2, the acquisition method governs how we initially consolidate the assets acquired and liabilities assumed in a business combination. Subsequent to acquisition, income determination becomes a regular part of the consolidation process. The fair-value bases (established at the acquisition date) for definite-lived subsidiary assets acquired and liabilities assumed will be amortized over their remaining lives for income recognition. For indefinite-lived assets (e.g., goodwill, certain other intangibles), an impairment model is used to assess whether asset write-downs are appropriate.

Current accounting standards suggest categories of intangible assets for possible recognition when one business acquires another. Examples include noncompetition agreements, customer lists, patents, subscriber lists, databases, trademarks, lease agreements, licenses, and many others. All identified intangible assets should be amortized over their economic useful life unless such life is considered *indefinite*. The term *indefinite life* is defined as a life that extends beyond the foreseeable future. A recognized intangible asset with an indefinite life should not be amortized unless and until its life is determined to be finite. Importantly, *indefinite* does not mean “infinite.” Also, the useful life of an intangible asset should not be considered indefinite because a precise finite life is not known.

For intangible assets with finite lives, the amortization method should reflect the pattern of decline in the economic usefulness of the asset. If no such pattern is apparent, the straight-line method of amortization should be used. The amount to be amortized should be the value assigned to the intangible asset less any residual value. In most cases, the residual value is presumed to be zero. However, that presumption can be overcome if the acquiring enterprise has a commitment from a third party to purchase the intangible at the end of its useful life or an observable market exists for the intangible asset.

The length of the amortization period for identifiable intangibles (i.e., those not included in goodwill) depends primarily on the assumed economic life of the asset. Factors that should be considered in determining the useful life of an intangible asset include

- Legal, regulatory, or contractual provisions.
- The effects of obsolescence, demand, competition, industry stability, rate of technological change, and expected changes in distribution channels.
- The enterprise’s expected use of the intangible asset.
- The level of maintenance expenditure required to obtain the asset’s expected future benefits.

Any recognized intangible assets considered to possess indefinite lives are not amortized but instead are assessed for impairment on an annual basis.<sup>16</sup> Similar to goodwill impairment assessment, an entity has the option to first perform qualitative assessments for its indefinite-lived intangibles to see if further quantitative tests are necessary. According to the FASB ASC (350-30-65-3), if an entity elects to perform a qualitative assessment, it examines events and circumstances to determine whether it is more likely than not (that is, a likelihood of more than 50 percent) that an indefinite-lived intangible asset is impaired. Qualitative factors include costs of using the intangible, legal and regulatory factors, industry and market considerations, and other. If the qualitative assessment indicates impairment is unlikely, no additional tests are needed.

<sup>16</sup> An entity has an unconditional option to bypass the qualitative assessment for any indefinite-lived intangible asset in any period and proceed directly to performing the quantitative impairment test.



If the qualitative assessment indicates that impairment is likely, the entity then must perform a quantitative test to determine if a loss has occurred. To test an indefinite-lived intangible asset for impairment, its carrying amount is compared to its fair value. If the fair value is less than the carrying amount, then the intangible asset is considered impaired and an impairment loss is recognized. The asset's carrying amount is reduced accordingly for the excess of its carrying amount over its fair value.

### LO 3-8

Understand the accounting and reporting for contingent consideration subsequent to a business acquisition.

## Contingent Consideration

Contingency agreements frequently accompany business combinations. In many cases, the target firm asks for consideration based on projections of its future performance. The acquiring firm, however, may not share the projections and, thus, may be unwilling to pay now for uncertain future performance. To close the deal, agreements for the acquirer's future payments to the former owners of the target are common. Alternatively, when the acquirer's stock comprises the consideration transferred, the sellers of the target firm may request a guaranteed minimum market value of the stock for a period of time to ensure a fair price.

### Accounting for Contingent Consideration in Business Combinations

As an illustration, assume that Skeptical, Inc., acquires 100 percent of the voting stock of Rosy Pictures Company on January 1, 2017, for the following consideration:

- \$550,000 market value of 10,000 shares of its \$5-par common stock.
- A contingent payment of \$80,000 cash if Rosy Pictures generates cash flows from operations of \$20,000 or more in 2017.
- A payment of sufficient shares of Skeptical common stock to ensure a total value of \$550,000 if the price per share is less than \$55 on January 1, 2018.

Under the acquisition method, each of the three elements of consideration represents a portion of the negotiated fair value of Rosy Pictures and therefore must be included in the recorded value entered on Skeptical's accounting records. For the cash contingency, Skeptical estimates that there is a 30 percent chance that the \$80,000 payment will be required. For the stock contingency, Skeptical estimates that there is a 20 percent probability that the 10,000 shares issued will have a market value of \$540,000 on January 1, 2018, and an 80 percent probability that the market value of the 10,000 shares will exceed \$550,000. Skeptical uses an interest rate of 4 percent to incorporate the time value of money.

To determine the fair values of the contingent consideration, Skeptical computes the present value of the expected payments as follows:

- *Cash contingency* =  $\$80,000 \times 30\% \times [1/(1 + .04)] = \$23,077$
- *Stock contingency* =  $\$10,000 \times 20\% \times [1/(1 + .04)] = \$1,923$

Skeptical then records in its accounting records the acquisition of Rosy Pictures as follows:

Investment in Rosy Pictures .....	575,000	
Common Stock (\$5 par) .....		50,000
Additional Paid-in Capital .....		500,000
Contingent Performance Obligation .....		23,077
Additional Paid-in Capital—Contingent Equity Outstanding .....		1,923
To record acquisition of Rosy Pictures at fair value of consideration transferred including performance and stock contingencies.		

Skeptical will report the contingent cash payment under its liabilities and the contingent stock payment as a component of stockholders' equity. In periods subsequent to acquisition, obligations for contingent consideration that meet the definition of a liability will continue to be measured at fair value with adjustments recognized in income. Those obligations classified as equity are not subsequently remeasured at fair value, consistent with other equity issues (e.g., common stock).

To continue the preceding example, assume that in 2017 Rosy Pictures exceeds the cash flow from operations threshold of \$20,000, thus requiring an additional payment of \$80,000. Also, Skeptical's stock price had fallen to \$54.45 at January 1, 2018. Because the acquisition

agreement called for a \$550,000 total value at January 1, 2018, Skeptical must issue an additional 101 shares (\$5,500 shortfall/\$54.45 per share) to the former owners of Rosy Pictures.

Contingent Performance Obligation .....	23,077	
Loss from Revaluation of Contingent Performance Obligation .....	56,923	
Cash .....		80,000
To record contingent cash payment required by original Rosy Pictures acquisition agreement.		
Additional Paid-in Capital—Contingent Equity Outstanding .....	1,923	
Common Stock .....		505
Additional Paid-in Capital .....		1,418
To record contingent stock issue required by original Rosy Pictures acquisition agreement.		

The loss from revaluation of the contingent performance obligation is reported in Skeptical's consolidated income statement as a component of ordinary income. Regarding the additional required stock issue, note that Skeptical's total paid-in capital remains unchanged from the total \$551,923 recorded at the acquisition date.

## Summary

1. The procedures used to consolidate financial information generated by the separate companies in a business combination are affected by both the passage of time and the method applied by the parent in accounting for the subsidiary. Thus, no single consolidation process that is applicable to all business combinations can be described.
2. The parent might elect to utilize the equity method to account for a subsidiary. As discussed in Chapter 1, the parent accrues income when earned by the subsidiary. The parent records dividend declarations by the subsidiary as reductions in the investment account. The effects of excess fair-value amortizations or any intra-entity transactions also are reflected within the parent's financial records. The equity method provides the parent with accurate information concerning the subsidiary's impact on consolidated totals; however, it is usually somewhat complicated to apply.
3. The initial value method and the partial equity method are two alternatives to the equity method. The initial value method recognizes only the subsidiary's dividends as income while the asset balance remains at the acquisition-date fair value. This approach is simple and typically reflects cash flows between the two companies. Under the partial equity method, the parent accrues the subsidiary's income as earned but does not record adjustments that might be required by excess fair-value amortizations or intra-entity transfers. The partial equity method is easier to apply than the equity method, and, in many cases, the parent's income is a reasonable approximation of the consolidated total.
4. For a consolidation in any subsequent period, all reciprocal balances must be eliminated. Thus, the subsidiary's equity accounts, the parent's investment balance, intra-entity income, dividends, and liabilities are removed. In addition, the remaining unamortized portions of the fair-value allocations are recognized along with excess amortization expenses for the period. If the equity method has not been applied, the parent's beginning Retained Earnings account also must be adjusted for any previous income or excess amortizations that have not yet been recorded.
5. For each subsidiary acquisition, the parent must assign the acquired assets and liabilities (including goodwill) to individual reporting units of the combined entity. The reporting units should be at operating segment level or lower and serve as the basis for future assessments of fair value. Any value assigned to goodwill is not amortized but instead is tested annually for impairment. Firms have the option to perform a qualitative assessment to evaluate whether a reporting unit's fair value more likely than not exceeds its carrying amount. If the assessment shows excess fair value over carrying amount for the reporting unit, a firm can forgo further testing. Otherwise, a two-step test is performed. First, if the fair value of any reporting unit below its carrying amount, then the implied value of the associated goodwill is recomputed. Second, the recomputed implied value of goodwill is compared to its carrying amount. An impairment loss must then be recognized if the carrying amount of goodwill exceeds its implied value.<sup>17</sup>
6. Subsequent to a business combination, any newly recognized subsidiary identifiable intangible assets (i.e., other than goodwill) considered to possess indefinite lives are not amortized but instead are assessed for impairment on an annual basis. Similar to goodwill impairment assessment, an

<sup>17</sup> A proposed FASB Accounting Standards Update would eliminate the second step of the impairment test. Goodwill would simply be the excess of a reporting unit's carrying amount over its fair value (loss not to exceed goodwill's carrying amount).

entity has the option to first perform qualitative assessments for its indefinite-lived intangibles to see if further quantitative tests are necessary. For intangible assets with finite lives, amortization expense is recognized over the intangible asset's useful life. The amortization method should reflect the pattern of decline in the economic usefulness of the asset. If no such pattern is apparent, the straight-line method of amortization should be used.

7. The acquisition-date fair value assigned to a subsidiary can be based, at least in part, on the fair value of any contingent consideration. For contingent obligations that meet the definition of a liability, the obligation is adjusted for changes in fair value over time with corresponding recognition of gains or losses from the revaluation. For contingent obligations classified as equity, no remeasurement to fair value takes place. In either case the initial value recognized in the combination does not change regardless of whether the contingency is eventually paid or not.

## Comprehensive Illustration

### Problem

(Estimated Time: 40 to 65 Minutes) On January 1, 2016, Top Company acquired all of Bottom Company's outstanding common stock for \$842,000 in cash. As of that date, one of Bottom's buildings with a 12-year remaining life was undervalued on its financial records by \$72,000. Equipment with a 10-year remaining life was undervalued, but only by \$10,000. The book values of all of Bottom's other assets and liabilities were equal to their fair values at that time except for an unrecorded licensing agreement with an assessed value of \$40,000 and a 20-year remaining useful life. Bottom's book value at the acquisition date was \$720,000.

During 2016, Bottom reported net income of \$100,000 and declared \$30,000 in dividends. Earnings were \$120,000 in 2017 with \$20,000 in dividends distributed by the subsidiary. As of December 31, 2018, the companies reported the following selected balances, which include all revenues and expenses for the year:

	Top Company December 31, 2018		Bottom Company December 31, 2018	
	Debit	Credit	Debit	Credit
Buildings . . . . .	\$1,540,000		\$460,000	
Cash and receivables . . .	50,000		90,000	
Common stock . . . . .		\$ 900,000		\$400,000
Dividends declared . . . . .	70,000		10,000	
Equipment . . . . .	280,000		200,000	
Cost of goods sold . . . . .	500,000		120,000	
Depreciation expense . . .	100,000		60,000	
Inventory . . . . .	280,000		260,000	
Land . . . . .	330,000		250,000	
Liabilities . . . . .		480,000		260,000
Retained earnings, 1/1/18		1,360,000		490,000
Revenues . . . . .		900,000		300,000

### Required

- If Top applies the equity method, what is its investment account balance as of December 31, 2018?
- If Top applies the initial value method, what is its investment account balance as of December 31, 2018?
- Regardless of the accounting method in use by Top, what are the consolidated totals as of December 31, 2018, for each of the following accounts?

Buildings	Revenues
Equipment	Net Income
Land	Investment in Bottom
Depreciation Expense	Dividends Declared
Amortization Expense	Cost of Goods Sold

- Prepare the worksheet entries required on December 31, 2018, to consolidate the financial records of these two companies. Assume that Top applied the equity method to its investment account.
- How would the worksheet entries in requirement (d) be altered if Top has used the initial value method?

## Solution

- a. To determine the investment balances under the equity method, four items must be determined: the initial value assigned, the income accrual, dividends and amortization of excess acquisition-date fair value over book value. Although the first three are indicated in the problem, amortizations must be calculated separately.

An allocation of Bottom's acquisition-date fair values as well as the related amortization expense follows.

Fair value of consideration transferred by Top Company . . .	\$ 842,000
Book value of Bottom Company, 1/1/16 . . . . .	(720,000)
Excess fair value over book value . . . . .	<u>\$ 122,000</u>

Adjustments to specific accounts based on fair values:

		<b>Remaining Life (years)</b>	<b>Annual Amortization</b>
Buildings . . . . .	\$ 72,000	12	\$6,000
Equipment . . . . .	10,000	10	1,000
Licensing agreement . . . . .	<u>40,000</u>	20	<u>2,000</u>
Totals . . . . .	<u>\$122,000</u>		<u>\$9,000</u>

Thus, if Top adopts the equity method to account for this subsidiary, the Investment in Bottom account shows a December 31, 2018, balance of \$1,095,000, computed as follows:

Initial value (fair value of consideration transferred by Top) . . . . .	\$ 842,000
Bottom Company's 2016–2017 increase in book value (income less dividends) . . . . .	170,000
Excess amortizations for 2016–2017 (\$9,000 per year for two years) . . . . .	(18,000)
Current year recognition (2018):	
Equity income accrual (Bottom's revenues less its expenses) . . .	\$120,000
Excess amortization expenses . . . . .	(9,000)
Dividends from Bottom . . . . .	<u>(10,000)</u>
Investment in Bottom Company, 12/31/18 . . . . .	<u>\$1,095,000</u>

The \$120,000 income accrual and the \$9,000 excess amortization expenses indicate that an Equity in Subsidiary Earnings balance of \$111,000 appears in Top's income statement for the current period.

- b. If Top Company applies the initial value method, the Investment in Bottom Company account permanently retains its original \$842,000 balance, and the parent recognizes only the intra-entity dividend of \$10,000 as income in 2018.
- c.
- The consolidated Buildings account as of December 31, 2018, has a balance of \$2,054,000. Although the two book value figures total only \$2 million, a \$72,000 allocation was made to this account based on fair value at the date of acquisition. Because this amount is being depreciated at the rate of \$6,000 per year, the original allocation will have been reduced by \$18,000 by the end of 2018, leaving only a \$54,000 increase.
  - On December 31, 2018, the consolidated Equipment account amounts to \$487,000. The book values found in the financial records of Top and Bottom provide a total of \$480,000. Once again, the allocation (\$10,000) established by the acquisition-date fair value must be included in the consolidated balance after being adjusted for three years of depreciation (\$1,000 × 3 years, or \$3,000).
  - Land has a consolidated total of \$580,000. Because the book value and fair value of Bottom's land were in agreement at the date of acquisition, no additional allocation was made to this account. Thus, the book values are simply added together to derive a consolidated figure.
  - *Cost of goods sold* = \$620,000. The cost of goods sold of the parent and subsidiary are added together.
  - *Depreciation expense* = \$167,000. The depreciation expenses of the parent and subsidiary are added together along with the \$6,000 additional building depreciation and the \$1,000 additional equipment depreciation as presented in the fair-value allocation schedule.

- *Amortization expense* = \$2,000. An additional expense of \$2,000 is recognized from the amortization of the licensing agreement acquired in the business combination.
- The Revenues account appears as \$1.2 million in the consolidated income statement. None of the worksheet entries in this example affects the individual balances of either company. Consolidation results merely from the addition of the two book values.
- Net income for this business combination is \$411,000: consolidated expenses of \$789,000 subtracted from revenues of \$1.2 million.
- The parent's Investment in Bottom account is removed entirely on the worksheet so that no balance is reported. For consolidation purposes, this account is always eliminated so that the individual assets and liabilities of the subsidiary can be included.
- Dividends declared for the consolidated entity should be reported as \$70,000, the amount Top distributed. Because Bottom's dividends are entirely intra-entity, they are deleted in arriving at consolidated figures.

d. Consolidation Entries Assuming Equity Method Used by Parent

**Entry S**

Common Stock (Bottom Company) . . . . .	400,000	
Retained Earnings, 1/1/18. . . . .		
(Bottom Company) . . . . .	490,000	
Investment in Bottom Company. . . . .		890,000
Elimination of subsidiary's beginning stockholders' equity accounts against book value portion of investment account.		

**Entry A**

Buildings . . . . .	60,000	
Equipment . . . . .	8,000	
Licensing Agreement. . . . .	36,000	
Investment in Bottom Company. . . . .		104,000
To recognize fair-value allocations to the subsidiary's assets in excess of book value. Balances represent original allocations less two years of amortization for the 2016–2017 period.		

**Entry I**

Equity in Subsidiary Earnings . . . . .	111,000	
Investment in Bottom Company. . . . .		111,000
To eliminate parent's equity income accrual, balance is computed in requirement (a).		

**Entry D**

Investment in Bottom . . . . .	10,000	
Dividends Declared . . . . .		10,000
To eliminate intra-entity dividends from the subsidiary to the parent (and recorded as a reduction in the investment account because the equity method is in use).		

**Entry E**

Depreciation Expense . . . . .	7,000	
Amortization Expense . . . . .	2,000	
Equipment . . . . .		1,000
Buildings. . . . .		6,000
Licensing Agreement. . . . .		2,000
To recognize excess fair-value depreciation and amortization for 2018.		

e. If Top utilizes the initial value method rather than the equity method, three changes are required in the development of consolidation entries:

- (1) An Entry \*C is required to update the parent's beginning Retained Earnings account as if the equity method had been applied. Both an income accrual as well as excess amortizations for the prior two years must be recognized because these balances were not recorded by the parent.

**Entry \*C**

Investment in Bottom Company . . . . .	152,000	
Retained Earnings, 1/1/18 (Top Company) . . . . .		152,000
To convert to the equity method by accruing the net effect of the subsidiary's operations (income less dividends) for the prior two years (\$170,000) along with excess amortization expenses (\$18,000) for this same period.		

(2) An alteration is needed in Entry **I** because, under the initial value method, only dividends are recorded by the parent as income.

**Entry I**

Dividend Income . . . . .	10,000	
Dividends Declared . . . . .		10,000
To eliminate intra-entity dividends recorded by parent as income.		

(3) Finally, because the intra-entity dividends have been eliminated in Entry **I**, no separate Entry **D** is needed.

## Appendix: Private Company Accounting for Business Combinations

**LO 3-9:**

Describe the alternative accounting treatments for goodwill and other intangible assets available for business combinations by private companies.

### *External Reporting Option for Private Company Goodwill Accounting*

In January 2014, the Financial Accounting Standards Board (FASB) approved an *Accounting Standards Update* (ASU 2014-02) to Topic 350, “Intangibles—Goodwill and Other, on Accounting for Goodwill.” This ASU emerged as a consensus of the FASB’s Private Company Council (PCC) and gives private companies an option to apply a simplified alternative to the more complex goodwill accounting model required of public companies. As discussed below, the new standard allows a private company both to amortize goodwill and to apply a simplified impairment test at either the reporting unit or entity level.

The private company standards apply only to businesses that do not meet the definition of a public business entity or a not-for-profit entity. In general, business is a public entity if the Securities and Exchange Commission (or a foreign or other domestic regulatory agency) requires the business to furnish financial statements (ASU 2013-12). In this textbook, our focus is squarely on public business entities. Nonetheless, the goodwill accounting option for private companies provides an interesting alternative that the FASB may someday consider for public entities as well.<sup>18</sup>

The new standard allows a private company to elect to amortize goodwill over a 10-year period.<sup>19</sup> The amortization process effectively treats goodwill as a definite-lived intangible asset. This approach, of course, stands in marked contrast to the goodwill accounting for public companies which treats goodwill as an indefinite-lived asset, prohibits amortization, and requires annual impairment testing for goodwill. In justifying the differential treatment for private companies, the FASB reasoned that, based on research by the PCC, goodwill impairment tests provided

limited decision-useful information because most users of private company financial statement generally disregard goodwill and goodwill impairment losses in their analysis of a private company’s financial condition and operating performance. (ASU 2014-02, Summary)

Equally important, the PCC expressed concerns about the cost and complexity of goodwill impairment tests, especially for private companies. The cost and complexity arise in large part from the efforts required in determining fair values for a company’s reporting units and their identifiable assets and liabilities.

In many cases, goodwill amortization will replace the need to periodically assess and, when deemed necessary, write-down goodwill through the recognition of impairment losses. Private companies who elect the alternative goodwill accounting, however, will still be required to test goodwill balances for impairment in some circumstances, although a simplified approach is employed.

<sup>18</sup> In November 2014, the FASB directed its staff to extend its research on goodwill amortization to public companies, focusing on the most appropriate useful life if goodwill were amortized and simplifying the goodwill impairment test.

<sup>19</sup> A less-than-10-year amortization period is available if it can be shown to be appropriate (ASC 350-20-35-63).

The goodwill impairment process is simplified in two respects for private companies. First, if a triggering event occurs (i.e., any event or change in circumstances that may have caused the fair value of the acquired entity—or the reporting unit—to fall below its carrying amount), then the unamortized balance of goodwill must be assessed for impairment.<sup>20</sup> However, to save costs and streamline the process, there is no requirement (as exists for public companies) to remeasure each of the entity's (or reporting unit's) separate assets and liabilities at current fair values to compute a residual implied value for goodwill. The measurement of the goodwill impairment loss simply equals the excess (if any) of the fair value of the acquired entity (or reporting unit) over its total carrying amount. The amount of the impairment loss, however, is limited to the remaining unamortized balance in the goodwill account.

Unlike public companies, a private company also has the option to designate and test goodwill for impairment either at the entity level or the reporting unit level—a policy election made at the adoption of the alternative goodwill method. Thus the accounting for goodwill impairment is simplified by both the ability to assess goodwill at the entity level and the use of a single-step test that compares the fair value of the entity to its carrying amount. Similar to public companies, a private company may skip the qualitative assessment. Unlike public companies, a private company can then go directly to a single-step quantitative impairment test.

### ***External Reporting Option for Private Company Accounting for Other Intangible Assets in a Business Combination***

In addition to the private company separate guidance for goodwill, the FASB in December 2014 issued ASU 2014-18, “Accounting for Identifiable Intangible Assets in a Business Combination (a consensus of the Private Company Council),” an amendment of Business Combinations (Topic 805). The new standard allows private companies an option to simplify their accounting by recognizing fewer intangible assets in future business combinations. Private companies can now elect to (1) limit the customer-related intangibles it recognizes separately to those capable of being sold or licensed independently from the other assets of the business, and (2) avoid separate recognition of noncompetition agreements.

By limiting the separate recognition of customer-related intangibles (e.g., customer lists, customer relationships, commodity supply contracts, etc.) and noncompetition agreements, the value of these intangible assets is effectively subsumed into goodwill. As with other private company financial reporting options, the FASB cites cost/benefit considerations.

By providing an accounting alternative, this Update reduces the cost and complexity associated with the measurement of certain identifiable intangible assets without significantly diminishing decision-useful information to users of private company financial statements (ASU 2014-18, Summary).

A private company may elect this alternative only if it also elects the private company goodwill accounting alternative which includes goodwill amortization—thus ensuring that any non-recognized intangibles subsumed into goodwill are also subject to amortization. Companies that choose the goodwill accounting alternative, however, are not required to elect the intangible assets accounting alternative.

## **Questions**

1. CCES Corporation acquires a controlling interest in Schmaling, Inc. CCES may utilize any one of three methods to internally account for this investment. Describe each of these methods, and indicate their advantages and disadvantages.
2. Maguire Company obtains 100 percent control over Williams Company. Several years after the takeover, consolidated financial statements are being produced. For each of the following accounts, briefly describe the values that should be included in consolidated totals.
  - a. Equipment.
  - b. Investment in Williams Company.
  - c. Dividends Declared.
  - d. Goodwill.
  - e. Revenues.
  - f. Expenses.
  - g. Common Stock.
  - h. Net Income.
3. When a parent company uses the equity method to account for an investment in a subsidiary, why do both the parent's Net Income and Retained Earnings account balances agree with the consolidated totals?

<sup>20</sup>Distinct from public company requirements, no annual assessment for goodwill impairment is required for private companies.

4. When a parent company uses the equity method to account for investment in a subsidiary, the amortization expense entry recorded during the year is eliminated on a consolidation worksheet as a component of Entry I. What is the necessity of removing this amortization?
5. When a parent company applies the initial value method or the partial equity method to an investment, a worksheet adjustment must be made to the parent's beginning Retained Earnings account (Entry \*C) in every period after the year of acquisition. What is the necessity for this entry? Why is no similar entry found when the parent utilizes the equity method?
6. Several years ago, Jenkins Company acquired a controlling interest in Lambert Company. Lambert recently borrowed \$100,000 from Jenkins. In consolidating the financial records of these two companies, how will this debt be handled?
7. Bennis adopts the equity method for its 100 percent investment in Waters. At the end of six years, Bennis reports an investment in Waters of \$920,000. What figures constitute this balance?
8. One company acquired another in a transaction in which \$100,000 of the acquisition price is assigned to goodwill. Several years later, a worksheet is being produced to consolidate these two companies. How is the reported value of the goodwill determined at this date?
9. When should a parent consider recognizing an impairment loss for goodwill associated with a subsidiary? How should the loss be reported in the financial statements?
10. Reimers Company acquires Rollins Corporation on January 1, 2017. As part of the agreement, the parent states that an additional \$100,000 payment to the former owners of Rollins will be made in 2018, if Rollins achieves certain income thresholds during the first two years following the acquisition. How should Reimers account for this contingency in its 2017 consolidated financial statements?

## Problems

### LO 3-2

1. A company acquires a subsidiary and will prepare consolidated financial statements for external reporting purposes. For internal reporting purposes, the company has decided to apply the initial value method. Why might the company have made this decision?
  - a. It is a relatively easy method to apply.
  - b. Operating results appearing on the parent's financial records reflect consolidated totals.
  - c. GAAP now requires the use of this particular method for internal reporting purposes.
  - d. Consolidation is not required when the parent uses the initial value method.

### LO 3-2

2. A company acquires a subsidiary and will prepare consolidated financial statements for external reporting purposes. For internal reporting purposes, the company has decided to apply the equity method. Why might the company have made this decision?
  - a. It is a relatively easy method to apply.
  - b. Operating results appearing on the parent's financial records reflect consolidated totals.
  - c. GAAP now requires the use of this particular method for internal reporting purposes.
  - d. Consolidation is not required when the parent uses the equity method.

### LO 3-4

3. On January 1, 2018, Jay Company acquired all the outstanding ownership shares of Zee Company. In assessing Zee's acquisition-date fair values, Jay concluded that the carrying value of Zee's long-term debt (8-year remaining life) was less than its fair value by \$20,000. At December 31, 2018, Zee Company's accounts show interest expense of \$12,000 and long-term debt of \$250,000. What amounts of interest expense and long-term debt should appear on the December 31, 2018, consolidated financial statements of Jay and its subsidiary Zee?

<i>Interest expense</i>	<i>Long-term debt</i>
a. \$14,500	\$270,000
b. \$14,500	\$267,500
c. \$9,500	\$270,000
d. \$9,500	\$267,500

### LO 3-5

4. When should a consolidated entity recognize a goodwill impairment loss?
  - a. If both the fair value of a reporting unit and its associated implied goodwill fall below their respective carrying amounts.
  - b. Whenever the entity's fair value declines significantly.
  - c. If the fair value of a reporting unit with goodwill fall below its carrying amount.
  - d. Annually on a systematic and rational basis.



## LO 3-1

5. Paar Corporation bought 100 percent of Kimmel, Inc., on January 1, 2015. On that date, Paar's equipment (10-year remaining life) has a book value of \$420,000 but a fair value of \$520,000. Kimmel has equipment (10-year remaining life) with a book value of \$272,000 but a fair value of \$400,000. Paar uses the equity method to record its investment in Kimmel. On December 31, 2017, Paar has equipment with a book value of \$294,000 but a fair value of \$445,200. Kimmel has equipment with a book value of \$190,400 but a fair value of \$357,000. What is the consolidated balance for the Equipment account as of December 31, 2017?
- \$574,000
  - \$802,200
  - \$612,600
  - \$484,400

## LO 3-4

6. How would the answer to problem (5) have been affected if the parent had applied the initial value method rather than the equity method?
- No effect: The method the parent uses is for internal reporting purposes only and has no impact on consolidated totals.
  - The consolidated Equipment account would have a higher reported balance.
  - The consolidated Equipment account would have a lower reported balance.
  - The balance in the consolidated Equipment account cannot be determined for the initial value method using the information given.

## LO 3-5

7. Goodwill recognized in a business combination must be allocated among a firm's identified reporting units. If the fair value of a particular reporting unit with recognized goodwill falls below its carrying amount, which of the following is true?
- No goodwill impairment loss is recognized unless the implied value for goodwill exceeds its carrying amount.
  - A goodwill impairment loss is recognized if the carrying amount for goodwill exceeds its implied value.
  - A goodwill impairment loss is recognized for the excess of a reporting unit's carrying amount over its fair value, not to exceed the carrying amount of goodwill.
  - The reporting unit reduces the values assigned to its long-term assets (including any unrecognized intangibles) to reflect its fair value.

## LO 3-7

8. If no legal, regulatory, contractual, competitive, economic, or other factors limit the life of an intangible asset, the asset's assigned value is allocated to expense over which of the following?
- 20 years.
  - 20 years with an annual impairment review.
  - Infinitely.
  - Indefinitely (no amortization) with an annual impairment review until its life becomes finite.

## LO 3-7

9. Dosmann, Inc., bought all outstanding shares of Lizzi Corporation on January 1, 2016, for \$700,000 in cash. This portion of the consideration transferred results in a fair-value allocation of \$35,000 to equipment and goodwill of \$88,000. At the acquisition date, Dosmann also agrees to pay Lizzi's previous owners an additional \$110,000 on January 1, 2018, if Lizzi earns a 10 percent return on the fair value of its assets in 2016 and 2017. Lizzi's profits exceed this threshold in both years. Which of the following is true?
- The additional \$110,000 payment is a reduction in consolidated retained earnings.
  - The fair value of the expected contingent payment increases goodwill at the acquisition date.
  - Consolidated goodwill as of January 1, 2018, increases by \$110,000.
  - The \$110,000 is recorded as an expense in 2018.

**Problems 10, 11, and 12 relate to the following:**

On January 1, 2016, Phoenix Co. acquired 100 percent of the outstanding voting shares of Sedona Inc., for \$600,000 cash. At January 1, 2016, Sedona's net assets had a total carrying amount of \$420,000. Equipment (eight-year remaining life) was undervalued on Sedona's financial records by \$80,000. Any remaining excess fair over book value was attributed to a customer list developed by Sedona (four-year remaining life), but not recorded on its books. Phoenix applies the equity method to account for its investment in Sedona. Each year since the acquisition, Sedona has declared a \$20,000 dividend. Sedona recorded net income of \$70,000 in 2016 and \$80,000 in 2017.

Selected account balances from the two companies' individual records were as follows:

	Phoenix	Sedona
2018 Revenues	\$498,000	\$285,000
2018 Expenses	350,000	195,000
2018 Income from Sedona	55,000	
Retained earnings 12/31/18	250,000	175,000

LO 3-3a

10. What is consolidated net income for Phoenix and Sedona for 2018?
- \$148,000
  - \$203,000
  - \$228,000
  - \$238,000

LO 3-3a

11. What is Phoenix's consolidated retained earnings balance at December 31, 2018?
- \$250,000
  - \$290,000
  - \$330,000
  - \$360,000

LO 3-3a

12. On its December 31, 2018, consolidated balance sheet, what amount should Phoenix report for Sedona's customer list?
- \$10,000
  - \$20,000
  - \$25,000
  - \$50,000

LO 3-7

13. Kaplan Corporation acquired Star, Inc., on January 1, 2017, by issuing 13,000 shares of common stock with a \$10 per share par value and a \$23 market value. This transaction resulted in recognizing \$62,000 of goodwill. Kaplan also agreed to compensate Star's former owners for any difference if Kaplan's stock is worth less than \$23 on January 1, 2018. On January 1, 2018, Kaplan issues an additional 3,000 shares to Star's former owners to honor the contingent consideration agreement. Which of the following is true?
- The fair value of the number of shares issued for the contingency increases the Goodwill account at January 1, 2018.
  - The parent's additional paid-in capital from the contingent equity recorded at the acquisition date is reclassified as a regular common stock issue on January 1, 2018.
  - All of the subsidiary's asset and liability accounts must be revalued for consolidation purposes based on their fair values as of January 1, 2018.
  - The additional shares are assumed to have been issued on January 1, 2017, so that a retrospective adjustment is required.

LO 3-3, 3-4

14. Herbert, Inc., acquired all of Rambis Company's outstanding stock on January 1, 2017, for \$574,000 in cash. Annual excess amortization of \$12,000 results from this transaction. On the date of the takeover, Herbert reported retained earnings of \$400,000, and Rambis reported a \$200,000 balance. Herbert reported internal net income of \$40,000 in 2017 and \$50,000 in 2018 and declared \$10,000 in dividends each year. Rambis reported net income of \$20,000 in 2017 and \$30,000 in 2018 and declared \$5,000 in dividends each year.
- Assume that Herbert's internal net income figures above do not include any income from the subsidiary.
    - If the parent uses the equity method, what is the amount reported as consolidated retained earnings on December 31, 2018?
    - Would the amount of consolidated retained earnings change if the parent had applied either the initial value or partial equity method for internal accounting purposes?
  - Under each of the following situations, what is the Investment in Rambis account balance on Herbert's books on January 1, 2018?
    - The parent uses the equity method.
    - The parent uses the partial equity method.
    - The parent uses the initial value method.

- c. Under each of the following situations, what is Entry \*C on a 2018 consolidation worksheet?
- The parent uses the equity method.
  - The parent uses the partial equity method.
  - The parent uses the initial value method.

**LO 3-3, 3-4**

15. Haynes, Inc., obtained 100 percent of Turner Company's common stock on January 1, 2017, by issuing 9,000 shares of \$10 par value common stock. Haynes's shares had a \$15 per share fair value. On that date, Turner reported a net book value of \$100,000. However, its equipment (with a five-year remaining life) was undervalued by \$5,000 in the company's accounting records. Also, Turner had developed a customer list with an assessed value of \$30,000, although no value had been recorded on Turner's books. The customer list had an estimated remaining useful life of 10 years.

The following balances come from the individual accounting records of these two companies as of December 31, 2017:

	Haynes	Turner
Revenues	\$(600,000)	\$(230,000)
Expenses	440,000	120,000
Investment income	Not given	—0—
Dividends declared	80,000	50,000

The following balances come from the individual accounting records of these two companies as of December 31, 2018:

	Haynes	Turner
Revenues	\$(700,000)	\$(280,000)
Expenses	460,000	150,000
Investment income	Not given	—0—
Dividends declared	90,000	40,000
Equipment	500,000	300,000

- a. What balance does Haynes's Investment in Turner account show on December 31, 2018, when the equity method is applied?
- b. What is the consolidated net income for the year ending December 31, 2018?
- c. What is the consolidated equipment balance as of December 31, 2018? How would this answer be affected by the investment method applied by the parent?
- d. If Haynes has applied the initial value method to account for its investment, what adjustment is needed to the beginning of the Retained Earnings account on a December 31, 2018, consolidation worksheet? How would this answer change if the partial equity method had been in use? How would this answer change if the equity method had been in use?
16. Francisco Inc. acquired 100 percent of the voting shares of Beltran Company on January 1, 2017. In exchange, Francisco paid \$450,000 in cash and issued 104,000 shares of its own \$1 par value common stock. On this date, Francisco's stock had a fair value of \$12 per share. The combination is a statutory merger with Beltran subsequently dissolved as a legal corporation. Beltran's assets and liabilities are assigned to a new reporting unit.

The following reports the fair values for the Beltran reporting unit for January 1, 2017, and December 31, 2018, along with their respective book values on December 31, 2018.

Beltran Reporting Unit	Fair Values	Fair Values	Book Values
	1/1/17	12/31/18	12/31/18
Cash	\$ 75,000	\$ 50,000	\$ 50,000
Receivables	193,000	225,000	225,000
Inventory	281,000	305,000	300,000
Patents	525,000	600,000	500,000
Customer relationships	500,000	480,000	450,000
Equipment (net)	295,000	240,000	235,000
Goodwill	?	?	400,000
Accounts payable	(121,000)	(175,000)	(175,000)
Long-term liabilities	(450,000)	(400,000)	(400,000)

**LO 3-6**

## LO 3-6

- a. Prepare Francisco's journal entry to record the assets acquired and the liabilities assumed in the Beltran merger on January 1, 2017.
- b. On December 31, 2018, Francisco opts to forgo any goodwill impairment qualitative assessment and estimates that the total fair value of the entire Beltran reporting unit is \$1,425,000. What amount of goodwill impairment, if any, should Francisco recognize on its 2018 income statement?
17. Alomar Co., a consolidated enterprise, conducted an impairment review for each of its reporting units. In its qualitative assessment, one particular reporting unit, Sellers, emerged as a candidate for possible goodwill impairment. Sellers has recognized net assets of \$1,094, including goodwill of \$755. Seller's fair value is assessed at \$1,028 and includes two internally developed unrecognized intangible assets (a patent and a customer list with fair values of \$199 and \$56, respectively). The following table summarizes current financial information for the Sellers reporting unit:

	Carrying Amounts	Fair Values
Tangible assets, net	\$ 84	\$ 137
Recognized intangible assets, net	255	326
Goodwill	755	?
Unrecognized intangible assets	0	255
Total	<u>\$1,094</u>	<u>\$1,028</u>

- a. Determine the amount of any goodwill impairment for Alomar's Sellers reporting unit.
- b. After recognition of any goodwill impairment loss, what are the reported carrying amounts for the following assets of Alomar's reporting unit Sellers?
- Tangible assets, net.
  - Goodwill.
  - Patent.
  - Customer list.

## LO 3-6

18. Destin Company recently acquired several businesses and recognized goodwill in each acquisition. Destin has allocated the resulting goodwill to its three reporting units: Sand Dollar, Salty Dog, and Baytowne. Destin opts to skip the qualitative assessment and therefore performs a quantitative goodwill impairment review annually.

In its current year assessment of goodwill, Destin provides the following individual asset and liability values for each reporting unit:

	Carrying Amounts	Fair Values
<b>Sand Dollar</b>		
Tangible assets	\$180,000	\$190,000
Trademark	170,000	150,000
Customer list	90,000	100,000
Goodwill	120,000	?
Liabilities	(30,000)	(30,000)
<b>Salty Dog</b>		
Tangible assets	\$200,000	\$200,000
Unpatented technology	170,000	125,000
Licenses	90,000	100,000
Goodwill	150,000	?
<b>Baytowne</b>		
Tangible assets	\$140,000	\$150,000
Unpatented technology	—0—	100,000
Copyrights	50,000	80,000
Goodwill	90,000	?

The fair values for each reporting unit (including goodwill) are \$510,000 for Sand Dollar, \$580,000 for Salty Dog, and \$560,000 for Baytowne. To date, Destin has reported no goodwill impairments.

- a. How much goodwill impairment should Destin report this year?
- b. What changes to the valuations of Destin's tangible assets and identified intangible assets should be reported based on the goodwill impairment tests?

**Problems 19 through 21 should be viewed as independent situations. They are based on the following data:**

Chapman Company obtains 100 percent of Abernethy Company's stock on January 1, 2017. As of that date, Abernethy has the following trial balance:

	Debit	Credit
Accounts payable . . . . .		\$ 50,000
Accounts receivable . . . . .	\$ 40,000	
Additional paid-in capital . . . . .		50,000
Buildings (net) (4-year remaining life) . . . . .	120,000	
Cash and short-term investments . . . . .	60,000	
Common stock . . . . .		250,000
Equipment (net) (5-year remaining life) . . . . .	200,000	
Inventory . . . . .	90,000	
Land . . . . .	80,000	
Long-term liabilities (mature 12/31/20) . . . . .		150,000
Retained earnings, 1/1/17 . . . . .		100,000
Supplies . . . . .	10,000	
Totals . . . . .	<u>\$600,000</u>	<u>\$600,000</u>

During 2017, Abernethy reported net income of \$80,000 while declaring and paying dividends of \$10,000. During 2018, Abernethy reported net income of \$110,000 while declaring and paying dividends of \$30,000.

LO 3-3a

19. Assume that Chapman Company acquired Abernethy's common stock for \$490,000 in cash. As of January 1, 2017, Abernethy's land had a fair value of \$90,000, its buildings were valued at \$160,000, and its equipment was appraised at \$180,000. Chapman uses the equity method for this investment. Prepare consolidation worksheet entries for December 31, 2017, and December 31, 2018.

LO 3-3b

20. Assume that Chapman Company acquired Abernethy's common stock for \$500,000 in cash. Assume that the equipment and long-term liabilities had fair values of \$220,000 and \$120,000, respectively, on the acquisition date. Chapman uses the initial value method to account for its investment. Prepare consolidation worksheet entries for December 31, 2017, and December 31, 2018.

LO 3-3c

21. Assume that Chapman Company acquired Abernethy's common stock by paying \$520,000 in cash. All of Abernethy's accounts are estimated to have a fair value approximately equal to present book values. Chapman uses the partial equity method to account for its investment. Prepare the consolidation worksheet entries for December 31, 2017, and December 31, 2018.

LO 3-3a, 3-3b, 3-4

22. Adams, Inc., acquires Clay Corporation on January 1, 2017, in exchange for \$510,000 cash. Immediately after the acquisition, the two companies have the following account balances. Clay's equipment (with a five-year remaining life) is actually worth \$440,000. Credit balances are indicated by parentheses.

	Adams	Clay
Current assets . . . . .	\$ 300,000	\$ 220,000
Investment in Clay . . . . .	510,000	—0—
Equipment . . . . .	600,000	390,000
Liabilities . . . . .	(200,000)	(160,000)
Common stock . . . . .	(350,000)	(150,000)
Retained earnings, 1/1/17 . . . . .	(860,000)	(300,000)

In 2017, Clay earns a net income of \$55,000 and declares and pays a \$5,000 cash dividend. In 2017, Adams reports net income from its own operations (exclusive of any income from Clay) of \$125,000 and declares no dividends. At the end of 2018, selected account balances for the two companies are as follows:

	Adams	Clay
Revenues . . . . .	\$(400,000)	\$(240,000)
Expenses . . . . .	290,000	180,000
Investment income . . . . .	Not given	—0—
Retained earnings, 1/1/18 . . . . .	Not given	(350,000)

(Continued)

(Continued)

	Adams	Clay
Dividends declared . . . . .	–0–	8,000
Common stock . . . . .	(350,000)	(150,000)
Current assets . . . . .	580,000	262,000
Investment in Clay . . . . .	Not given	–0–
Equipment . . . . .	520,000	420,000
Liabilities . . . . .	(152,000)	(130,000)

- a. What are the December 31, 2018, Investment Income and Investment in Clay account balances assuming Adams uses the:
  - Equity method.
  - Initial value method.
- b. How does the parent’s internal investment accounting method choice affect the amount reported for expenses in its December 31, 2018, consolidated income statement?
- c. How does the parent’s internal investment accounting method choice affect the amount reported for equipment in its December 31, 2018, consolidated balance sheet?
- d. What is Adams’s January 1, 2018, Retained Earnings account balance assuming Adams accounts for its investment in Clay using the:
  - Equity value method.
  - Initial value method.
- e. What worksheet adjustment to Adams’s January 1, 2018, Retained Earnings account balance is required if Adams accounts for its investment in Clay using the initial value method?
- f. Prepare the worksheet entry to eliminate Clay’s stockholders’ equity.
- g. What is consolidated net income for 2018?

LO 3-1, 3-4

23. Following are selected account balances from Penske Company and Stanza Corporation as of December 31, 2018:

	Penske	Stanza
Revenues . . . . .	\$(700,000)	\$(400,000)
Cost of goods sold . . . . .	250,000	100,000
Depreciation expense . . . . .	150,000	200,000
Investment income . . . . .	Not given	–0–
Dividends declared . . . . .	80,000	60,000
Retained earnings, 1/1/18 . . . . .	(600,000)	(200,000)
Current assets . . . . .	400,000	500,000
Copyrights . . . . .	900,000	400,000
Royalty agreements . . . . .	600,000	1,000,000
Investment in Stanza . . . . .	Not given	–0–
Liabilities . . . . .	(500,000)	(1,380,000)
Common stock . . . . .	(600,000) (\$20 par)	(200,000) (\$10 par)
Additional paid-in capital . . . . .	(150,000)	(80,000)

On January 1, 2018, Penske acquired all of Stanza’s outstanding stock for \$680,000 fair value in cash and common stock. Penske also paid \$10,000 in stock issuance costs. At the date of acquisition, copyrights (with a six-year remaining life) have a \$440,000 book value but a fair value of \$560,000.

- a. As of December 31, 2018, what is the consolidated copyrights balance?
- b. For the year ending December 31, 2018, what is consolidated net income?
- c. As of December 31, 2018, what is the consolidated retained earnings balance?
- d. As of December 31, 2018, what is the consolidated balance to be reported for goodwill?

LO 3-2, 3-3, 3-4

24. Foxx Corporation acquired all of Greenburg Company’s outstanding stock on January 1, 2016, for \$600,000 cash. Greenburg’s accounting records showed net assets on that date of \$470,000, although equipment with a 10-year remaining life was undervalued on the records by \$90,000. Any recognized goodwill is considered to have an indefinite life.

Greenburg reports net income in 2016 of \$90,000 and \$100,000 in 2017. The subsidiary declared dividends of \$20,000 in each of these two years.

Account balances for the year ending December 31, 2018, follow. Credit balances are indicated by parentheses.

	Foxx	Greenburg
Revenues .....	\$ (800,000)	\$ (600,000)
Cost of goods sold .....	100,000	150,000
Depreciation expense .....	300,000	350,000
Investment income .....	(20,000)	–0–
Net income .....	<u>\$ (420,000)</u>	<u>\$ (100,000)</u>
Retained earnings, 1/1/18 .....	\$(1,100,000)	\$ (320,000)
Net income .....	(420,000)	(100,000)
Dividends declared .....	120,000	20,000
Retained earnings, 12/31/18 .....	<u>\$(1,400,000)</u>	<u>\$ (400,000)</u>
Current assets .....	\$ 300,000	\$ 100,000
Investment in subsidiary .....	600,000	–0–
Equipment (net) .....	900,000	600,000
Buildings (net) .....	800,000	400,000
Land .....	600,000	100,000
Total assets .....	<u>\$ 3,200,000</u>	<u>\$ 1,200,000</u>
Liabilities .....	\$ (900,000)	\$ (500,000)
Common stock .....	(900,000)	(300,000)
Retained earnings .....	(1,400,000)	(400,000)
Total liabilities and equity .....	<u>\$(3,200,000)</u>	<u>\$(1,200,000)</u>

a. Determine the December 31, 2018, consolidated balance for each of the following accounts:

Depreciation Expense	Buildings
Dividends Declared	Goodwill
Revenues	Common Stock
Equipment	

- b. How does the parent's choice of an accounting method for its investment affect the balances computed in requirement (a)?
- c. Which method of accounting for this subsidiary is the parent actually using for internal reporting purposes?
- d. If the parent company had used a different method of accounting for this investment, how could that method have been identified?
- e. What would be Foxx's balance for retained earnings as of January 1, 2018, if each of the following methods had been in use?
- Initial value method.
  - Partial equity method.
  - Equity method.

**LO 3-1, 3-3a, 3-4**

25. Allison Corporation acquired all of the outstanding voting stock of Mathias, Inc., on January 1, 2017, in exchange for \$5,875,000 in cash. Allison intends to maintain Mathias as a wholly owned subsidiary. Both companies have December 31 fiscal year-ends. At the acquisition date, Mathias's stockholders' equity was \$2,000,000 including retained earnings of \$1,500,000.

At the acquisition date, Allison prepared the following fair value allocation schedule for its newly acquired subsidiary:

Consideration transferred .....		\$5,875,000
Mathias stockholders' equity .....		<u>2,000,000</u>
Excess fair over book value .....		<u>\$3,875,000</u>
to unpatented technology (8-year remaining life) .....	\$ 800,000	
to patents (10-year remaining life) .....	2,500,000	
to increase long-term debt (undervalued, 5-year remaining life) .....	<u>(100,000)</u>	<u>3,200,000</u>
Goodwill .....		<u>\$ 675,000</u>

Post-acquisition, Allison employs the equity method to account for its investment in Mathias. During the two years following the business combination, Mathias reports the following income and dividends:

	<i>Income</i>	<i>Dividends</i>
2017	\$480,000	\$25,000
2018	960,000	50,000

No asset impairments have occurred since the acquisition date.

Individual financial statements for each company as of December 31, 2018, appear below. Parentheses indicate credit balances. Dividends declared were paid in the same period.

<b>Income Statement</b>	<b>Allison</b>	<b>Mathias</b>
Sales	(6,400,000)	(3,900,000)
Cost of goods sold	4,500,000	2,500,000
Depreciation expense	875,000	277,000
Amortization expense	430,000	103,000
Interest expense	55,000	60,000
Equity earnings in Mathias	(630,000)	–0–
Net income	<u>(1,170,000)</u>	<u>(960,000)</u>
<b>Statement of Retained Earnings</b>		
Retained earnings 1/1	(5,340,000)	(1,955,000)
Net income (above)	(1,170,000)	(960,000)
Dividends declared	560,000	50,000
Retained earnings 12/31	<u>(5,950,000)</u>	<u>(2,865,000)</u>
<b>Balance Sheet</b>		
Cash	75,000	143,000
Accounts receivable	950,000	225,000
Inventories	1,700,000	785,000
Investment in Mathias	6,580,000	–0–
Equipment (net)	3,700,000	2,052,000
Patents	95,000	–0–
Unpatented technology	2,125,000	1,450,000
Goodwill	425,000	–0–
Total assets	<u>15,650,000</u>	<u>4,655,000</u>
Accounts payable	(500,000)	(90,000)
Long-term debt	(1,000,000)	(1,200,000)
Common stock	(8,200,000)	(500,000)
Retained earnings 12/31	<u>(5,950,000)</u>	<u>(2,865,000)</u>
Total liabilities and equity	<u>(15,650,000)</u>	<u>(4,655,000)</u>

**Required:**

- a. Show how Allison determined its December 31, 2018, Investment in Mathias balance.
- b. Prepare a worksheet to determine the consolidated values to be reported on Allison's financial statements.

LO 3-1, 3-3a

26. On January 3, 2016, Persoff Corporation acquired all of the outstanding voting stock of Sea Cliff, Inc., in exchange for \$6,000,000 in cash. Persoff elected to exercise control over Sea Cliff as a wholly owned subsidiary with an independent accounting system. Both companies have December 31 fiscal year-ends. At the acquisition date, Sea Cliff's stockholders' equity was \$2,500,000 including retained earnings of \$1,700,000.

Persoff pursued the acquisition, in part, to utilize Sea Cliff's technology and computer software. These items had fair values that differed from their values on Sea Cliff's books as follows:

<b>Asset</b>	<b>Book Value</b>	<b>Fair Value</b>	<b>Remaining Useful Life</b>
Patented technology	\$140,000	\$2,240,000	7 years
Computer software	\$ 60,000	\$1,260,000	12 years



Sea Cliff's remaining identifiable assets and liabilities had acquisition-date book values that closely approximated fair values. Since acquisition, no assets have been impaired. During the next three years, Sea Cliff reported the following income and dividends:

	Net Income	Dividends
2016	\$900,000	\$150,000
2017	940,000	150,000
2018	975,000	150,000

December 31, 2018, financial statements for each company appear below. Parentheses indicate credit balances. Dividends declared were paid in the same period.

Income Statement	Persoff	Sea Cliff
Revenues	\$ (2,720,000)	\$(2,250,000)
Cost of goods sold	1,350,000	870,000
Depreciation expense	275,000	380,000
Amortization expense	370,000	25,000
Equity earnings in Sea Cliff	(575,000)	–0–
Net income	<u>\$ (1,300,000)</u>	<u>\$(975,000)</u>
<b>Statement of Retained Earnings</b>		
Retained earnings 1/1	\$ (7,470,000)	\$(3,240,000)
Net income (above)	(1,300,000)	(975,000)
Dividends declared	600,000	150,000
Retained earnings 12/31	<u>\$ (8,170,000)</u>	<u>\$(4,065,000)</u>
<b>Balance Sheet</b>		
Current assets	\$ 490,000	\$ 375,000
Investment in Sea Cliff	7,165,000	–0–
Computer software	300,000	45,000
Patented technology	800,000	80,000
Goodwill	100,000	–0–
Equipment	1,835,000	4,500,000
Total assets	<u>\$ 10,690,000</u>	<u>\$ 5,000,000</u>
Liabilities	\$ (520,000)	\$ (135,000)
Common stock	(2,000,000)	(800,000)
Retained earnings 12/31	<u>(8,170,000)</u>	<u>(4,065,000)</u>
Total liabilities and equity	<u>\$(10,690,000)</u>	<u>\$(5,000,000)</u>

- Construct Persoff's acquisition-date fair-value allocation schedule for its investment in Sea Cliff.
- Show how Persoff determined its Equity earnings in Sea Cliff balance for the year ended December 31, 2018.
- Show how Persoff determined its December 31, 2018, Investment in Sea Cliff balance.
- Prepare a worksheet to determine the consolidated values to be reported on Persoff's financial statements.

27. On January 1, 2017, Prestige Corporation acquired 100 percent of the voting stock of Stylene Corporation in exchange for \$2,030,000 in cash and securities. On the acquisition date, Stylene had the following balance sheet:

Cash	\$ 23,000	Accounts payable	\$1,050,000
Accounts receivable	97,000		
Inventory	140,000		
Equipment (net)	1,490,000	Common stock	800,000
Trademarks	850,000	Retained earnings	750,000
	<u>\$2,600,000</u>		<u>\$2,600,000</u>

At the acquisition date, the book values of Stylene's assets and liabilities were generally equivalent to their fair values except for the following assets:

Asset	Book Value	Fair Value	Remaining Useful Life
Equipment	\$1,490,000	\$1,610,000	8 years
Customer lists	—0—	160,000	4 years
Trademarks	850,000	900,000	Indefinite

During the next two years, Stylene has the following income and dividends in its own separately prepared financial reports to its parent.

	Net Income	Dividends
2017	\$175,000	\$25,000
2018	375,000	45,000

Dividends are declared and paid in the same period. The December 31, 2018, separate financial statements for each company appear below. Parentheses indicate credit balances.

Income Statement	Prestige	Stylene
Revenues	\$ (4,200,000)	\$ (2,200,000)
Cost of goods sold	2,300,000	1,550,000
Depreciation expense	495,000	275,000
Amortization expense	105,000	—0—
Equity earnings in Stylene	(320,000)	—0—
Net income	<u>\$ (1,620,000)</u>	<u>\$ (375,000)</u>
<b>Statement of Retained Earnings</b>		
Retained earnings 1/1	\$ (2,900,000)	\$ (900,000)
Net income (above)	(1,620,000)	(375,000)
Dividends declared	150,000	45,000
Retained earnings 12/31	<u>\$ (4,370,000)</u>	<u>\$ (1,230,000)</u>
<b>Balance Sheet</b>		
Cash	\$ 430,000	\$ 35,000
Accounts receivable	693,000	75,000
Inventory	890,000	420,000
Investment in Stylene	2,400,000	—0—
Equipment	6,000,000	1,400,000
Customer lists	115,000	—0—
Trademarks	2,500,000	850,000
Goodwill	172,000	—0—
Total assets	<u>\$ 13,200,000</u>	<u>\$ 2,780,000</u>
Accounts payable	\$ (330,000)	\$ (750,000)
Common stock	(8,500,000)	(800,000)
Retained earnings 12/31	(4,370,000)	(1,230,000)
Total liabilities and equity	<u>\$(13,200,000)</u>	<u>\$ (2,780,000)</u>

- Prepare Prestige's acquisition-date fair-value allocation schedule for its investment in Stylene.
- Show how Prestige determined its December 31, 2018, Investment in Stylene balance.
- Prepare a worksheet to determine the balances for Prestige's December 31, 2018, consolidated financial statements.

LO 3-1, 3-3a

**excel**

28. Patrick Corporation acquired 100 percent of O'Brien Company's outstanding common stock on January 1, for \$550,000 in cash. O'Brien reported net assets with a carrying amount of \$350,000 at that time. Some of O'Brien's assets either were unrecorded (having been internally developed) or had fair values that differed from book values as follows:

	Book Values	Fair Values
Trademarks (indefinite life) . . . . .	\$ 60,000	\$160,000
Customer relationships (5-year remaining life) . . . . .	—0—	75,000
Equipment (10-year remaining life) . . . . .	342,000	312,000

Any goodwill is considered to have an indefinite life with no impairment charges during the year.

Following are financial statements at the end of the first year for these two companies prepared from their separately maintained accounting systems. O'Brien declared and paid dividends in the same period. Credit balances are indicated by parentheses.

	Patrick	O'Brien
Revenues . . . . .	\$ (1,125,000)	\$ (520,000)
Cost of goods sold . . . . .	300,000	228,000
Depreciation expense . . . . .	75,000	70,000
Amortization expense . . . . .	25,000	—0—
Income from O'Brien . . . . .	(210,000)	—0—
Net Income. . . . .	<u>\$ (935,000)</u>	<u>\$ (222,000)</u>
Retained earnings 1/1 . . . . .	\$ (700,000)	\$ (250,000)
Net Income. . . . .	(935,000)	(222,000)
Dividends declared. . . . .	142,000	80,000
Retained earnings 12/31. . . . .	<u>\$ (1,493,000)</u>	<u>\$ (392,000)</u>
Cash . . . . .	\$ 185,000	\$ 105,000
Receivables . . . . .	225,000	56,000
Inventory. . . . .	175,000	135,000
Investment in O'Brien. . . . .	680,000	—0—
Trademarks . . . . .	474,000	60,000
Customer relationships . . . . .	—0—	—0—
Equipment (net) . . . . .	925,000	272,000
Goodwill . . . . .	—0—	—0—
Total assets . . . . .	<u>\$ 2,664,000</u>	<u>\$ 628,000</u>
Liabilities . . . . .	\$ (771,000)	\$ (136,000)
Common stock . . . . .	(400,000)	(100,000)
Retained earnings 12/31. . . . .	(1,493,000)	(392,000)
Total liabilities and equity . . . . .	<u>\$ (2,664,000)</u>	<u>\$ (628,000)</u>

- a. Show how Patrick computed the \$210,000 Income of O'Brien balance. Discuss how you determined which accounting method Patrick uses for its investment in O'Brien.
- b. Without preparing a worksheet or consolidation entries, determine and explain the totals to be reported for this business combination for the year ending December 31.
- c. Verify the totals determined in part (b) by producing a consolidation worksheet for Patrick and O'Brien for the year ending December 31.
29. Following are separate financial statements of Michael Company and Aaron Company as of December 31, 2018 (credit balances indicated by parentheses). Michael acquired all of Aaron's outstanding voting stock on January 1, 2014, by issuing 20,000 shares of its own \$1 par common stock. On the acquisition date, Michael Company's stock actively traded at \$23.50 per share.

LO 3-1, 3-3a, 3-3b, 3-4

**excel**

	<b>Michael Company 12/31/18</b>	<b>Aaron Company 12/31/18</b>
Revenues . . . . .	\$ (610,000)	\$ (370,000)
Cost of goods sold . . . . .	270,000	140,000
Amortization expense . . . . .	115,000	80,000
Dividend income . . . . .	(5,000)	—0—
Net income . . . . .	<u>\$ (230,000)</u>	<u>\$ (150,000)</u>
Retained earnings, 1/1/18 . . . . .	\$ (880,000)	\$ (490,000)
Net income (above) . . . . .	(230,000)	(150,000)
Dividends declared . . . . .	90,000	5,000
Retained earnings, 12/31/18 . . . . .	<u>\$ (1,020,000)</u>	<u>\$ (635,000)</u>
Cash . . . . .	\$ 110,000	\$ 15,000
Receivables . . . . .	380,000	220,000
Inventory . . . . .	560,000	280,000
Investment in Aaron Company . . . . .	470,000	—0—
Copyrights . . . . .	460,000	340,000
Royalty agreements . . . . .	920,000	380,000
Total assets . . . . .	<u>\$ 2,900,000</u>	<u>\$ 1,235,000</u>
Liabilities . . . . .	\$ (780,000)	\$ (470,000)
Preferred stock . . . . .	(300,000)	—0—
Common stock . . . . .	(500,000)	(100,000)
Additional paid-in capital . . . . .	(300,000)	(30,000)
Retained earnings, 12/31/18 . . . . .	<u>(1,020,000)</u>	<u>(635,000)</u>
Total liabilities and equity . . . . .	<u>\$ (2,900,000)</u>	<u>\$(1,235,000)</u>

On the date of acquisition, Aaron reported retained earnings of \$230,000 and a total book value of \$360,000. At that time, its royalty agreements were undervalued by \$60,000. This intangible was assumed to have a six-year remaining life with no residual value. Additionally, Aaron owned a trademark with a fair value of \$50,000 and a 10-year remaining life that was not reflected on its books. Aaron declared and paid dividends in the same period.

- a. Using the preceding information, prepare a consolidation worksheet for these two companies as of December 31, 2018.
  - b. Instead of the initial value method, assume now that Michael applies the equity method to its Investment in Aaron account. What account balances would the parent's individual financial statements then show for the Equity in Subsidiary Earnings, Retained Earnings, and Investment in Aaron accounts?
  - c. Assuming that Michael applied the equity method to this investment, how would the consolidation entries differ on a December 31, 2018, worksheet?
  - d. Assuming that Michael applied the equity method to this investment, how would the December 31, 2018, reported consolidated balances differ?
30. Giant acquired all of Small's common stock on January 1, 2014, in exchange for cash of \$770,000. On that day, Small reported common stock of \$170,000 and retained earnings of \$400,000. At the acquisition date, \$90,000 of the fair-value price was attributed to undervalued land while \$50,000 was assigned to undervalued equipment having a 10-year remaining life. The \$60,000 unallocated portion of the acquisition-date excess fair value over book value was viewed as goodwill. Over the next few years, Giant applied the equity method to the recording of this investment.
- Following are individual financial statements for the year ending December 31, 2018. On that date, Small owes Giant \$10,000. Small declared and paid dividends in the same period. Credits are indicated by parentheses.
- a. How was the \$135,000 Equity in Income of Small balance computed?
  - b. Without preparing a worksheet or consolidation entries, determine and explain the totals to be reported by this business combination for the year ending December 31, 2018.
  - c. Verify the amounts determined in part (b) by producing a consolidation worksheet for Giant and Small for the year ending December 31, 2018.

LO 3-1, 3-3, 3-6

**excel**

- d. If Giant determined that the entire amount of goodwill from its investment in Small was impaired in 2018, how would the parent's accounts reflect the impairment loss? How would the worksheet process change? What impact does an impairment loss have on consolidated financial statements?

	Giant	Small
Revenues . . . . .	\$(1,175,000)	\$ (360,000)
Cost of goods sold . . . . .	550,000	90,000
Depreciation expense . . . . .	172,000	130,000
Equity in income of Small. . . . .	(135,000)	–0–
Net income. . . . .	<u>\$ (588,000)</u>	<u>\$ (140,000)</u>
Retained earnings, 1/1/18. . . . .	\$(1,417,000)	\$ (620,000)
Net income (above) . . . . .	(588,000)	(140,000)
Dividends declared. . . . .	310,000	110,000
Retained earnings, 12/31/18 . . . . .	<u>\$ (1,695,000)</u>	<u>\$ (650,000)</u>
Current assets . . . . .	\$ 398,000	\$ 318,000
Investment in Small. . . . .	995,000	–0–
Land. . . . .	440,000	165,000
Buildings (net) . . . . .	304,000	419,000
Equipment (net) . . . . .	648,000	286,000
Goodwill . . . . .	–0–	–0–
Total assets . . . . .	<u>\$ 2,785,000</u>	<u>\$ 1,188,000</u>
Liabilities. . . . .	\$ (840,000)	\$ (368,000)
Common stock . . . . .	(250,000)	(170,000)
Retained earnings (above). . . . .	(1,695,000)	(650,000)
Total liabilities and equity . . . . .	<u>\$ (2,785,000)</u>	<u>\$ (1,188,000)</u>

## LO 3-1, 3-3a, 3-3b, 3-4

31. On January 1, 2017, Pinnacle Corporation exchanged \$3,200,000 cash for 100 percent of the outstanding voting stock of Strata Corporation. On the acquisition date, Strata had the following balance sheet:

Cash . . . . .	\$ 122,000	Accounts payable . . . . .	\$ 375,000
Accounts receivable. . . . .	283,000	Long-term debt . . . . .	2,655,000
Inventory. . . . .	350,000	Common stock . . . . .	1,500,000
Buildings (net) . . . . .	1,875,000	Retained earnings. . . . .	1,100,000
Licensing agreements . . . . .	3,000,000		<u>\$5,630,000</u>
	<u>\$5,630,000</u>		

Pinnacle prepared the following fair-value allocation:

Fair value of Strata (consideration transferred) . . . . .	\$3,200,000
Carrying amount acquired. . . . .	<u>2,600,000</u>
Excess fair value . . . . .	600,000
to buildings (undervalued). . . . .	\$300,000
to licensing agreements (overvalued). . . . .	<u>(100,000)</u>
to goodwill (indefinite life) . . . . .	<u>\$ 400,000</u>

At the acquisition date, Strata's buildings had a 10-year remaining life and its licensing agreements were due to expire in 5 years. At December 31, 2018, Strata's accounts payable included an \$85,000 current liability owed to Pinnacle. Strata Corporation continues its separate legal existence as a wholly owned subsidiary of Pinnacle with independent accounting records. Pinnacle employs the initial value method in its internal accounting for its investment in Strata.

The separate financial statements for the two companies for the year ending December 31, 2018, follow. Credit balances are indicated by parentheses.

	Pinnacle	Strata
Sales	\$ (7,000,000)	\$(3,000,000)
Cost of goods sold	4,650,000	1,700,000
Interest expense	255,000	160,000
Depreciation expense	585,000	350,000
Amortization expense		600,000
Dividend income	(50,000)	
Net income	<u>\$ (1,560,000)</u>	<u>\$ (190,000)</u>
Retained earnings 1/1/18	\$ (5,000,000)	\$(1,350,000)
Net income	(1,560,000)	(190,000)
Dividends declared	560,000	50,000
Retained earnings 12/31/18	<u>\$ (6,000,000)</u>	<u>\$(1,490,000)</u>
Cash	\$ 433,000	\$ 165,000
Accounts receivable	1,210,000	200,000
Inventory	1,235,000	1,500,000
Investment in Strata	3,200,000	
Buildings (net)	5,572,000	2,040,000
Licensing agreements		1,800,000
Goodwill	350,000	
Total assets	<u>\$ 12,000,000</u>	<u>\$ 5,705,000</u>
Accounts payable	\$ (300,000)	\$ (715,000)
Long-term debt	(2,700,000)	(2,000,000)
Common stock	(3,000,000)	(1,500,000)
Retained earnings 12/31/18	<u>(6,000,000)</u>	<u>(1,490,000)</u>
Total liabilities and OE	<u>\$ (12,000,000)</u>	<u>\$(5,705,000)</u>

- a. Prepare a worksheet to consolidate the financial information for these two companies.
  - b. Compute the following amounts that would appear on Pinnacle's 2018 separate (nonconsolidated) financial records if Pinnacle's investment accounting was based on the equity method.
    - Subsidiary income.
    - Retained earnings, 1/1/18.
    - Investment in Strata.
  - c. What effect does the parent's internal investment accounting method have on its consolidated financial statements?
32. Following are selected accounts for Mergaronite Company and Hill, Inc., as of December 31, 2018. Several of Mergaronite's accounts have been omitted. Credit balances are indicated by parentheses. Dividends were declared and paid in the same period.

	Mergaronite	Hill
Revenues	\$(600,000)	\$(250,000)
Cost of goods sold	280,000	100,000
Depreciation expense	120,000	50,000
Investment income	Not given	NA
Retained earnings, 1/1/18	(900,000)	(600,000)
Dividends declared	130,000	40,000
Current assets	200,000	690,000
Land	300,000	90,000
Buildings (net)	500,000	140,000
Equipment (net)	200,000	250,000
Liabilities	(400,000)	(310,000)
Common stock	(300,000)	(40,000)
Additional paid-in capital	(50,000)	(160,000)

LO 3-1, 3-3, 3-4

**excel**

Assume that Mergaronite took over Hill on January 1, 2014, by issuing 7,000 shares of common stock having a par value of \$10 per share but a fair value of \$100 each. On January 1, 2014, Hill's land was undervalued by \$20,000, its buildings were overvalued by \$30,000, and equipment was undervalued by \$60,000. The buildings had a 10-year remaining life; the equipment had a 5-year remaining life. A customer list with an appraised value of \$100,000 was developed internally by Hill and was to be written off over a 20-year period.

a. Determine and explain the December 31, 2018, consolidated totals for the following accounts:

Revenues	Amortization Expense	Customer List
Cost of Goods Sold	Buildings	Common Stock
Depreciation Expense	Equipment	Additional Paid-In Capital

b. In requirement (a), why can the consolidated totals be determined without knowing which method the parent used to account for the subsidiary?

c. If the parent uses the equity method, what consolidation entries would be used on a 2018 worksheet?

**LO 3-3, 3-4, 3-6**



33. On January 1, 2018, Brooks Corporation exchanged \$1,183,000 fair-value consideration for all of the outstanding voting stock of Chandler, Inc. At the acquisition date, Chandler had a book value equal to \$1,105,000. Chandler's individual assets and liabilities had fair values equal to their respective book values except for the patented technology account, which was undervalued by \$204,000 with an estimated remaining life of six years. The Chandler acquisition was Brooks's only business combination for the year.

In case expected synergies did not materialize, Brooks Corporation wished to prepare for a potential future spin-off of Chandler, Inc. Therefore, Brooks had Chandler maintain its separate incorporation and independent accounting information system as elements of continuing value.

On December 31, 2018, each company submitted the following financial statements for consolidation. Dividends were declared and paid in the same period. Parentheses indicated credit balances.

	Brooks Corp.	Chandler Inc.
<b>Income Statement</b>		
Revenues . . . . .	\$ (640,000)	\$ (587,000)
Cost of goods sold . . . . .	255,000	203,000
Gain on bargain purchase . . . . .	(126,000)	–0–
Depreciation and amortization . . . . .	150,000	151,000
Equity earnings from Chandler . . . . .	(199,000)	–0–
Net income . . . . .	<u>\$ (560,000)</u>	<u>\$ (233,000)</u>
<b>Statement of Retained Earnings</b>		
Retained earnings, 1/1 . . . . .	\$(1,835,000)	\$ (805,000)
Net income (above) . . . . .	(560,000)	(233,000)
Dividends declared . . . . .	100,000	40,000
Retained earnings, 12/31 . . . . .	<u>\$(2,295,000)</u>	<u>\$ (998,000)</u>
<b>Balance Sheet</b>		
Current assets . . . . .	\$ 343,000	\$ 432,000
Investment in Chandler . . . . .	1,468,000	–0–
Trademarks . . . . .	134,000	221,000
Patented technology . . . . .	395,000	410,000
Equipment . . . . .	693,000	341,000
Total assets . . . . .	<u>\$ 3,033,000</u>	<u>\$ 1,404,000</u>
Liabilities . . . . .	\$ (203,000)	\$ (106,000)
Common stock . . . . .	(535,000)	(300,000)
Retained earnings, 12/31 . . . . .	(2,295,000)	(998,000)
Total liabilities and equity . . . . .	<u>\$(3,033,000)</u>	<u>\$(1,404,000)</u>

a. Show how Brooks determined the following account balances:

- Gain on bargain purchase.
- Earnings from Chandler.
- Investment in Chandler.

b. Prepare a December 31, 2018, consolidated worksheet for Brooks and Chandler.

LO 3-3a, 3-3b, 3-7



34. Branson paid \$465,000 cash for all of the outstanding common stock of Wolfpack, Inc., on January 1, 2017. On that date, the subsidiary had a book value of \$340,000 (common stock of \$200,000 and retained earnings of \$140,000), although various unrecorded royalty agreements (10-year remaining life) were assessed at a \$100,000 fair value. Any remaining excess fair value was considered goodwill.

In negotiating the acquisition price, Branson also promised to pay Wolfpack’s former owners an additional \$50,000 if Wolfpack’s income exceeded \$120,000 total over the first two years after the acquisition. At the acquisition date, Branson estimated the probability-adjusted present value of this contingent consideration at \$35,000. On December 31, 2017, based on Wolfpack’s earnings to date, Branson increased the value of the contingency to \$40,000.

During the subsequent two years, Wolfpack reported the following amounts for income and dividends:

	Net Income	Dividends Declared
2017	\$65,000	\$25,000
2018	75,000	35,000

In keeping with the original acquisition agreement, on December 31, 2018, Branson paid the additional \$50,000 performance fee to Wolfpack’s previous owners.

Prepare each of the following:

- a. Branson’s entry to record the acquisition of the shares of its Wolfpack subsidiary.
- b. Branson’s entries at the end of 2017 and 2018 to adjust its contingent performance obligation for changes in fair value and the December 31, 2018, payment.
- c. Consolidation worksheet entries as of December 31, 2018, assuming that Branson has applied the equity method.
- d. Consolidation worksheet entries as of December 31, 2018, assuming that Branson has applied the initial value method.

LO 3-3, 3-8

35. Allen Company acquired 100 percent of Bradford Company’s voting stock on January 1, 2014, by issuing 10,000 shares of its \$10 par value common stock (having a fair value of \$14 per share). As of that date, Bradford had stockholders’ equity totaling \$105,000. Land shown on Bradford’s accounting records was undervalued by \$10,000. Equipment (with a five-year remaining life) was undervalued by \$5,000. A secret formula developed by Bradford was appraised at \$20,000 with an estimated life of 20 years.

Following are the separate financial statements for the two companies for the year ending December 31, 2018. There were no intra-entity payables on that date. Credit balances are indicated by parentheses.

	Allen Company	Bradford Company
Revenues	\$ (485,000)	\$(190,000)
Cost of goods sold	160,000	70,000
Depreciation expense	130,000	52,000
Subsidiary earnings	(66,000)	–0–
Net income	<u>\$ (261,000)</u>	<u>\$(68,000)</u>
Retained earnings, 1/1/18	\$ (659,000)	\$ (98,000)
Net income (above)	(261,000)	(68,000)
Dividends declared	175,500	40,000
Retained earnings, 12/31/18	<u>\$ (744,500)</u>	<u>\$(126,000)</u>
Current assets	\$ 268,000	\$ 75,000
Investment in Bradford Company	216,000	–0–
Land	427,500	58,000
Buildings and equipment (net)	713,000	161,000
Total assets	<u>\$ 1,624,500</u>	<u>\$ 294,000</u>
Current liabilities	\$ (190,000)	\$(103,000)
Common stock	(600,000)	(60,000)
Additional paid-in capital	(90,000)	(5,000)
Retained earnings, 12/31/18	(744,500)	(126,000)
Total liabilities and equity	<u>\$(1,624,500)</u>	<u>\$(294,000)</u>



LO 3-3a

**excel**

- a. Explain how Allen derived the \$66,000 balance in the Subsidiary Earnings account.
- b. Prepare a worksheet to consolidate the financial information for these two companies.
36. Tyler Company acquired all of Jasmine Company's outstanding stock on January 1, 2016, for \$206,000 in cash. Jasmine had a book value of only \$140,000 on that date. However, equipment (having an eight-year remaining life) was undervalued by \$54,400 on Jasmine's financial records. A building with a 20-year remaining life was overvalued by \$10,000. Subsequent to the acquisition, Jasmine reported the following:

	Net Income	Dividends Declared
2016	\$50,000	\$10,000
2017	60,000	40,000
2018	30,000	20,000

In accounting for this investment, Tyler has used the equity method. Selected accounts taken from the financial records of these two companies as of December 31, 2018, follow:

	Tyler Company	Jasmine Company
Revenues—operating	\$(310,000)	\$(104,000)
Expenses	198,000	74,000
Equipment (net)	320,000	50,000
Buildings (net)	220,000	68,000
Common stock	(290,000)	(50,000)
Retained earnings, 12/31/18	(410,000)	(160,000)

Determine and explain the following account balances as of December 31, 2018:

- a. Investment in Jasmine Company (on Tyler's individual financial records).
- b. Equity in Subsidiary Earnings (on Tyler's individual financial records).
- c. Consolidated Net Income.
- d. Consolidated Equipment (net).
- e. Consolidated Buildings (net).
- f. Consolidated Goodwill (net).
- g. Consolidated Common Stock.
- h. Consolidated Retained Earnings, 12/31/18.
37. On January 1, 2017, Procise Corporation acquired 100 percent of the outstanding voting stock of GaugeRite Corporation for \$1,980,000 cash. On the acquisition date, GaugeRite had the following balance sheet:

Cash	\$ 14,000	Accounts payable	\$ 120,000
Accounts receivable	100,000	Long-term debt	930,000
Land	700,000	Common stock	1,000,000
Equipment (net)	1,886,000	Retained earnings	650,000
	<u>\$2,700,000</u>		<u>\$2,700,000</u>

At the acquisition date, the following allocation was prepared:

Fair value of consideration transferred		\$1,980,000
Book value acquired		1,650,000
Excess fair value over book value		330,000
To in-process research and development	\$44,000	
To equipment (8-year remaining life)	56,000	100,000
To goodwill (indefinite life)		<u>\$ 230,000</u>

Although at acquisition date Procise had expected \$44,000 in future benefits from GaugeRite's in-process research and development project, by the end of 2017 it was apparent that the research project was a failure with no future economic benefits.

LO 3-3

**excel**

On December 31, 2018, Procise and GaugeRite submitted the following trial balances for consolidation. There were no intra-entity payables on that date.

	Procise	GaugeRite
Sales .....	\$ (3,500,000)	\$ (1,000,000)
Cost of goods sold .....	1,600,000	630,000
Depreciation expense .....	350,000	130,000
Other operating expenses .....	190,000	30,000
Subsidiary income .....	(203,000)	–0–
Net income .....	<u>\$ (1,563,000)</u>	<u>\$ (210,000)</u>
Retained earnings 1/1/18 .....	\$ (3,000,000)	\$ (800,000)
Net income .....	(1,563,000)	(210,000)
Dividends declared .....	200,000	25,000
Retained earnings 12/31/18 .....	<u>\$ (4,363,000)</u>	<u>\$ (985,000)</u>
Cash .....	\$ 228,000	\$ 50,000
Accounts receivable .....	840,000	155,000
Inventory .....	900,000	580,000
Investment in GaugeRite .....	2,257,000	–0–
Land .....	3,500,000	700,000
Equipment (net) .....	4,785,000	1,700,000
Goodwill .....	290,000	–0–
Total assets .....	<u>\$ 12,800,000</u>	<u>\$ 3,185,000</u>
Accounts payable .....	\$ (193,000)	\$ (400,000)
Long-term debt .....	(3,094,000)	(800,000)
Common stock .....	(5,150,000)	(1,000,000)
Retained earnings 12/31/18 .....	<u>(4,363,000)</u>	<u>(985,000)</u>
Total liabilities and equities .....	<u>\$ (12,800,000)</u>	<u>\$ (3,185,000)</u>

- Show how Procise derived its December 31, 2018, Investment in GaugeRite account balance.
- Explain the treatment of the acquired in-process research and development.
- Prepare a consolidated worksheet for Procise and GaugeRite as of December 31, 2018.

38. On January 1, Prine, Inc., acquired 100 percent of Lydia Company's common stock for a fair value of \$120,000,000 in cash and stock. Lydia's assets and liabilities equaled their fair values except for its equipment, which was undervalued by \$500,000 and had a 10-year remaining life.

Prine specializes in media distribution and viewed its acquisition of Lydia as a strategic move into content ownership and creation. Prine expected both cost and revenue synergies from controlling Lydia's artistic content (a large library of classic movies) and its sports programming specialty video operation. Accordingly, Prine allocated Lydia's assets and liabilities (including \$50,000,000 of goodwill) to a newly formed operating segment appropriately designated as a reporting unit.

The fair values of the reporting unit's identifiable assets and liabilities through the first year of operations were as follows.

Account	Fair Values	
	1/1	12/31
Cash .....	\$ 215,000	\$ 109,000
Receivables (net) .....	525,000	897,000
Movie library (25-year remaining life) .....	40,000,000	60,000,000
Broadcast licenses (indefinite life) .....	15,000,000	20,000,000
Equipment (10-year remaining life) .....	20,750,000	19,000,000
Current liabilities .....	(490,000)	(650,000)
Long-term debt .....	(6,000,000)	(6,250,000)

However, Lydia's assets have taken longer than anticipated to produce the expected synergies with Prine's operations. Accordingly, Prine reviewed events and circumstances and concluded that Lydia's fair value was likely less than its carrying amount. At year-end, Prine reduced its assessment of the Lydia reporting unit's fair value to \$110,000,000.

LO 3-4a, 3-6

**excel**

At December 31, Prine and Lydia submitted the following balances for consolidation. There were no intra-entity payables on that date.

	Prine, Inc.	Lydia Co.
Revenues . . . . .	\$ (18,000,000)	\$(12,000,000)
Operating expenses . . . . .	10,350,000	11,800,000
Equity in Lydia earnings . . . . .	(150,000)	
Dividends declared . . . . .	300,000	80,000
Retained earnings, 1/1 . . . . .	(52,000,000)	(2,000,000)
Cash . . . . .	260,000	109,000
Receivables (net) . . . . .	210,000	897,000
Investment in Lydia . . . . .	120,070,000	
Broadcast licenses . . . . .	350,000	14,014,000
Movie library . . . . .	365,000	45,000,000
Equipment (net) . . . . .	136,000,000	17,500,000
Current liabilities . . . . .	(755,000)	(650,000)
Long-term debt . . . . .	(22,000,000)	(7,250,000)
Common stock . . . . .	(175,000,000)	(67,500,000)

- What is the relevant initial test to determine whether goodwill could be impaired?
- At what amount should Prine record an impairment loss for its Lydia reporting unit for the year?
- What is consolidated net income for the year?
- What is the December 31 consolidated balance for goodwill?
- What is the December 31 consolidated balance for broadcast licenses?
- Prepare a consolidated worksheet for Prine and Lydia (Prine's trial balance should first be adjusted for any appropriate impairment loss).

### Appendix Problems

LO 3-8

39. Briefly discuss the cost savings that may result from a private company electing to amortize goodwill as opposed to annual impairment testing.

LO 3-8

40. Angela Corporation (a private company) acquired all of the outstanding voting stock of Eddy Tech, Inc., on January 1, 2018, in exchange for \$9,000,000 in cash. At the acquisition date, Eddy Tech's stockholders' equity was \$7,200,000 including retained earnings of \$3,000,000.

At the acquisition date, Angela prepared the following fair value allocation schedule for its newly acquired subsidiary:

Consideration transferred . . . . .		\$9,000,000
Eddy's stockholder's equity . . . . .		7,200,000
Excess fair over book value . . . . .		<u>\$1,800,000</u>
to patented technology (5-year remaining life) . . . . .	\$ 150,000	
to trade names (indefinite remaining life) . . . . .	500,000	
to equipment (8-year remaining life) . . . . .	<u>50,000</u>	700,000
Goodwill . . . . .		<u>\$1,100,000</u>

At the end of 2018, Angela and Eddy Tech report the following amounts from their individually maintained account balances, before consideration of their parent-subsidiary relationship. Parentheses indicate a credit balance.

	Angela	Eddy Tech
Sales . . . . .	(7,850,000)	(2,400,000)
Cost of goods sold . . . . .	4,200,000	1,300,000
Depreciation expense . . . . .	425,000	48,000
Amortization expense . . . . .	250,000	12,000
Other operating expenses . . . . .	75,000	53,750
Net income . . . . .	(2,900,000)	(986,250)

### Required:

Prepare a 2018 consolidated income statement for Angela and its subsidiary Eddy Tech. Assume that Angela, as a private company, elects to amortize goodwill over a 10-year period.

## Develop Your Skills



### RESEARCH CASE

Jonas Tech Corporation recently acquired Innovation Plus Company. The combined firm consists of three related businesses that will serve as reporting units. In connection with the acquisition, Jonas requests your help with the following asset valuation and allocation issues. Support your answers with references to FASB ASC as appropriate.

Jonas recognizes several identifiable intangibles from its acquisition of Innovation Plus. It expresses the desire to have these intangible assets written down to zero in the acquisition period.

The price Jonas paid for Innovation Plus indicates that it paid a large amount for goodwill. However, Jonas worries that any future goodwill impairment may send the wrong signal to its investors about the wisdom of the Innovation Plus acquisition. Jonas thus wishes to allocate the combined goodwill of all of its reporting units to one account called *Enterprise Goodwill*. In this way, Jonas hopes to minimize the possibility of goodwill impairment because a decline in goodwill in one business unit could be offset by an increase in the value of goodwill in another business unit.

#### Required

1. Advise Jonas on the acceptability of its suggested immediate write-off of its identifiable intangibles.
2. Indicate the relevant factors to consider in allocating the value assigned to identifiable intangibles acquired in a business combination to expense over time.
3. Advise Jonas on the acceptability of its suggested treatment of goodwill.
4. Indicate the relevant factors to consider in allocating goodwill across an enterprise's business units.

### MICROSOFT IMPAIRMENT ANALYSIS CASE

In 2015 Microsoft Corporation reported a \$5.1 billion charge for the impairment of goodwill and a \$2.2 billion charge for the impairment of intangible assets in one of its reporting units (segments) in its 10-K annual report. Referring to Microsoft's 2015 financial statements and any other information from the media, address the following:

1. Microsoft's segments serve as its reporting units for assessing goodwill for potential impairments. Which segment suffered a 2015 impairment? Describe the revenue model for this segment.
2. What were the underlying business reasons that required Microsoft to record a goodwill impairment in 2015?
3. How did Microsoft reflect the 2015 goodwill impairment in its income statement and cash flow statement?
4. Describe in your own words the goodwill impairment testing steps performed by Microsoft in 2015 and the consequent loss measurement.

### FASB ASC AND IASB RESEARCH CASE

A vice president for operations at Poncho Platforms asks for your help on a financial reporting issue concerning goodwill. Two years ago, the company suffered a goodwill impairment loss for its Chip Integration reporting unit. Since that time, however, the Chip Integration unit has recovered nicely and its current cash flows (and projected cash flows) are at an all-time high. The vice president now asks whether the goodwill loss can be reversed given the reversal of fortunes for the Chip Integration reporting unit.

1. Is impairment of goodwill reversible under U.S. GAAP? How about under IFRS? (Refer to FASB Topic 350, "Intangibles—Goodwill and Other," and IAS 36, "Impairment of Assets.")
2. Are goodwill impairment testing procedures the same under IFRS and U.S. GAAP? If not, how is goodwill tested for impairment under IFRS? (Refer to IAS 36, "Impairment of Assets.")

## EXCEL CASE 1



On January 1, 2017, Innovus, Inc., acquired 100 percent of the common stock of ChipTech Company for \$670,000 in cash and other fair-value consideration. ChipTech's fair value was allocated among its net assets as follows:

Fair value of consideration transferred for ChipTech		\$670,000
Book value of ChipTech:		
Common stock and Additional Paid-In Capital (APIC)	\$130,000	
Retained earnings	370,000	500,000
Excess fair value over book value to		170,000
Trademark (10-year remaining life)	\$ 40,000	
Existing technology (5-year remaining life)	80,000	120,000
Goodwill		<u>\$ 50,000</u>

The December 31, 2018, trial balances for the parent and subsidiary follow (there were no intra-entity payables on that date):

	Innovus	ChipTech
Revenues . . . . .	\$ (990,000)	\$ (210,000)
Cost of goods sold . . . . .	500,000	90,000
Depreciation expense . . . . .	100,000	5,000
Amortization expense . . . . .	55,000	18,000
Dividend income . . . . .	(40,000)	–0–
Net income . . . . .	<u>\$ (375,000)</u>	<u>\$ (97,000)</u>
Retained earnings 1/1/18 . . . . .	\$ (1,555,000)	\$ (450,000)
Net income . . . . .	(375,000)	(97,000)
Dividends declared . . . . .	250,000	40,000
Retained earnings 12/31/18 . . . . .	<u>\$ (1,680,000)</u>	<u>\$ (507,000)</u>
Current assets . . . . .	\$ 960,000	\$ 355,000
Investment in ChipTech . . . . .	670,000	
Equipment (net) . . . . .	765,000	225,000
Trademark . . . . .	235,000	100,000
Existing technology . . . . .	–0–	45,000
Goodwill . . . . .	450,000	–0–
Total assets . . . . .	<u>\$ 3,080,000</u>	<u>\$ 725,000</u>
Liabilities . . . . .	\$ (780,000)	(88,000)
Common stock . . . . .	(500,000)	(100,000)
Additional paid-in capital . . . . .	(120,000)	(30,000)
Retained earnings 12/31/18 . . . . .	<u>(1,680,000)</u>	<u>(507,000)</u>
Total liabilities and equity . . . . .	<u>\$ (3,080,000)</u>	<u>\$ (725,000)</u>

### Required

- Using Excel, compute consolidated balances for Innovus and ChipTech. Either use a worksheet approach or compute the balances directly.
- Prepare a second spreadsheet that shows a 2018 impairment loss for the entire amount of goodwill from the ChipTech acquisition.

## EXCEL CASE 2



On January 1, 2017, Hi-Speed.com acquired 100 percent of the common stock of Wi-Free Co. for cash of \$730,000. The consideration transferred was allocated among Wi-Free's net assets as follows:

Wi-Free fair value (cash paid by Hi-Speed)		\$730,000
Book value of Wi-Free:		
Common stock and additional paid-in capital (APIC)	\$130,000	
Retained earnings	370,000	500,000
Excess fair value over book value to		230,000
In-process R&D	\$ 75,000	
Computer software (overvalued)	(30,000)	
Internet domain name	120,000	165,000
Goodwill		<u>\$ 65,000</u>

At the acquisition date, the computer software had a 4-year remaining life, and the Internet domain name was estimated to have a 10-year remaining life. By the end of 2017, it became clear that the acquired in-process research and development would yield no economic benefits and Hi-Speed.com recognized an impairment loss. At December 31, 2018, Wi-Free's accounts payable included a \$30,000 amount owed to Hi-Speed.

The December 31, 2018, trial balances for the parent and subsidiary follow:

	Hi-Speed.com	Wi-Free Co.
Revenues . . . . .	\$ (1,100,000)	\$ (325,000)
Cost of goods sold . . . . .	625,000	122,000
Depreciation expense . . . . .	140,000	12,000
Amortization expense . . . . .	50,000	11,000
Equity in subsidiary earnings . . . . .	(175,500)	–0–
Net income . . . . .	<u>\$ (460,500)</u>	<u>\$ (180,000)</u>
Retained earnings 1/1/18 . . . . .	\$ (1,552,500)	\$ (450,000)
Net income . . . . .	(460,500)	(180,000)
Dividends declared . . . . .	250,000	50,000
Retained earnings 12/31/18	<u>\$ (1,763,000)</u>	<u>\$ (580,000)</u>
Current assets . . . . .	\$ 1,034,000	\$ 345,000
Investment in Wi-Free . . . . .	856,000	–0–
Equipment (net) . . . . .	713,000	305,000
Computer software . . . . .	650,000	130,000
Internet domain name . . . . .	–0–	100,000
Goodwill . . . . .	–0–	–0–
Total assets . . . . .	<u>\$ 3,253,000</u>	<u>\$ 880,000</u>
Liabilities . . . . .	\$ (870,000)	\$ (170,000)
Common stock . . . . .	(500,000)	(110,000)
Additional paid-in capital . . . . .	(120,000)	(20,000)
Retained earnings 12/31/18 . . . . .	(1,763,000)	(580,000)
Total liabilities and equity . . . . .	<u>\$ (3,253,000)</u>	<u>\$ (880,000)</u>

### Required

- Using Excel, prepare calculations showing how Hi-Speed derived the \$856,000 amount for its investment in Wi-Free.
- Using Excel, compute consolidated balances for Hi-Speed and Wi-Free. Either use a worksheet approach or compute the balances directly.

## Computer Project

### Alternative Investment Methods, Goodwill Impairment, and Consolidated Financial Statements

In this project, you are to provide an analysis of alternative accounting methods for controlling interest investments and subsequent effects on consolidated reporting. The project requires the use of a computer and a spreadsheet software package (e.g., Microsoft Excel, etc.). The use of these tools allows you

to assess the sensitivity of alternative accounting methods on consolidated financial reporting without preparing several similar worksheets by hand. Also, by modeling a worksheet process, you can develop a better understanding of accounting for combined reporting entities.

### **Consolidated Worksheet Preparation**

You will be creating and entering formulas to complete four worksheets. The first objective is to demonstrate the effect of different methods of accounting for the investments (equity, initial value, and partial equity) on the parent company's trial balance and on the consolidated worksheet subsequent to acquisition. The second objective is to show the effect on consolidated balances and key financial ratios of recognizing a goodwill impairment loss.

The project requires preparation of the following four separate worksheets:

- a. Consolidated information worksheet (follows).
- b. Equity method consolidation worksheet.
- c. Initial value method consolidation worksheet.
- d. Partial equity method consolidation worksheet.

If your spreadsheet package has multiple worksheet capabilities (e.g., Excel), you can use separate worksheets; otherwise, each of the four worksheets can reside in a separate area of a single spreadsheet.

**In formulating your solution, each worksheet should link directly to the first worksheet.** Also, feel free to create supplemental schedules to enhance the capabilities of your worksheet.

### **Project Scenario**

Pecos Company acquired 100 percent of Suaro's outstanding stock for \$1,450,000 cash on January 1, 2017, when Suaro had the following balance sheet:

<b>Assets</b>		<b>Liabilities and Equity</b>	
Cash .....	\$ 37,000	Liabilities .....	\$(422,000)
Receivables .....	82,000	Common stock .....	(350,000)
Inventory .....	149,000	Retained earnings .....	(126,000)
Land .....	90,000		
Equipment (net) .....	225,000		
Software .....	315,000		
Total assets .....	<u>\$898,000</u>	Total liabilities and equity ...	<u>\$(898,000)</u>

At the acquisition date, the fair values of each identifiable asset and liability that differed from book value were as follows:

Land	\$ 80,000	
Brand name	60,000	(indefinite life—unrecognized on Suaro's books)
Software	415,000	(2-year estimated remaining useful life)
In-process R&D	300,000	

### **Additional Information**

- Although at acquisition date Pecos expected future benefits from Suaro's in-process research and development (R&D), by the end of 2017 it became clear that the research project was a failure with no future economic benefits.
- During 2017, Suaro earns \$75,000 and pays no dividends.
- Selected amounts from Pecos and Suaro's separate financial statements at December 31, 2018, are presented in the consolidated information worksheet. All consolidated worksheets are to be prepared as of December 31, 2018, two years subsequent to acquisition.
- Pecos's January 1, 2018, Retained Earnings balance—before any effect from Suaro's 2017 income—is \$(930,000) (credit balance).
- Pecos has 500,000 common shares outstanding for EPS calculations and reported \$2,943,100 for consolidated assets at the beginning of the period.

Following is the consolidated information worksheet.

	A	B	C	D
1	<b>December 31, 2018, trial balances</b>			
2				
3		<b>Pecos</b>	<b>Suaro</b>	
4	Revenues	\$ (1,052,000)	\$ (427,000)	
5	Operating expenses	821,000	262,000	
6	Goodwill impairment loss	?		
7	Income of Suaro	<u>?</u>		
8	Net income	?	<u>\$ (165,000)</u>	
9				
10	Retained earnings—Pecos 1/1/18	?		
11	Retained earnings—Suaro 1/1/18		(201,000)	
12	Net income (above)	?	(165,000)	
13	Dividends declared	<u>200,000</u>	<u>35,000</u>	
14	Retained earnings 12/31/18	<u>?</u>	<u>\$ (331,000)</u>	
15				
16	Cash	195,000	95,000	
17	Receivables	247,000	143,000	
18	Inventory	415,000	197,000	
19	Investment in Suaro	?		
20				
21				
22				
23	Land	341,000	85,000	
24	Equipment (net)	240,100	100,000	
25	Software		312,000	
26	Other intangibles	145,000		
27	Goodwill			
28	Total assets	<u>?</u>	<u>\$ 932,000</u>	
29				
30	Liabilities	(1,537,100)	(251,000)	
31	Common stock	(500,000)	(350,000)	
32	Retained earnings (above)	?	(331,000)	
33	Total liabilities and equity	<u>?</u>	<u>\$ (932,000)</u>	
34				
35	Fair-value allocation schedule			
36	Price paid	1,450,000		
37	Book value	<u>476,000</u>		
38	Excess initial value	974,000	Amortizations	
39	to land	(10,000)	2017	2018
40	to brand name	60,000	?	?

(continued)



(continued)

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
41	to software	100,000	?	?
42	to IPR&D	300,000	?	?
43	to goodwill	524,000	?	?
44				
45	Suaro's RE changes	Income	Dividends	
46	2017	75,000	0	
47	2018	165,000	35,000	

### Project Requirements

Complete the four worksheets as follows:

- Input the **consolidated information worksheet** provided and complete the fair-value allocation schedule by computing the excess amortizations for 2017 and 2018.
- Using separate worksheets, prepare Pecos's trial balances for each of the indicated accounting methods (equity, initial value, and partial equity). **Use only formulas for the Investment in Suaro, the Income of Suaro, and Retained Earnings accounts.**
- Using references to other cells only (either from the consolidated information worksheet or from the separate method sheets), prepare for each of the three consolidation worksheets:**
  - Adjustments and eliminations.
  - Consolidated balances.
- Calculate and present the effects of a 2018 total goodwill impairment loss on the following ratios for the consolidated entity:
  - Earnings per share (EPS).
  - Return on assets.
  - Return on equity.
  - Debt to equity.

Your worksheets should have the capability to adjust immediately for the possibility that all acquisition goodwill can be considered impaired in 2018.
- Prepare a word-processed report that describes and discusses the following worksheet results:**
  - The effects of alternative investment accounting methods on the parent's trial balances and the final consolidation figures.
  - The relation between consolidated retained earnings and the parent's retained earnings under each of the three (equity, initial value, partial equity) investment accounting methods.
  - The effect on EPS, return on assets, return on equity, and debt-to-equity ratios of the recognition that all acquisition-related goodwill is considered impaired in 2018.

# Consolidated Financial Statements and Outside Ownership

**W**al-Mart Stores, Inc. (Walmart), in its 2015 consolidated financial statements, includes the accounts of the company and all of its subsidiaries in which a controlling interest is maintained. For those consolidated subsidiaries where Walmart's ownership is less than 100 percent, the outside stockholders' interests are shown as *noncontrolling interests* in the stockholders' equity section of its consolidated balance sheet. On its consolidated income statement, Walmart also allocates a share of the consolidated net income to the noncontrolling interest.

A number of reasons exist for one company to hold less than 100 percent ownership of a subsidiary. The parent might not have had sufficient resources available to obtain all of the outstanding stock. As a second possibility, a few subsidiary stockholders may elect to retain their ownership, perhaps in hope of getting a better price at a later date.

Lack of total ownership is frequently encountered with foreign subsidiaries. The laws of some countries prohibit outsiders from maintaining complete control of domestic business enterprises. In other areas of the world, a parent can seek to establish better relations with a subsidiary's employees, customers, and local government by maintaining some percentage of native ownership.

## LO 4-1

Understand that business combinations can occur with less than complete ownership.

Regardless of the reason for owning less than 100 percent, the parent consolidates the financial data of every subsidiary when control is present. As discussed in Chapter 2, *complete ownership is not a prerequisite for*

*consolidation*. A single economic entity is formed whenever one company is able to control the decision-making process of another.

Although most parent companies own 100 percent of their subsidiaries, a significant number, such as Walmart, establish control with a lesser amount of stock. The remaining outside owners are collectively referred to as a *noncontrolling interest*, which replaces the traditional term *minority interest*.<sup>1</sup> The presence of these other stockholders poses a number of reporting questions for the accountant. Whenever less than 100 percent of

<sup>1</sup>The term *minority interest* had been used almost universally to identify the presence of other outside owners. However, current GAAP refers to these outside owners as the noncontrolling interest. Because this term is more descriptive, it is used throughout this textbook.

## Learning Objectives

**After studying this chapter, you should be able to:**

- LO 4-1** Understand that business combinations can occur with less than complete ownership.
- LO 4-2** Describe the concepts and valuation principles underlying the acquisition method of accounting for the noncontrolling interest.
- LO 4-3** Allocate goodwill acquired in a business combination across the controlling and noncontrolling interests.
- LO 4-4** Demonstrate the computation and allocation of consolidated net income in the presence of a noncontrolling interest.
- LO 4-5** Identify and calculate the four noncontrolling interest figures that must be included within the consolidation process and prepare a consolidation worksheet in the presence of a noncontrolling interest.
- LO 4-6** Identify appropriate placements for the components of the noncontrolling interest in consolidated financial statements.
- LO 4-7** Determine the effect on consolidated financial statements of a control premium paid by the parent.
- LO 4-8** Understand the impact on consolidated financial statements of a midyear acquisition.
- LO 4-9** Understand the impact on consolidated financial statements when a step acquisition has taken place.
- LO 4-10** Record the sale of a subsidiary (or a portion of its shares).

a subsidiary's voting stock is held, how should the subsidiary's accounts be valued within consolidated financial statements? How should the presence of these additional owners be acknowledged?

### LO 4-2

Describe the concepts and valuation principles underlying the acquisition method of accounting for the noncontrolling interest.

## Consolidated Financial Reporting in the Presence of a Noncontrolling Interest

### *Noncontrolling Interest Defined*

The authoritative accounting literature defines a noncontrolling interest as follows:

The ownership interests in the subsidiary that are held by owners other than the parent is a noncontrolling interest. The noncontrolling interest in a subsidiary is part of the equity of the consolidated group. (FASB ASC 810-10-45-15)

When a parent company acquires a controlling ownership interest with less than 100 percent of a subsidiary's voting shares, it must account for the noncontrolling shareholders' interest in its consolidated financial statements. The noncontrolling interest represents an additional set of owners who have legal claim to the subsidiary's net assets.

Exhibit 4.1 provides a framework for introducing several fundamental challenges in accounting and reporting for a noncontrolling interest. The issues focus on how the parent, in its consolidated financial statements, should

- Recognize the subsidiary's assets and liabilities.
- Assign values to the subsidiary's assets and liabilities.
- Value and disclose the presence of the other owners.

The acquisition method's solution to these challenges involves both the *economic unit concept* and *fair value*. First, the economic unit concept views the parent and subsidiary companies as a single economic unit for financial reporting purposes. Thus, a controlled company must always be consolidated as a whole regardless of the parent's level of ownership. As shown in Exhibit 4.1, when a parent controls a subsidiary through a 70 percent ownership, the parent must consolidate 100 percent of the subsidiary's (and the parent's) assets and liabilities in order to reflect the single economic unit. The consolidated balance sheet then provides an owners' equity amount for the noncontrolling owners' interest—a recognition that the parent does not own 100 percent of the subsidiary's assets and liabilities.

The acquisition method also captures the subsidiary's acquisition-date fair values as the relevant attribute for reporting the financial effects of the business combination—including the noncontrolling interest. Fair values also provide for managerial accountability to investors and creditors for assessing the success or failure of the combination. In contrast, the parent's assets and liabilities remain at their previous carrying amounts.

### *Control and Accountability*

In acquiring a controlling interest, a parent company becomes responsible for managing all the subsidiary's assets and liabilities even though it may own only a partial interest. If a parent can control the business activities of its subsidiary, it directly follows that the parent

**EXHIBIT 4.1**  
Noncontrolling Interest—  
Date of Acquisition

PARENT AND 70% OWNED SUBSIDIARY COMPANIES	
Consolidated Balance Sheet	
Date of Acquisition	
Parent's assets (100%)	Parent's liabilities (100%)
<b>Subsidiary's assets (100%)</b>	<b>Subsidiary's liabilities (100%)</b>
	Parent company owners' equity
	• 100% of parent's net assets
	• <b>70% of subsidiary's net assets</b>
	<b>Noncontrolling owners' interest</b>
	• <b>30% of subsidiary net assets</b>

is accountable to its investors and creditors for all of the subsidiary's assets, liabilities, and profits. To provide a complete picture of the acquired subsidiary requires fair-value measurements for both the subsidiary as a whole and its individual assets and liabilities. Thus, for business combinations involving less-than-100 percent ownership, the acquirer recognizes and measures the following at the acquisition date:

- All subsidiary identifiable assets and liabilities at their full fair values.<sup>2</sup>
- Noncontrolling interest at fair value.
- Goodwill or a gain from a bargain purchase.

In concluding that consolidated statements involving a noncontrolling interest should initially show all of the subsidiary's assets and liabilities at their full fair values, the 2005 FASB exposure draft Business Combinations (para. B23.a.) observed:

The acquirer obtains control of the acquiree at the acquisition date and, therefore, becomes responsible and accountable for all of the acquiree's assets, liabilities, and activities, regardless of the percentage of its ownership in the investee.

... an important purpose of financial statements is to provide users with relevant and reliable information about the performance of the entity and the resources under its control. That applies regardless of the extent of the ownership interest a parent holds in a particular subsidiary. The Boards concluded that measurement at fair value enables users to better assess the cash generating abilities of the identifiable net assets acquired in the business combination and the accountability of management for the resources entrusted to it.

To summarize, even though a company acquires less than 100 percent of another firm, financial reporting standards require the parent to include 100 percent of the assets acquired and liabilities assumed. At the acquisition date, the parent measures at fair value both the subsidiary as a whole and its identifiable assets and liabilities. Also, the parent recognizes the noncontrolling interest at its acquisition-date fair value. However, as discussed below, measuring the fair value of the noncontrolling interest presents some special challenges.

### Subsidiary Acquisition-Date Fair Value in the Presence of a Noncontrolling Interest

When a parent company acquires a less-than-100 percent controlling interest in another firm, the acquisition method requires a determination of the acquisition-date fair value of the acquired firm for consolidated financial reporting. The total acquired firm fair value in the presence of a partial acquisition is the sum of the following two components at the acquisition date:

- The fair value of the controlling interest.
- The fair value of the noncontrolling interest.

The sum of these two components serves as the starting point for the parent in valuing and reporting the subsidiary acquisition. If the sum exceeds the collective fair values of the identifiable net assets acquired and liabilities assumed, then goodwill is recognized. Conversely, if the collective fair values of the identifiable net assets acquired and liabilities assumed exceed the total fair value, the acquirer recognizes a gain on bargain purchase.

Measurement of the controlling interest fair value remains straightforward in the vast majority of cases—the consideration transferred by the parent typically provides the best evidence of fair value of the acquirer's interest. However, there is no parallel consideration transferred available to value the noncontrolling interest. Therefore, the parent must employ other valuation techniques to estimate the fair value of the noncontrolling interest at the acquisition date.

Usually, a parent can rely on readily available market trading activity to provide a fair valuation for its subsidiary's noncontrolling interest. Market trading prices for the noncontrolling interest shares in the weeks before and after the acquisition provide an objective measure of their fair value. The fair value of these shares then becomes the initial basis for reporting the noncontrolling interest in consolidated financial statements.

<sup>2</sup>As noted in Chapter 2, exceptions to the fair-value measurement principle include deferred taxes, certain employee benefits, indemnification assets, reacquired rights, share-based awards, and assets held for sale.



## Discussion Question

The FASB received numerous comment letters during its deliberations prior to adopting the current financial accounting standards on business combinations. Many of these letters addressed the FASB's proposed (and ultimately accepted) use of the economic unit concept as a valuation basis for less-than-100-percent acquisitions. A sampling of these letters includes the following observations:

**Bob Laux, Microsoft:** Microsoft agrees with the Board that the principles underlying standards should strive to reflect the underlying economics of transactions and events. However, we do not believe the Board's conclusion that recognizing the entire economic value of the acquiree, regardless of the ownership interest in the acquiree at the acquisition date, reflects the underlying economics.

**Patricia A. Little, Ford Motor Company:** We agree that recognizing 100 percent of the fair value of the acquiree is appropriate. We believe that this is crucial in erasing anomalies which were created when only the incremental ownership acquired was fair valued and the minority interest was reflected at its carryover basis.

**Sharilyn Gasaway, Alltel Corporation:** One of the underlying principles . . . is that the acquirer should measure and recognize the fair value of the acquiree as a whole. If 100 percent of the ownership interests are acquired, measuring and recognizing 100 percent of the fair value is both appropriate and informative. However, if less than 100 percent of the ownership interests are acquired, recognizing the fair value of 100 percent of the business acquired is not representative of the value actually acquired. In the instance in which certain minority owners retain their ownership interest, recognizing the fair value of the minority interest does not provide sufficient benefit to financial statement users to justify the additional cost incurred to calculate that fair value.

**PricewaterhouseCoopers:** We agree that the noncontrolling interest should be recorded at its fair value when it is initially recorded in the consolidated financial statements. As such, when control is obtained in a single step, the acquirer would record 100 percent of the fair value of the assets acquired (including goodwill) and liabilities assumed.

**Loretta Cangialosi, Pfizer:** While we understand the motivation of the FASB to account for all elements of the acquisition transaction at fair value, we are deeply concerned about the practice issues that will result. The heavy reliance on expected value techniques, use of the hypothetical market participants, the lack of observable markets, and the obligation to affix values to "possible" and even "remote" scenarios, among other requirements, will all conspire to create a standard that will likely prove to be nonoperational, unauditible, representationally unfaithful, abuse-prone, costly, and of limited (and perhaps negative) shareholder value.

Do you think the FASB made the correct decision in requiring consolidated financial statements to recognize all of the subsidiary's assets and liabilities at fair value regardless of the percentage ownership acquired by the parent?

Acquirers frequently must pay a premium price per share to garner sufficient shares to ensure a controlling interest. A control premium, however, typically is needed only to acquire sufficient shares to obtain a controlling interest. The remaining (noncontrolling interest) shares no longer provide the added benefit of transferring control to the new owner, and, therefore, may sell at a price less than the shares that yielded control. For example, when Expedia, Inc. acquired its 63 percent controlling interest in Trivago, the fair value of the noncontrolling interest excluded any control premium. In discussing the Trivago acquisition, Expedia's 2015 annual report noted

The fair value of the 37% noncontrolling interest was estimated to be \$344 million at the time of acquisition based on the fair value per share, excluding the control premium. The control premium was derived directly based on the additional consideration paid to certain shareholders in order to obtain control. The additional consideration was determined to be the best estimate to represent the control premium as it was a premium paid only to the controlling shareholders.

Control premiums are properly included in the fair value of the controlling interest, but as the Expedia-Trivago combination demonstrates, they sometimes do not affect the fair values of the remaining subsidiary shares. Therefore, separate independent valuations for the controlling and noncontrolling interests are often needed for measuring the total fair value of the subsidiary.

In the absence of fair value evidence based on market trades, firms must turn to less objective measures of noncontrolling interest fair value. For example, comparable investments may be available to estimate fair value. Alternatively, valuation models based on subsidiary discounted cash flows or residual income projections can be employed to estimate the acquisition-date fair value of the noncontrolling interest. Finally, if a control premium is unlikely, the consideration paid by the parent can be used to imply a fair value for the entire subsidiary. The noncontrolling interest fair value is then simply measured as its percentage of this implied subsidiary total fair value.

### ***Noncontrolling Interest Fair Value as Evidenced by Market Trades***

In the majority of cases, direct evidence based on market activity in the outstanding subsidiary shares (not owned by the parent) will provide the best measure of acquisition-date fair value for the noncontrolling interest. For example, assume that Parker Corporation wished to acquire 9,000 of the 10,000 outstanding equity shares of Strong Company and projected substantial synergies from the proposed acquisition. Parker estimated that a 100 percent acquisition was not needed to extract these synergies. Also, Parker projected that financing more than a 90 percent acquisition would be too costly.

Parker then offered all of Strong's shareholders a premium price for up to 90 percent of the outstanding shares.<sup>3</sup> To induce a sufficient number of shareholders to sell, Parker needed to offer \$70 per share, even though the shares had been trading in the \$59 to \$61 range. During the weeks following the acquisition, the 10 percent noncontrolling interest in Strong Company continues to trade in the \$59 to \$61 range.

In this case, the \$70 per share price paid by Parker does not appear representative of the fair value of all the shares of Strong Company. The fact that the noncontrolling interest shares continue to trade around \$60 per share indicates a \$60,000 fair value for the 1,000 shares not owned by Parker. Therefore, the valuation of the noncontrolling interest is best evidenced by the traded fair value of Strong's shares, not the price paid by Parker.

The \$70 share price paid by Parker nonetheless represents a negotiated value for the 9,000 shares. In the absence of any evidence to the contrary, these shares owned by Parker have a fair value of \$630,000 incorporating the additional value Parker expects to extract from synergies with Strong. Thus the fair value of Strong is measured as the sum of the respective fair values of the controlling and noncontrolling interests as follows:

Fair value of controlling interest ( $\$70 \times 9,000$ shares) . . . . .	\$630,000
Fair value of noncontrolling interest ( $\$60 \times 1,000$ shares) . . . . .	<u>60,000</u>
Acquisition-date fair value of Strong Company . . . . .	<u>\$690,000</u>

At the acquisition date, Parker assessed the total fair value of Strong's identifiable net assets at \$600,000. Therefore, we compute goodwill as the excess of the acquisition-date fair value of the firm as a whole over the sum of the fair values of the identifiable net assets as follows:

Acquisition-date fair value of Strong Company . . . . .	\$690,000
Fair value of Strong Company's identifiable net assets . . . . .	<u>600,000</u>
Goodwill . . . . .	<u>\$ 90,000</u>

<sup>3</sup>A more detailed analysis of the effect of a control premium on consolidated financial reporting is presented later in this chapter.

**LO 4-3**

Allocate goodwill acquired in a business combination across the controlling and noncontrolling interests.

### ***Allocating Acquired Goodwill to the Controlling and Noncontrolling Interests***

To properly report ownership equity in consolidated financial statements, acquisition-date goodwill should be apportioned across the controlling and noncontrolling interests. The parent first allocates goodwill to its controlling interest for the excess of the fair value of the parent's equity interest over its share of the fair value of the identifiable net assets. Any remaining goodwill is then attributed to the noncontrolling interest. As a result, the allocated goodwill will not always be proportional to the percentages owned. Continuing the Parker and Strong example, all of the acquisition goodwill is allocated to the controlling interest as follows:

	Controlling Interest	Noncontrolling Interest	Total
Acquisition-date fair value of Strong Company . . .	\$630,000	\$60,000	\$690,000
Relative fair value of Strong's identifiable net assets (90% and 10% of \$600,000) . . . . .	<u>540,000</u>	<u>60,000</u>	<u>600,000</u>
Goodwill . . . . .	<u>\$ 90,000</u>	<u>\$ -0-</u>	<u>\$ 90,000</u>

In the unlikely event that the noncontrolling interest's proportionate share of the subsidiary's net asset fair values exceeds its total fair value, such an excess would serve to reduce the goodwill recognized by the parent. For example, if Strong's 10 percent noncontrolling interest had a fair value of \$55,000, Strong's total fair value would equal \$685,000, and goodwill (all allocated to the controlling interest) would decrease to \$85,000. Alternatively, if Strong's 10 percent noncontrolling interest had a fair value of \$70,000, Strong's total fair value would equal \$700,000. In this case, goodwill would equal \$100,000 with \$90,000 allocated to the controlling interest and \$10,000 allocated to the noncontrolling interest.

Finally, if the total fair value of the acquired firm is less than the collective sum of its identifiable net assets, a *bargain purchase* occurs. In such rare combinations, the parent recognizes the entire gain on bargain purchase in current income. In no case is any amount of the gain allocated to the noncontrolling interest.

### ***Noncontrolling Interest Fair Value Implied by Parent's Consideration Transferred***

In other cases, especially when a large percentage of the acquiree's voting stock is purchased, the consideration paid by the parent may be reflective of the acquiree's total fair value. For example, again assume Parker pays \$70 per share for 9,000 shares of Strong Company representing a 90 percent equity interest. Also assume that the remaining 1,000 noncontrolling interest shares are not actively traded. If there was no compelling evidence that the \$70 acquisition price was not representative of all of Strong's 10,000 shares, then it appears reasonable to estimate the fair value of the 10 percent noncontrolling interest using the price paid by Parker. The total fair value of Strong Company is then estimated at \$700,000 and allocated as follows:

Fair value of controlling interest (\$70 × 9,000 shares) . . . . .	\$630,000
Fair value of noncontrolling interest (\$70 × 1,000 shares) . . . . .	<u>70,000</u>
Acquisition-date fair value of Strong Company . . . . .	<u>\$700,000</u>

Note that in this case, because the price per share paid by the parent equals the noncontrolling interest per share fair value, goodwill is recognized proportionately across the two ownership groups. Assuming again that the collective fair value of Strong's identifiable net assets equals \$600,000, goodwill is recognized and allocated as follows:

**LO 4-4**

Demonstrate the computation and allocation of consolidated net income in the presence of a noncontrolling interest.

	Controlling Interest	Noncontrolling Interest	Total
Acquisition-date fair value of Strong Company . . . .	\$630,000	\$70,000	\$700,000
Relative fair value of Strong's identifiable net assets (90% and 10%) . . . . .	<u>540,000</u>	<u>60,000</u>	<u>600,000</u>
Goodwill . . . . .	<u>\$ 90,000</u>	<u>\$10,000</u>	<u>\$100,000</u>

### Allocating Consolidated Net Income to the Parent and Noncontrolling Interest

Consolidated net income measures the results of operations for the combined entity. Reflecting the economic unit concept, consolidated net income includes 100 percent of the parent's net income and 100 percent of the subsidiary's net income, adjusted for excess acquisition-date fair value over book value amortizations. Once consolidated net income is determined, it is then allocated to the parent company and the noncontrolling interests. Because the noncontrolling interests' ownership pertains only to the subsidiary, their share of consolidated net income is limited to a share of the subsidiary's net income adjusted for acquisition-date excess fair-value amortizations.<sup>4</sup>

To illustrate, again assume that Parker acquires 90 percent of Strong Company. Further assume that current year consolidated net income equals \$108,000 including \$10,000 of annual acquisition-date excess fair-value amortization. If Strong reports revenues of \$280,000 and expenses of \$160,000 based on its internal book values, then the noncontrolling interest share of Strong's income can be computed as follows:

Noncontrolling Interest in Subsidiary Strong Company Net Income	
Strong revenues . . . . .	\$280,000
Strong expenses . . . . .	<u>160,000</u>
Strong net income . . . . .	\$120,000
Excess acquisition-date fair-value amortization . . . . .	<u>10,000</u>
Strong net income adjusted for excess amortization . . . . .	\$110,000
Noncontrolling interest percentage . . . . .	<u>10%</u>
Noncontrolling interest share of adjusted subsidiary net income . . . . .	<u>\$ 11,000</u>

**The \$11,000 noncontrolling interest share of adjusted subsidiary net income is equivalent to the noncontrolling interest share of consolidated net income.** This figure is then simply subtracted from the combined entity's consolidated net income to derive the parent's interest in consolidated net income. Thus, the allocation is presented in Parker's consolidated financial statements as follows:

Consolidated Net Income Allocation	
Consolidated net income . . . . .	\$108,000
Less: Net income attributable to noncontrolling interest . . . . .	<u>11,000</u>
Net income attributable to parent (controlling interest) . . . . .	<u>\$ 97,000</u>

Note that the noncontrolling shareholders' portion of consolidated net income is limited to their 10 percent share of the adjusted *subsidiary* income. These shareholders own a 10 percent interest in the subsidiary company, but no ownership in the parent firm.<sup>5</sup>

<sup>4</sup> Adjusting the subsidiary net income for the excess fair-value amortizations recognizes that the noncontrolling interest represents equity in the subsidiary's net assets as remeasured to fair values on the acquisition date.

<sup>5</sup> In this text we assume that the relative ownership percentages of the parent and noncontrolling interest represent an appropriate basis for allocating adjusted subsidiary net income across ownership groups.



**LO 4-5**

Identify and calculate the four noncontrolling interest figures that must be included within the consolidation process, and prepare a consolidation worksheet in the presence of a noncontrolling interest.

## Partial Ownership Consolidations (Acquisition Method)

Having reviewed the basic concepts of accounting for a noncontrolling interest, we now concentrate on the mechanical aspects of the consolidation process when an outside ownership is present. More specifically, we examine consolidations for time periods subsequent to the date of acquisition to analyze the full range of accounting complexities created by a noncontrolling interest. As indicated previously, this discussion centers on the acquisition method as required under generally accepted accounting principles.

The acquisition method focuses on incorporating in the consolidated financial statements 100 percent of the subsidiary's assets and liabilities at their acquisition-date fair values. Note that subsequent to acquisition, changes in current fair values for assets and liabilities are not recognized.<sup>6</sup> Instead, the subsidiary assets acquired and liabilities assumed are reflected in future consolidated financial statements using their acquisition-date fair values net of subsequent excess fair value amortizations (or possibly reduced for impairment).

The presence of a noncontrolling interest does not dramatically alter the consolidation procedures presented in Chapter 3. The unamortized balance of the acquisition-date fair-value allocation must still be computed and included within the consolidated totals. Excess fair-value amortization expenses of these allocations are recognized each year as appropriate. Reciprocal balances are eliminated. Beyond these basic steps, the measurement and recognition of four noncontrolling interest balances add a new dimension to the process of consolidating financial information. The parent company must determine and then enter each of these figures when constructing a worksheet:

- Noncontrolling interest in the subsidiary as of the beginning of the current year.
- Net income attributable to the noncontrolling interest.
- Subsidiary dividends attributable to the noncontrolling interest.
- Noncontrolling interest as of the end of the year (found by combining the three balances above).

### Illustration—Partial Acquisition with No Control Premium

To illustrate, assume that King Company acquires 80 percent of Pawn Company's 100,000 outstanding voting shares on January 1, 2017, for \$9.75 per share or a total of \$780,000 cash consideration. Further assume that the 20 percent noncontrolling interest shares traded both before and after the acquisition date at an average of \$9.75 per share. The total fair value of Pawn to be used initially in consolidation is

Consideration transferred by King ( $\$9.75 \times 80,000$ shares) . . . . .	\$780,000
Noncontrolling interest fair value ( $\$9.75 \times 20,000$ shares) . . . . .	<u>195,000</u>
Pawn's acquisition-date fair value . . . . .	<u>\$975,000</u>

Thus King did not pay a control premium to acquire its share of Pawn—both sets of shares have identical per share fair values.

Exhibit 4.2 presents the book value of Pawn's accounts as well as the fair value of each asset and liability on the acquisition date. Pawn's total fair value is attributed to Pawn's assets and liabilities as shown in Exhibit 4.3. Annual amortization relating to these allocations also is included in this schedule. Although expense figures are computed for only the initial years, some amount of amortization is recognized in each of the 20 years following the acquisition (the life assumed for the patented technology).

Exhibit 4.3 shows first that all identifiable assets acquired and liabilities assumed are adjusted to their full individual fair values at the acquisition date. The noncontrolling

<sup>6</sup> Exceptions common to all firms (whether subject to consolidation or not) include recognizing changing fair values for marketable equity securities and other financial instruments.

**EXHIBIT 4.2**  
**Subsidiary Accounts—Date**  
**of Acquisition**

<b>PAWN COMPANY</b>			
<b>Account Balances</b>			
<b>January 1, 2017</b>			
	<b>Book Value</b>	<b>Fair Value</b>	<b>Difference</b>
Current assets . . . . .	\$ 440,000	\$440,000	\$ –0–
Trademarks (indefinite life)	260,000	320,000	60,000
Patented technology (20-year remaining life) . .	480,000	600,000	120,000
Equipment (10-year remaining life) . . . . .	110,000	100,000	(10,000)
Long-term liabilities (8 years to maturity) . . . . .	<u>(550,000)</u>	<u>(510,000)</u>	<u>40,000</u>
Net assets . . . . .	<u>\$ 740,000</u>	<u>\$950,000</u>	<u>\$210,000</u>
Common stock . . . . .	\$(230,000)		
Retained earnings, 1/1/17 . . . . .	(510,000)		

Note: Parentheses indicate a credit balance.

**EXHIBIT 4.3** Excess Fair-Value Allocations

<b>KING COMPANY AND 80% OWNED SUBSIDIARY PAWN COMPANY</b>			
<b>Fair-Value Allocation and Amortization</b>			
<b>January 1, 2017</b>			
	<b>Allocation</b>	<b>Remaining Life (years)</b>	<b>Annual Excess Amortizations</b>
Pawn's acquisition-date fair value (100%) . . . . .	\$975,000		
Pawn's acquisition-date book value (100%) . . . . .	(740,000)		
Fair value in excess of book value . . . . .	<u>\$235,000</u>		
Adjustments (100%) to . . . . .			
Trademarks . . . . .	\$ 60,000	indefinite	\$ –0–
Patented technology . . . . .	120,000	20	6,000
Equipment . . . . .	(10,000)	10	(1,000)
Long-term liabilities (8 years to maturity) . . . . .	40,000	8	5,000
Goodwill . . . . .	<u>\$ 25,000</u>	indefinite	<u>\$ –0–</u>
Annual amortizations of excess fair value over book value (initial years) . . . . .			<u>\$ 10,000</u>
<b>Goodwill Allocation to the Controlling and Noncontrolling Interests</b>			
	<b>Controlling Interest</b>	<b>Noncontrolling Interest</b>	<b>Total</b>
Fair value at acquisition date . . . . .	\$780,000	\$195,000	\$975,000
Relative fair value of Pawn's identifiable net assets (80% and 20%) . . . . .	<u>760,000</u>	<u>190,000</u>	<u>950,000</u>
Goodwill . . . . .	<u>\$ 20,000</u>	<u>\$ 5,000</u>	<u>\$ 25,000</u>

interest will share proportionately in these fair-value adjustments. Exhibit 4.3 also shows that any excess fair value not attributable to Pawn's identifiable net assets is assigned to goodwill. Because the controlling and noncontrolling interests' acquisition-date fair values are identical at \$9.75 per share, the resulting goodwill is allocated proportionately across these ownership interests.

Consolidated financial statements will be produced for the year ending December 31, 2018. This date is arbitrary. Any time period subsequent to 2017 could serve to demonstrate the applicable consolidation procedures. Having already calculated the acquisition-date fair-value allocations and related amortization, the accountant can construct a consolidation of these two companies along the lines demonstrated in Chapter 3. Only the presence of the 20 percent noncontrolling interest alters this process.

To complete the information needed for this combination, assume that Pawn Company reports the following changes in retained earnings since King's acquisition:

Current year (2018)	
Net income.....	\$90,000
Less: Dividends declared .....	<u>(50,000)</u>
Increase in retained earnings.....	<u>\$40,000</u>
Prior years (only 2017 in this illustration):	
Increase in retained earnings.....	<u>\$70,000</u>

Assuming that King Company applies the equity method, the Investment in Pawn Company account as of December 31, 2018, can be constructed as shown in Exhibit 4.4. Note that the \$852,000 balance is computed based on applying King's 80 percent ownership to Pawn's income (less amortization) and dividends. Although 100 percent of the subsidiary's assets, liabilities, revenues, and expenses will be combined in consolidation, the internal accounting for King's investment in Pawn is based on its 80 percent ownership. This technique facilitates worksheet adjustments that allocate various amounts to the noncontrolling interest. Exhibit 4.5 presents the separate financial statements for these two companies as of December 31, 2018, and the year then ended, based on the information provided.

### Consolidated Totals

Although the inclusion of a 20 percent outside ownership complicates the consolidation process, the 2018 totals to be reported by this business combination can nonetheless be determined without the use of a worksheet:

- *Revenues* = \$1,340,000. The revenues of the parent and the subsidiary are added together. The acquisition method includes the subsidiary's revenues in total although King owns only 80 percent of the stock.
- *Cost of Goods Sold* = \$544,000. The parent and subsidiary balances are added together.
- *Depreciation Expense* = \$79,000. The parent and subsidiary balances are added together along with the \$1,000 reduction in equipment depreciation as indicated in Exhibit 4.3.
- *Amortization Expense* = \$181,000. The parent and subsidiary balances are added together along with the \$6,000 additional patented technology amortization expense as indicated in Exhibit 4.3.
- *Interest Expense* = \$120,000. The parent and subsidiary balances are added along with an additional \$5,000. Exhibit 4.3 shows Pawn's long-term debt reduced by \$40,000 to fair value. Because the maturity value remains constant, the \$40,000 represents a discount amortized to interest expense over the remaining eight-year life of the debt.

### EXHIBIT 4.4 Equity Method Investment Balance

<b>KING COMPANY</b>		
<b>Investment in Pawn Company</b>		
<b>Equity Method</b>		
<b>December 31, 2018</b>		
Acquisition price for 80% interest.....		\$780,000
Prior year (2017):		
Increase in retained earnings (80% × \$70,000).....	\$56,000	
Excess amortization expenses (80% × \$10,000) (Exhibit 4.3) ..	<u>(8,000)</u>	48,000
Current year (2018):		
Income accrual (80% × \$90,000).....	72,000	
Excess amortization expense (80% × \$10,000) (Exhibit 4.3) ...	<u>(8,000)</u>	
Equity in subsidiary earnings.....	64,000*	
Dividends from Pawn (80% × \$50,000) .....	<u>(40,000)</u>	24,000
Balance, 12/31/18 .....		<u>\$852,000</u>

\*This figure appears in King's 2018 income statement. See Exhibit 4.5.

**EXHIBIT 4.5**  
**Separate Financial Records**

<b>KING COMPANY AND PAWN COMPANY</b>		
<b>Separate Financial Statements</b>		
<b>For December 31, 2018, and the Year Then Ended</b>		
	<b>King</b>	<b>Pawn</b>
Revenues .....	\$ (910,000)	\$ (430,000)
Cost of goods sold .....	344,000	200,000
Depreciation expense.....	60,000	20,000
Amortization expense.....	100,000	75,000
Interest expense .....	70,000	45,000
Equity in subsidiary earnings (see Exhibit 4.4) .....	(64,000)	—0—
Net income .....	<u>\$ (400,000)</u>	<u>\$ (90,000)</u>
Retained earnings, 1/1/18 .....	\$ (860,000)	\$ (580,000)
Net income (above).....	(400,000)	(90,000)
Dividends declared.....	60,000	50,000
Retained earnings, 12/31/18 .....	<u>\$(1,200,000)</u>	<u>\$ (620,000)</u>
Current assets .....	\$ 726,000	\$ 445,000
Trademarks.....	304,000	295,000
Patented technology.....	880,000	540,000
Equipment (net) .....	390,000	160,000
Investment in Pawn Company (see Exhibit 4.4) .....	852,000	—0—
Total assets.....	<u>\$ 3,152,000</u>	<u>\$ 1,440,000</u>
Long-term liabilities.....	\$(1,082,000)	\$ (590,000)
Common stock.....	(870,000)	(230,000)
Retained earnings, 12/31/18.....	(1,200,000)	(620,000)
Total liabilities and equities .....	<u>\$(3,152,000)</u>	<u>\$(1,440,000)</u>

Note: Parentheses indicate a credit balance.

- *Equity in Subsidiary Earnings* = —0—. The parent's investment income is replaced with the subsidiary's separate revenues and expenses which are then included in the consolidated totals.
- *Consolidated Net Income* = \$416,000. The consolidated entity's total earnings before allocation to the controlling and noncontrolling ownership interests.
- *Net Income Attributable to Noncontrolling Interest* = \$16,000. The outside owners are assigned 20 percent of Pawn's reported net income of \$90,000 less \$10,000 total excess fair-value amortization. The acquisition method shows this amount as an allocation of consolidated net income.
- *Net Income Attributable to King Company (Controlling Interest)* = \$400,000. The acquisition method shows this amount as an allocation of consolidated net income.
- *Retained Earnings, 1/1* = \$860,000. The parent company figure equals the consolidated total because the equity method was applied. If the initial value method or the partial equity method had been used, the parent's balance would require adjustment to include any unrecorded figures.
- *Dividends Declared* = \$60,000. Only the parent company balance is reported. Eighty percent of the subsidiary's dividends are distributable to the parent and are thus eliminated. The remaining distribution goes to the outside owners and serves to reduce the noncontrolling interest balance.
- *Retained Earnings, 12/31* = \$1,200,000. The balance is found by adding the controlling interest's share of consolidated net income to the beginning consolidated retained earnings balance and then subtracting the parent's dividends. Because the equity method is utilized, the parent company figure reflects the total for the business combination.
- *Current Assets* = \$1,171,000. The parent's and subsidiary's book values are added.

- *Trademarks* = \$659,000. The parent's book value is added to the subsidiary's book value plus the \$60,000 allocation of the acquisition-date fair value (see Exhibit 4.3).
- *Patented Technology* = \$1,528,000. The parent's book value is added to the subsidiary's book value plus the \$120,000 excess fair-value allocation less two years' excess amortizations of \$6,000 per year (see Exhibit 4.3).
- *Equipment* = \$542,000. The parent's book value is added to the subsidiary's book value less the \$10,000 acquisition-date fair-value reduction plus two years' expense reductions of \$1,000 per year (see Exhibit 4.3).
- *Investment in Pawn Company* = –0–. The balance reported by the parent is eliminated so that the subsidiary's assets and liabilities can be included in the consolidated totals.
- *Goodwill* = \$25,000. The total goodwill allocation shown in Exhibit 4.3 is reported.
- *Total Assets* = \$3,925,000. This balance is a summation of the consolidated assets.
- *Long-Term Liabilities* = \$1,642,000. The parent's book value is added to the subsidiary's book value less the \$40,000 acquisition-date fair-value allocation net of two years' amortizations of \$5,000 per year (see Exhibit 4.3).
- *Noncontrolling Interest in Subsidiary* = \$213,000. The outside ownership is 20 percent of the subsidiary's year-end book value adjusted for any unamortized excess fair value attributed to the noncontrolling interest:

Noncontrolling interest in Pawn at 1/1/18	
20% of \$810,000 beginning book value—common stock plus 1/1/18 retained earnings . . . . .	\$162,000
20% of unamortized excess fair-value allocations as of 1/1 . . . . .	45,000
Noncontrolling interest in Pawn 1/1/18 . . . . .	<u>\$207,000</u>
Net income attributable to noncontrolling interest (see page 165) . . . . .	16,000
Dividends distributable to noncontrolling interest (20% of \$50,000 total) . . . . .	<u>(10,000)</u>
Noncontrolling interest in Pawn at 12/31/18 . . . . .	<u><u>\$213,000</u></u>

- *Common Stock* = \$870,000. Only the parent's balance is reported.
- *Retained Earnings, 12/31* = \$1,200,000. Computed on page 165.
- *Total Liabilities and Equities* = \$3,925,000. This total is a summation of consolidated liabilities, noncontrolling interest, and equities.

#### **Alternative Calculation of Noncontrolling Interest at December 31, 2018**

The acquisition method requires that the noncontrolling interest in the subsidiary's net assets be measured at fair value at the date of acquisition. Subsequent to acquisition, however, the noncontrolling interest value is adjusted for its share of subsidiary net income, excess fair-value amortizations, and dividends. The following schedule demonstrates how the noncontrolling interest's acquisition-date fair value is adjusted to show the ending consolidated balance sheet amount.

Fair value of 20% noncontrolling interest in Pawn at acquisition date . . . . .	\$195,000
20% of \$70,000 change in Pawn's 2017 retained earnings . . . . .	14,000
20% of excess fair-value amortizations . . . . .	<u>(2,000)</u> 12,000
2018 net income allocation [20% × (\$90,000 – \$10,000)] . . . . .	16,000
2018 dividends (20% × \$50,000) . . . . .	<u>(10,000)</u>
Noncontrolling interest in Pawn at December 31, 2018 . . . . .	<u><u>\$213,000</u></u>

As can be seen in the above schedule, the fair-value principle applies only to the initial noncontrolling interest valuation.

#### **Worksheet Process—Acquisition Method**

The consolidated totals for King and Pawn also can be determined by means of a worksheet as shown in Exhibit 4.6. Comparing this example with Exhibit 3.7 in Chapter 3 indicates that the presence of a noncontrolling interest does not create a significant number of changes in the consolidation procedures.

**EXHIBIT 4.6 Noncontrolling Interest (No Control Premium) Illustrated**

<b>KING COMPANY AND PAWN COMPANY</b>						
<b>Consolidation Worksheet</b>						
<b>Investment: Equity Method</b>			<b>For Year Ending December 31, 2018</b>		<b>Ownership: 80%</b>	
<b>Accounts</b>	<b>King Company*</b>	<b>Pawn Company*</b>	<b>Consolidation Entries</b>		<b>Noncontrolling Interest</b>	<b>Consolidated Totals</b>
			<b>Debit</b>	<b>Credit</b>		
Revenues	(910,000)	(430,000)				(1,340,000)
Cost of goods sold	344,000	200,000				544,000
Depreciation expense	60,000	20,000		(E) 1,000		79,000
Amortization expense	100,000	75,000	(E) 6,000			181,000
Interest expense	70,000	45,000	(E) 5,000			120,000
Equity in Pawn's earnings (see Exhibit 4.4)	(64,000)	—	(I) 64,000			—
Separate company net income	(400,000)	(90,000)				
Consolidated net income						(416,000)
Net income attributable to noncontrolling interest					(16,000)	16,000
Net income attributable to King Company						(400,000)
Retained earnings, 1/1	(860,000)	(580,000)	(S) 580,000			(860,000)
Net income (above)	(400,000)	(90,000)				(400,000)
Dividends declared	60,000	50,000		(D) 40,000	10,000	60,000
Retained earnings, 12/31	(1,200,000)	(620,000)				(1,200,000)
Current assets	726,000	445,000				1,171,000
Trademarks	304,000	295,000	(A) 60,000			659,000
Patented technology	880,000	540,000	(A) 114,000	(E) 6,000		1,528,000
Equipment (net)	390,000	160,000	(E) 1,000	(A) 9,000		542,000
Investment in Pawn Company (see Exhibit 4.4)	852,000	—	(D) 40,000	(S) 648,000 (A) 180,000 (I) 64,000		—
Goodwill	—	—	(A) 25,000			25,000
Total assets	3,152,000	1,440,000				3,925,000
Long-term liabilities	(1,082,000)	(590,000)	(A) 35,000	(E) 5,000		(1,642,000)
Common stock	(870,000)	(230,000)	(S) 230,000			(870,000)
Noncontrolling interest in Pawn, 1/1				(S) 162,000 (A) 45,000	(207,000)	
Noncontrolling interest in Pawn, 12/31					(213,000)	(213,000)
Retained earnings, 12/31	(1,200,000)	(620,000)				(1,200,000)
Total liabilities and equities	(3,152,000)	(1,440,000)	1,160,000	1,160,000		(3,925,000)

\*See Exhibit 4.5.

Note: Parentheses indicate a credit balance.

Consolidation entries:

(S) Elimination of subsidiary's stockholders' equity along with recognition of January 1 noncontrolling interest.

(A) Allocation of subsidiary total fair value in excess of book value, unamortized balances as of January 1.

(I) Elimination of intra-entity income (equity accrual less amortization expenses).

(D) Elimination of intra-entity dividends.

(E) Recognition of amortization expenses of fair-value allocations.

The worksheet still includes elimination of the subsidiary's stockholders' equity accounts (Entry **S**) although, as explained next, this entry is expanded to record the beginning noncontrolling interest for the year. The second worksheet entry (Entry **A**) recognizes the excess acquisition-date fair-value allocations at January 1 after one year of amortization with an additional adjustment to the beginning noncontrolling interest. Intra-entity income and dividends are removed also (Entries **I** and **D**) while current-year excess amortization expenses are recognized (Entry **E**). The differences from the Chapter 3 illustrations relate exclusively to

the recognition of the three components of the noncontrolling interest. In addition, *a separate Noncontrolling Interest column is added to the worksheet to accumulate these components to form the year-end figure to be reported on the consolidated balance sheet.*

### ***Noncontrolling Interest—Beginning of Year***

Under the acquisition method, the noncontrolling interest shares proportionately in the fair values of the subsidiary's identifiable net assets as adjusted for excess fair-value amortizations. On the consolidated worksheet, this total net fair value is represented by two components:

1. Pawn's stockholders' equity accounts (common stock and beginning retained earnings) indicate a January 1, 2018, book value of \$810,000.
2. January 1, 2018, acquisition-date fair-value net of previous year's amortizations (in this case 2017 only).

Therefore, the January 1, 2018, balance of the 20 percent outside ownership is computed as follows:

20% × \$810,000 subsidiary book value at 1/1/18. . . . .	\$162,000
20% × \$225,000* unamortized excess fair-value allocation at 1/1/18 . . . . .	45,000
Noncontrolling interest in Pawn at 1/1/18 . . . . .	<u>\$207,000</u>
*Acquisition-date excess fair over book value (Exhibit 4.3). . . . .	\$235,000
Less: 2017 excess fair over book value amortization . . . . .	<u>(10,000)</u>
Unamortized excess fair over book value amount at 1/1/18 . . . . .	<u>\$225,000</u>

The \$207,000 noncontrolling interest balance at 1/1/18 is recognized on the worksheet through Entry **S** (\$162,000) and Entry **A** (\$45,000):

### ***Consolidation Entry S***

Common Stock (Pawn) . . . . .	230,000	
Retained Earnings, 1/1/18 (Pawn) . . . . .	580,000	
Investment in Pawn Company (80%) . . . . .		648,000
Noncontrolling Interest in Pawn Company, 1/1/18 (20%) . . . . .		162,000
To eliminate beginning stockholders' equity accounts of subsidiary along with book value portion of investment (equal to 80 percent ownership). Noncontrolling interest of 20 percent is also recognized.		

### ***Consolidation Entry A***

Trademarks . . . . .	60,000	
Patented Technology. . . . .	114,000	
Liabilities. . . . .	35,000	
Goodwill . . . . .	25,000	
Equipment . . . . .		9,000
Investment in Pawn Company (80%) . . . . .		180,000
Noncontrolling Interest in Pawn Company, 1/1/18 (20%) . . . . .		45,000
To recognize unamortized excess fair value as of January 1, 2018, to Pawn's assets acquired and liabilities assumed in the combination. Also to allocate the unamortized fair value to the noncontrolling interest. Goodwill is attributable proportionately to controlling and noncontrolling interests.		

The total \$207,000 balance assigned here to the outside owners at the beginning of the year is extended to the Noncontrolling Interest worksheet column (see Exhibit 4.6).

To complete the required worksheet adjustments, Entries **I**, **D**, and **E** are prepared as follows:

### **Consolidation Entry I**

Equity in Pawn's Earnings .....	64,000	
Investment in Pawn Company .....		64,000
To eliminate intra-entity income accrual comprising subsidiary income less excess acquisition-date fair-value amortizations.		

### **Consolidation Entry D**

Investment in Pawn Company .....	40,000	
Dividends Declared .....		40,000
To eliminate intra-entity dividends.		

### **Consolidation Entry E**

Amortization Expense .....	6,000	
Interest Expense .....	5,000	
Equipment (net) .....	1,000	
Depreciation Expense .....		1,000
Patented Technology .....		6,000
Long-Term Liabilities .....		5,000
To recognize current year excess fair-value amortizations.		

### **Noncontrolling Interest—Share of Current Year Consolidated Net Income**

Exhibit 4.6 shows the noncontrolling interest's share of current year earnings is \$16,000. The amount is based on the subsidiary's \$90,000 net income (Pawn Company column) less excess acquisition-date fair-value amortizations. Thus, King assigns \$16,000 to the outside owners computed as follows:

<b>Net Income Attributable to Noncontrolling Interest</b>	
Pawn Company net income .....	\$90,000
Excess acquisition-date fair-value amortization .....	<u>10,000</u>
Net income adjusted for excess amortizations .....	\$80,000
Noncontrolling interest percentage .....	<u>20%</u>
Net income attributable to noncontrolling interest in Pawn .....	<u><u>\$16,000</u></u>

In effect, 100 percent of each subsidiary revenue and expense account (including excess acquisition-date fair-value amortizations) is consolidated with an accompanying 20 percent allocation to the noncontrolling interest. The 80 percent net effect corresponds to King's ownership.

Because \$16,000 of consolidated net income accrues to the noncontrolling interest, this amount is added to the \$207,000 beginning balance assigned (in Entries **S** and **A**) to these outside owners. The noncontrolling interest increases because the subsidiary generated a profit during the period.

Although we could record this allocation through an additional worksheet entry, the \$16,000 is usually shown, as in Exhibit 4.6, by means of a columnar adjustment. The current



year accrual is simultaneously entered in the Income Statement section of the consolidated column as an allocation of consolidated net income and in the Noncontrolling Interest column as an increase. This procedure assigns a portion of the combined earnings to the outside owners rather than to the parent company owners.

### ***Noncontrolling Interest—Dividends***

The \$40,000 dividend to the parent company is eliminated routinely through Entry **D**, but the remainder of Pawn's dividend went to the noncontrolling interest. The impact of the dividend (20 percent of the subsidiary's total) distributable to the other owners must be acknowledged. As shown in Exhibit 4.6, this remaining \$10,000 is extended directly into the Noncontrolling Interest column on the worksheet as a reduction. It represents the decrease in the underlying claim of the outside ownership that resulted from the subsidiary's dividend declaration.

### ***Noncontrolling Interest—End of Year***

The ending assignment for these other owners is calculated by a summation of

Noncontrolling interest in Pawn beginning of year—credit balance . . . . .	\$207,000
Net income attributable to noncontrolling interest . . . . .	16,000
Less: Dividends to the outside owners . . . . .	<u>(10,000)</u>
Noncontrolling interest in Pawn end of year—credit balance . . . . .	<u>\$213,000</u>

The Noncontrolling Interest column on the worksheet in Exhibit 4.6 accumulates these figures. The \$213,000 total is then transferred to the balance sheet, where it appears in the consolidated financial statements.

#### **LO 4-6**

Identify appropriate placements for the components of the noncontrolling interest in consolidated financial statements.

### ***Consolidated Financial Statements***

Having successfully consolidated the information for King and Pawn, the resulting financial statements for these two companies are produced in Exhibit 4.7. These figures are taken from the consolidation worksheet.

Exhibit 4.7 shows first the consolidated income statement. Consolidated net income is computed at the combined entity level as \$416,000 and then allocated to the noncontrolling and controlling interests. The statement of changes in owners' equity provides details of the ownership changes for the year for both the controlling and noncontrolling interest shareholders. Finally, note the placement of the noncontrolling interest in the subsidiary's equity squarely in the consolidated owners' equity section.<sup>7</sup>

#### **LO 4-7**

Determine the effect on consolidated financial statements of a control premium paid by the parent.

### **Illustration—Partial Acquisition with Control Premium**

To illustrate the valuation implications for an acquisition involving a control premium, again assume that King Company acquires 80 percent of Pawn Company's 100,000 outstanding voting shares on January 1, 2017. We also again assume that Pawn's shares traded before the acquisition date at an average of \$9.75 per share. In this scenario, however, we assume that to acquire sufficient shares to gain control King pays \$11 per share or a total of \$880,000 cash consideration for its 80 percent interest. King thus pays a control premium of \$1.25 (\$11 – \$9.75) per share to acquire Pawn. King anticipates that synergies with Pawn will create additional value for King's shareholders. Finally, following the acquisition, the remaining 20 percent noncontrolling interest shares continue to trade at \$9.75.

The total fair value of Pawn to be used initially in consolidation is thus recomputed as follows:

Consideration transferred by King (\$11.00 × 80,000 shares) . . . . .	\$ 880,000
Noncontrolling interest fair value (\$9.75 × 20,000 shares) . . . . .	<u>195,000</u>
Pawn's total fair value at January 1, 2017 . . . . .	<u>\$1,075,000</u>

<sup>7</sup>If appropriate, each component of other comprehensive income is allocated to the controlling and noncontrolling interests. The statement of changes in owners' equity would also provide an allocation of accumulated other comprehensive income elements across the controlling and noncontrolling interests.

**EXHIBIT 4.7**  
**Consolidated Statements**  
**with Noncontrolling**  
**Interest—Acquisition**  
**Method**

<b>KING COMPANY AND PAWN COMPANY</b>			
<b>Consolidated Financial Statements</b>			
<b>Income Statement</b>			
<b>Year Ended December 31, 2018</b>			
Revenues .....			\$1,340,000
Cost of goods sold .....			(544,000)
Depreciation expense.....			(79,000)
Amortization expense.....			(181,000)
Interest expense .....			(120,000)
Consolidated net income.....			<u>\$ 416,000</u>
To noncontrolling interest .....			16,000
To King Company (controlling interest).....			<u>\$ 400,000</u>
<b>Statement of Changes in Owners' Equity</b>			
<b>Year Ended December 31, 2018</b>			
	<b>King Company Owners</b>		
	<b>Retained Earnings</b>	<b>Common Stock</b>	<b>Noncontrolling Interest</b>
Balance, January 1 .....	\$ 860,000	\$870,000	\$207,000
Net income .....	400,000		16,000
Less: Dividends .....	(60,000)		(10,000)
Balance, December 31.....	<u>\$1,200,000</u>	<u>\$870,000</u>	<u>\$213,000</u>
<b>Balance Sheet</b>			
<b>At December 31, 2018</b>			
<i>Assets</i>			
Current assets .....			\$1,171,000
Trademarks.....			659,000
Patented technology.....			1,528,000
Equipment (net) .....			542,000
Goodwill.....			25,000
Total assets .....			<u>\$3,925,000</u>
<i>Liabilities</i>			
Long-term liabilities .....			\$1,642,000
<i>Owners' Equity</i>			
Common stock—King Company .....			870,000
Noncontrolling interest in Pawn .....			213,000
Retained earnings .....			1,200,000
Total liabilities and owners' equity .....			<u>\$3,925,000</u>

In keeping with the acquisition method's requirement that identifiable assets acquired and liabilities assumed be adjusted to fair value, King allocates Pawn's total fair value as follows:

Fair value of Pawn at January 1, 2017 .....		\$1,075,000
Book value of Pawn at January 1, 2017.....		<u>(740,000)</u>
Fair value in excess of book value .....		\$ 335,000
Adjustments to.....		
Trademarks .....	\$ 60,000	
Patented technology .....	120,000	
Equipment .....	(10,000)	
Long-term liabilities .....	40,000	210,000
Goodwill .....		<u>\$ 125,000</u>

Note that the *identifiable* assets acquired and liabilities assumed are again adjusted to their full individual fair values at the acquisition date. Only the amount designated as goodwill is changed to \$125,000 from \$25,000 in the original fair-value allocation example as shown in Exhibit 4.3. In this case, King allocates \$120,000 of the \$125,000 total goodwill amount to its own interest as follows:

	Controlling Interest	Noncontrolling Interest	Total
Fair value at acquisition date . . . . .	\$880,000	\$195,000	\$1,075,000
Relative fair value of Pawn's identifiable net assets (80% and 20%) . . . . .	<u>760,000</u>	<u>190,000</u>	<u>950,000</u>
Goodwill . . . . .	<u>\$120,000</u>	<u>\$ 5,000</u>	<u>\$ 125,000</u>

The initial acquisition-date fair value of \$195,000 for the noncontrolling interest includes only a \$5,000 goodwill allocation from the combination. Because the parent paid an extra \$1.25 per share more than the fair value of the noncontrolling interest shares, more goodwill is allocated to the parent.

Next we separate the familiar consolidated worksheet entry **A** into two components labeled **A1** and **A2**. The **A1** worksheet entry allocates the excess acquisition-date fair value to the *identifiable* assets acquired and liabilities assumed (trademarks, patented technology, equipment, and liabilities). Note that the relative ownership percentages of the parent and noncontrolling interest (80 percent and 20 percent) provide the basis for allocating the net \$200,000 adjustment to the parent's Investment account (\$160,000) and the 1/1/18 balance of the noncontrolling interest (\$40,000).

Next, consolidated worksheet entry **A2** provides the recognition and allocation of the goodwill balance taking into account the differing per share prices of the parent's consideration transferred and the noncontrolling interest fair value. Note that the presence of a control premium affects primarily the parents' shares, and thus goodwill is disproportionately (relative to the ownership percentages) allocated to the controlling and noncontrolling interests. Exhibit 4.8 shows the consolidated worksheet for this extension to the King and Pawn example.

#### **Consolidation Entry A1 (see page 171 for excess fair value allocations)**

Trademarks . . . . .	60,000	
Patented Technology . . . . .	114,000	
Liabilities . . . . .	35,000	
Equipment . . . . .		9,000
Investment in Pawn Company (80%) . . . . .		160,000
Noncontrolling Interest in Pawn 1/1/18 (20%) . . . . .		40,000

#### **Consolidation Entry A2**

Goodwill . . . . .	125,000	
Investment in Pawn Company . . . . .		120,000
Noncontrolling Interest in Pawn 1/1/18 . . . . .		5,000

**EXHIBIT 4.8 Noncontrolling Interest (Control Premium) Illustrated**

<b>KING COMPANY AND PAWN COMPANY</b>						
<b>Consolidation Worksheet</b>						
<i>Investment: Equity Method</i>	<b>For Year Ending December 31, 2018</b>					<b>Ownership: 80%</b>
<b>Accounts</b>	<b>King Company</b>	<b>Pawn Company</b>	<b>Consolidation Entries</b>		<b>Noncontrolling Interest</b>	<b>Consolidated Totals</b>
			<b>Debit</b>	<b>Credit</b>		
Revenues	(910,000)	(430,000)				(1,340,000)
Cost of goods sold	344,000	200,000				544,000
Depreciation expense	60,000	20,000		(E) 1,000		79,000
Amortization expense	100,000	75,000	(E) 6,000			181,000
Interest expense	70,000	45,000	(E) 5,000			120,000
Equity in Pawn's earnings	(64,000)	—	(I) 64,000			—
Separate company net income	(400,000)	(90,000)				
Consolidated net income						(416,000)
Net income attributable to noncontrolling interest					(16,000)	16,000
Net income attributable to King Company						(400,000)
Retained earnings, 1/1	(860,000)	(580,000)	(S) 580,000			(860,000)
Net income (above)	(400,000)	(90,000)				(400,000)
Dividends declared	60,000	50,000		(D) 40,000	10,000	60,000
Retained earnings, 12/31	(1,200,000)	(620,000)				(1,200,000)
Current assets	626,000	445,000				1,071,000
Trademarks	304,000	295,000	(A1) 60,000			659,000
Patented technology	880,000	540,000	(A1) 114,000	(E) 6,000		1,528,000
Equipment (net)	390,000	160,000	(E) 1,000	(A1) 9,000		542,000
Investment in Pawn Company	952,000	—	(D) 40,000	(S) 648,000 (A1) 160,000 (A2) 120,000 (I) 64,000		—
Goodwill	—	—	(A2) 125,000			125,000
Total assets	3,152,000	1,440,000				3,925,000
Long-term liabilities	(1,082,000)	(590,000)	(A1) 35,000	(E) 5,000		(1,642,000)
Common stock	(870,000)	(230,000)	(S) 230,000			(870,000)
Noncontrolling interest in Pawn 1/1				(S) 162,000 (A1) 40,000 (A2) 5,000		
Noncontrolling interest in Pawn 12/31					(207,000)	(213,000)
Retained earnings, 12/31	(1,200,000)	(620,000)				(1,200,000)
Total liabilities and equities	(3,152,000)	(1,440,000)	1,260,000	1,260,000		(3,925,000)

Note: Parentheses indicate a credit balance.

Consolidation entries:

(S) Elimination of subsidiary's stockholders' equity along with recognition of January 1 noncontrolling interest.

(A1) Allocation of subsidiary identifiable net asset fair value in excess of book value, unamortized balances as of January 1.

(A2) Allocation of goodwill to parent and noncontrolling interest.

(I) Elimination of intra-entity income (equity accrual less amortization expenses).

(D) Elimination of intra-entity dividends.

(E) Recognition of amortization expenses of fair-value allocations.

The worksheet calculates the December 31, 2018, noncontrolling balance as follows:

Pawn January 1, 2018: 20% book value	\$162,000
January 1, 2018: 20% excess fair-value allocation for Pawn's identifiable net assets (\$200,000 × 20%) + \$5,000 goodwill allocation	45,000
Noncontrolling interest at January 1, 2018	\$207,000
2018 consolidated net income allocation	16,000
Noncontrolling interest share of Pawn dividends	(10,000)
Noncontrolling interest in Pawn, December 31, 2018	<u>\$213,000</u>

Note that the \$45,000 January 1 excess fair-value allocation to the noncontrolling interest includes the noncontrolling interest's full share of the *identifiable* assets acquired and liabilities assumed in the combination but only \$5,000 for goodwill. Because King Company paid a \$100,000 control premium (80,000 shares  $\times$  \$1.25), the additional \$100,000 is allocated entirely to the controlling interest.

By comparing Exhibits 4.6 and 4.8 we can assess the effect of the separate acquisition-date valuations for the controlling and noncontrolling interests. As seen in the differences across Exhibits 4.6 and 4.8 calculated next, the presence of King's control premium affects the goodwill component in the consolidated financial statements and little else.

	Exhibit 4.6	Exhibit 4.8	Difference
<b>On King's Separate Financial Statements</b>			
Current assets . . . . .	\$ 726,000	\$ 626,000	-\$100,000
Investment in Pawn . . . . .	852,000	952,000	+ 100,000
<b>On the Consolidated Balances</b>			
Current assets . . . . .	1,171,000	1,071,000	- 100,000
Goodwill . . . . .	25,000	125,000	+ 100,000

Because King paid an additional \$100,000 for its 80 percent interest in Pawn, the initial value assigned to the Investment account increases and current assets (i.e., additional cash paid for the acquisition) decreases by \$100,000. The extra \$100,000 then simply increases goodwill on the consolidated balance sheet. Note that the noncontrolling interest amount remains unchanged at \$213,000 across Exhibits 4.6 and 4.8, consistent with the fact that its acquisition-date fair value was left unchanged at \$195,000.

### Effects Created by Alternative Investment Methods

In the King and Pawn illustrations, the parent uses the equity method and bases all worksheet entries on that approach. As discussed in Chapter 3, had King incorporated the initial value method or the partial equity method, a few specific changes in the consolidation process would be required although the reported figures would be identical.

#### *Initial Value Method*

The initial value method ignores two accrual-based adjustments. First, the parent recognizes dividend income rather than an equity income accrual. Thus, the parent does not accrue the percentage of the subsidiary's net income earned in past years in excess of dividends (the increase in subsidiary retained earnings). Second, the parent does not record amortization expense under the initial value method and therefore must include it in the consolidation process if proper totals are to be achieved. Because neither of these figures is recognized in applying the initial value method, an Entry \*C is added to the worksheet to convert the previously recorded balances to the equity method. The parent's beginning Retained Earnings is affected by this adjustment as well as the Investment in Subsidiary account. The exact amount is computed as follows.

#### *Conversion to Equity Method from Initial Value Method (Entry \*C)*

Combine:

1. The increase (since acquisition) in the subsidiary's retained earnings during past years (net income less dividends) times the parent's ownership percentage, and
2. The parent's percentage of total amortization expense for these same past years.

The parent's use of the initial value method requires an additional procedural change. Under this method, the parent recognizes income when its subsidiary declares a dividend. Entry (I) removes both intra-entity dividend income and subsidiary dividends to the parent. Thus, when the initial value method is used, Entry D is unnecessary.

**Partial Equity Method**

Again, an Entry \*C is needed to convert the parent's retained earnings as of January 1 to the equity method. In this case, however, only the amortization expense for the prior years must be included. Recall that under the partial equity method, although the parent accrues its share of reported subsidiary income, it does not recognize any acquisition-date excess fair value amortization expenses.

**LO 4-8**

Understand the impact on consolidated financial statements of a midyear acquisition.

## Revenue and Expense Reporting for Midyear Acquisitions

In virtually all of our previous examples, the parent gains control of the subsidiary on the first day of the fiscal year. How is the consolidation process affected if an acquisition occurs on a midyear (any other than the first day of the fiscal year) date?

When a company gains control at a midyear date, a few obvious changes are needed. The new parent must compute the subsidiary's book value as of that date to determine excess total fair value over book value allocations (e.g., intangibles). Excess amortization expenses as well as any equity accrual and dividend distributions are recognized for a period of less than a year. Finally, because only net income earned by the subsidiary after the acquisition date accrues to the new owners, it is appropriate to include only postacquisition revenues and expenses in consolidated totals.

### Consolidating Postacquisition Subsidiary Revenue and Expenses

Following a midyear acquisition, a parent company excludes current-year subsidiary revenue and expense amounts that have accrued prior to the acquisition date from its consolidated totals. For example, when Comcast acquired AT&T Broadband, its December 31 year-end income statement included AT&T Broadband revenues and expenses only subsequent to the acquisition date. Comcast reported \$8.1 billion in revenues that year. However, in a pro forma schedule, Comcast noted that had it included AT&T Broadband's revenues from January 1, total revenue for the year would have been \$16.8 billion. However, because the \$8.7 billion additional revenue (\$16.8 billion – \$8.1 billion) was not earned by Comcast owners, Comcast excluded this preacquisition revenue from its consolidated total.

To further illustrate the complexities of accounting for a midyear acquisition, assume that Tyler Company acquires 90 percent of Steven Company on July 1, 2018, for \$900,000 and prepares the following fair-value allocation schedule:

Steven Company fair value, 7/1/18 . . . . .		\$1,000,000
Steven Company book value, 7/1/18 . . . . .		
Common stock . . . . .	\$600,000	
Retained earnings, 7/1/18 . . . . .	<u>200,000</u>	<u>800,000</u>
Excess fair value over book value . . . . .		\$ 200,000
Adjust trademark to fair value (4-year remaining life) . . . . .		<u>200,000</u>
Goodwill . . . . .		<u>\$ –0–</u>

The affiliates report the following 2018 income statement amounts from their own separate operations:

	<b>Tyler</b>	<b>Steven</b>
Revenues	\$450,000	\$300,000
Expenses	325,000	150,000
Dividends (declared quarterly)	100,000	20,000

Assuming that all revenues and expenses occurred evenly throughout the year, the December 31, 2018, consolidated income statement appears as follows:

<b>TYLER COMPANY</b> <b>Consolidated Income Statement</b> <b>For the Year Ended December 31, 2018</b>	
Revenues .....	\$600,000
Expenses .....	<u>425,000</u>
Consolidated net income .....	\$175,000
To noncontrolling interest .....	<u>5,000</u>
To Tyler Company (controlling interest) .....	<u><u>\$170,000</u></u>

The consolidated income statement components are computed below:

- *Revenues* = \$600,000. Combined balances of \$750,000 less \$150,000 ( $\frac{1}{2}$  of Steven's revenues).
- *Expenses* = \$425,000. Combined balances of \$475,000 less \$75,000 ( $\frac{1}{2}$  of Steven's expenses) plus \$25,000 excess amortization ( $\$200,000 \div 4 \text{ years} \times \frac{1}{2} \text{ year}$ ).
- *Net Income Attributable to Noncontrolling Interest* = \$5,000.  $10\% \times (\$150,000 \text{ Steven's income} - \$50,000 \text{ excess amortization}) \times \frac{1}{2} \text{ year}$ .

In this example, preacquisition subsidiary revenue and expense accounts are eliminated from the consolidated totals. Note also that by excluding 100 percent of the preacquisition income accounts from consolidation, the noncontrolling interest is viewed as coming into being as of the parent's acquisition date.<sup>8</sup>

A midyear acquisition requires additional adjustments when preparing consolidating worksheets. The balances the subsidiary submits for consolidation typically include results for its entire fiscal period. Thus, in the December 31 financial statements, the book value of the firm acquired on a midyear date is reflected by a January 1 retained earnings balance plus revenues, expenses, and dividends from the beginning of the year to the acquisition date. To effectively eliminate subsidiary book value as of the acquisition date, Consolidation Entry S includes these items in addition to the other usual elements of book value (i.e., stock accounts). To illustrate, assuming that both affiliates submit fiscal year financial statements for consolidation, Tyler would make the following 2018 consolidation worksheet entry:

### **Consolidation Worksheet Entry S**

Common Stock—Steven .....	600,000	
Retained Earnings—Steven (1/1/18)* .....	135,000	
Revenues .....	150,000	
Dividends Declared—Steven .....		10,000
Expenses .....		75,000
Noncontrolling Interest (7/1/18) .....		80,000
Investment in Steven .....		720,000

\*To arrive at Steven's January 1 retained earning balance, we use the July 1 balance of \$200,000 less income from the first six months of \$75,000 ( $\frac{1}{2}$  of \$150,000 annual Steven income) plus \$10,000 dividends declared.

Through Entry S, preacquisition subsidiary revenues, expenses, and dividends are effectively

- Included as part of the subsidiary book value elimination in the year of acquisition.
- Included as components of the beginning value of the noncontrolling interest.
- Excluded from the consolidated income statement and statement of retained earnings.

<sup>8</sup>Current practice provides comparability across fiscal years through pro forma disclosures of various categories of revenue and expense as if the combination had occurred at the beginning of the reporting period. With the advent of modern information systems, separate cutoffs for revenues and expenses are readily available.

## Acquisition Following an Equity Method Investment

In many cases, a parent company owns a noncontrolling equity interest in a firm prior to obtaining control. In such cases, as the preceding example demonstrates, the parent consolidates the postacquisition revenues and expenses of its new subsidiary. Because the parent owned an equity investment in the subsidiary prior to the control date, however, the parent reports on its income statement the “equity in earnings of the investee” that accrued up to the date control was obtained. In this case, in the year of acquisition, the consolidated income statement reports both combined revenues and expenses (postacquisition) of the subsidiary and equity method income (preacquisition).

In subsequent years, the need to separate pre- and postacquisition amounts is limited to ensuring that excess amortizations correctly reflect the midyear acquisition date. Finally, if the parent employs the initial value method of accounting for the investment in subsidiary on its books, the conversion to the equity method must also reflect only postacquisition amounts.

### LO 4-9

Understand the impact on consolidated financial statements when a step acquisition has taken place.

## Step Acquisitions

When Ticketmaster Entertainment Corporation increased its percentage ownership in Front Line Company from 39.4 percent to 82.3 percent, it began consolidating its investment in Front Line. Prior to the acquisition of control through majority ownership, the investment in Front Line was accounted for using the equity method of accounting.

In all previous consolidation illustrations, control over a subsidiary was assumed to have been achieved through a single transaction. Obviously, Ticketmaster’s takeover of Front Line shows that a combination also can be the result of a series of stock purchases. These step acquisitions further complicate the consolidation process. The financial information of the separate companies must still be brought together, but varying amounts of consideration have been transferred to former owners at several different dates. How do the initial acquisitions affect this process?

### Control Achieved in Steps—Acquisition Method

A **step acquisition** occurs when control is achieved in a series of equity acquisitions, as opposed to a single transaction. As with all business combinations, the acquisition method measures the acquired firm (including the noncontrolling interest) at fair value at the date control is obtained. The acquisition of a controlling interest is considered an important economic, and therefore measurement, event. Consequently, the parent utilizes a single uniform valuation basis for all subsidiary assets acquired and liabilities assumed—fair value at the date control is obtained.

If the parent previously held a noncontrolling interest in the acquired firm, the parent remeasures that interest to fair value and recognizes a gain or loss. For example, when eBay increased its equity ownership from 10 percent to 93 percent, it obtained control over GittiGidiyor, a Turkish online marketplace. To measure the subsidiary’s acquisition-date fair value, eBay revalued its previously held 10 percent equity interest to fair value and recognized a \$17 million gain. As a result, eBay increased its investment account for both the cash paid for the newly acquired shares and the increase in the fair value of its previously owned shares in GittiGidiyor.

If after obtaining control, the parent increases its ownership interest in the subsidiary, no further remeasurement takes place. The parent simply accounts for the additional subsidiary shares acquired as an equity transaction—consistent with any transactions with other owners, as opposed to outsiders. Next we present an example of consolidated reporting when the parent obtains a controlling interest in a series of steps. Then, we present an example of a parent’s post-control acquisition of its subsidiary’s shares.

### Example: Step Acquisition Resulting in Control—Acquisition Method

To illustrate, assume that Arch Company obtains control of Zion Company through two cash acquisitions. The details of each acquisition are provided in Exhibit 4.9. Assuming that Arch has gained the ability to significantly influence Zion’s decision-making process, the first investment, for external reporting purposes, is accounted for by means of the equity method as discussed in Chapter 1. Thus, Arch must determine any allocations and amortization



associated with its purchase price (see Exhibit 4.10). A customer base with a 22-year estimated remaining life represented the initial excess payment.

Application of the equity method requires the accrual of investee income by the parent while any dividends from the investee are recorded as a decrease in the Investment account. Arch must also reduce both the income and asset balances in recognition of the annual \$2,000 amortization indicated in Exhibit 4.10. Following the information provided in Exhibits 4.9 and 4.10, over the next two years, Arch Company's Investment in Zion account grows to \$190,000:

Price paid for 30% investment in Zion—1/1/16 . . . . .	\$164,000
Accrual of 2016 equity income (\$60,000 × 30%) . . . . .	18,000
Share of dividends 2016 (\$20,000 × 30%) . . . . .	(6,000)
Amortization for 2016 . . . . .	(2,000)
Accrual of 2017 equity income (\$80,000 × 30%) . . . . .	24,000
Share of dividends 2017 (\$20,000 × 30%) . . . . .	(6,000)
Amortization for 2017 . . . . .	(2,000)
Investment in Zion—1/1/18 . . . . .	<u>\$190,000</u>

On January 1, 2018, Arch's ownership is increased to 80 percent by the purchase of another 50 percent of Zion Company's outstanding common stock for \$350,000. Although the equity method can still be utilized for internal reporting, this second acquisition necessitates the preparation of consolidated financial statements beginning in 2018. Arch now controls Zion; the two companies are viewed as a single economic entity for external reporting purposes.

Once Arch gains control over Zion on January 1, 2018, the acquisition method focuses exclusively on control-date fair values and considers any previous amounts recorded by the acquirer as irrelevant for future valuations. Thus, in a step acquisition all previous values for the investment, prior to the date control is obtained, are remeasured to fair value on the date control is obtained.

We add the assumption that the \$350,000 consideration transferred by Arch in its second acquisition of Zion represents the best available evidence for measuring the fair value of Zion Company at January 1, 2018. Therefore, an estimated fair value of \$700,000 (\$350,000 ÷ 50%) is assigned to Zion Company as of January 1, 2018, and provides the valuation basis for the assets acquired, the liabilities assumed, and the 20 percent noncontrolling interest.

**EXHIBIT 4.9**  
Consolidation Information  
for a Step Acquisition

ARCH COMPANY'S ACQUISITIONS OF ZION COMPANY SHARES				
	Consideration Transferred	Percentage Acquired	Zion Company (100%)	
			Book Value	Fair Value
January 1, 2016	\$164,000	30%	\$400,000	\$546,667
January 1, 2018	350,000	50	500,000	700,000
<b>Zion Company's Income and Dividends for 2016–2018</b>				
			<b>Income</b>	<b>Dividends</b>
	2016		\$ 60,000	\$ 20,000
	2017		80,000	20,000
	2018		100,000	20,000

**EXHIBIT 4.10**  
Allocation of First  
Noncontrolling Acquisition

ARCH COMPANY AND ZION COMPANY Fair Value Allocation and Amortization January 1, 2016	
Fair value of consideration transferred . . . . .	\$ 164,000
Book value equivalent of Arch's ownership (\$400,000 × 30%) . . . . .	(120,000)
Customer base . . . . .	\$ 44,000
Assumed remaining life . . . . .	22 years
Annual amortization expense . . . . .	<u>\$ 2,000</u>

Exhibit 4.11 shows Arch's allocation of Zion's \$700,000 acquisition-date fair value, first to the ownership interests and then to Zion's assets.

*Note that the acquisition method views a multiple-step acquisition as essentially the same as a single-step acquisition.* In the Arch Company and Zion Company example, once control is evident, the only relevant values in consolidating the accounts of Zion are fair values at January 1, 2018. A new basis of accountability arises for Zion Company on that single date because obtaining control of another firm is considered a significant remeasurement event. Previously owned noncontrolling blocks of stock are consequently revalued to fair value on the date control is obtained.

In revaluing a previous stock ownership in the acquired firm, the acquirer recognizes any resulting gain or loss in income. Therefore, on January 1, 2018, Arch increases the Investment in Zion account to \$210,000 (30% × \$700,000 fair value) and records the revaluation gain as follows:

Investment in Zion . . . . .	20,000	
Gain on Revaluation of Zion . . . . .		20,000
Fair value of Arch's 30% investment in Zion at 1/1/18 (30% × \$700,000) . . . . .		\$210,000
Book value of Arch's 30% investment in Zion at 1/1/18 . . . . .		190,000
Gain on revaluation of Zion to fair value . . . . .		<u>\$ 20,000</u>

### Worksheet Consolidation for a Step Acquisition (Acquisition Method)

To continue the example, the amount in Arch Company's 80 percent Investment in Zion account is updated for 2018:

Investment in Zion (after revaluation on 1/1/18) . . . . .	\$210,000
January 1, 2018—Second acquisition price paid . . . . .	350,000
Equity income accrual—2018 (80% × \$100,000) . . . . .	80,000
Amortization of customer base (80% × \$10,000) . . . . .	(8,000)
Share of Zion dividends—2018 (80% × \$20,000) . . . . .	<u>(16,000)</u>
Investment in Zion—12/31/18 . . . . .	<u>\$616,000</u>

The worksheet for consolidating Arch Company and Zion Company is shown in Exhibit 4.12. Observe that

- The consolidation worksheet entries are essentially the same as if Arch had acquired its entire 80 percent ownership on January 1, 2018.

#### EXHIBIT 4.11 Allocation of Acquisition- Date Fair Value

<b>ARCH COMPANY AND ZION COMPANY</b>	
<b>Zion Fair Value at Date Control Is Obtained</b>	
<b>January 1, 2018</b>	
Fair value of Arch's 50% equity acquisition . . . . .	\$ 350,000
Fair value of 30% equity already owned by Arch . . . . .	210,000
Fair value of 20% noncontrolling interest . . . . .	<u>140,000</u>
Total fair value assigned to Zion Company . . . . .	<u>\$ 700,000</u>
<b>Excess Fair over Book Value Allocation and Amortization</b>	
<b>January 1, 2018</b>	
Zion Company fair value . . . . .	\$ 700,000
Zion Company book value . . . . .	<u>(500,000)</u>
Customer base . . . . .	\$ 200,000
Assumed remaining life . . . . .	<u>20 years</u>
Annual amortization expense . . . . .	<u>\$ 10,000</u>

- The noncontrolling interest is allocated 20 percent of the excess fair-value allocation from the customer base.
- The noncontrolling interest is allocated 20 percent of Zion's 2018 income less its share of the excess amortization attributable to the customer base.
- The gain on revaluation of Arch's initial investment in Zion is recognized as income of the current period.

**EXHIBIT 4.12 Step Acquisition Illustrated**

<b>ARCH COMPANY AND ZION COMPANY</b>						
<b>Consolidation Worksheet</b>						
<b>For Year Ending December 31, 2018</b>						
<i>Investment: Equity Method</i>						<b>Ownership: 80%</b>
<b>Accounts</b>	<b>Arch Company</b>	<b>Zion Company</b>	<b>Consolidation Entries</b>		<b>Noncontrolling Interest</b>	<b>Consolidated Totals</b>
			<b>Debit</b>	<b>Credit</b>		
<b>Income Statement</b>						
Revenues	(600,000)	(260,000)				(860,000)
Expenses	425,000	160,000	(E) 10,000			595,000
Equity in subsidiary earnings	(72,000)	—0—	(I) 72,000			—0—
Gain on revaluation of Zion	(20,000)	—0—				(20,000)
Separate company net income	(267,000)	(100,000)				
Consolidated net income						(285,000)
Net income attributable to noncontrolling interest					(18,000)	18,000
Net income attributable to Arch Company						(267,000)
<b>Statement of Retained Earnings</b>						
Retained earnings, 1/1						
Arch Company	(758,000)					(758,000)
Zion Company		(230,000)	(S) 230,000			
Net income (above)	(267,000)	(100,000)				(267,000)
Dividends declared	125,000	20,000		(D) 16,000	4,000	125,000
Retained earnings, 12/31	(900,000)	(310,000)				(900,000)
<b>Balance Sheet</b>						
Current assets	509,000	280,000				789,000
Land	205,000	90,000				295,000
Buildings (net)	646,000	310,000				956,000
Investment in Zion Company	616,000	—0—	(D) 16,000	(A) 160,000 (S) 400,000 (I) 72,000		—0—
Customer base	—0—	—0—	(A) 200,000	(E) 10,000		190,000
Total assets	1,976,000	680,000				2,230,000
Liabilities	(461,000)	(100,000)				(561,000)
Noncontrolling interest in Zion Company, 1/1	—0—	—0—		(S) 100,000		
Noncontrolling interest in Zion Company, 12/31	—0—	—0—		(A) 40,000	(140,000)	(154,000)
Common stock	(355,000)	(200,000)	(S) 200,000			(355,000)
Additional paid-in capital	(260,000)	(70,000)	(S) 70,000			(260,000)
Retained earnings, 12/31 (above)	(900,000)	(310,000)				(900,000)
Total liabilities and equities	(1,976,000)	(680,000)	798,000	798,000		(2,230,000)

Note: Parentheses indicate a credit balance.

Consolidation entries:

(S) Elimination of subsidiary's stockholders' equity along with recognition of 1/1 noncontrolling interest.

(A) Allocation of subsidiary total fair value in excess of book value, unamortized balances as of 1/1.

(I) Elimination of intra-entity income (equity accrual less amortization expenses).

(D) Elimination of intra-entity dividends.

(E) Recognition of amortization expenses on fair-value allocations.

### Example: Step Acquisition Resulting after Control Is Obtained

The previous example demonstrates a step acquisition with control achieved with the most recent purchase. Post-control acquisitions by a parent of a subsidiary's stock, however, often continue as well. Recall that the acquisition method measures an acquired firm at its fair value on the date control is obtained.

A parent's subsequent subsidiary stock acquisitions do not affect these initially recognized fair values. For example, when Walmart increased its ownership in Walmart Chile from 75 percent to 100 percent, it did not change the valuation bases of Walmart Chile's assets. The acquisition of the 25 percent noncontrolling interest was treated as an equity transaction with a corresponding adjustment to additional paid-in capital. As the Walmart example shows, once the subsidiary's valuation basis is established as of the date control is obtained, as long as control is maintained, this valuation basis remains the same. Any further purchases (or sales) of the subsidiary's stock are treated as equity transactions.

To illustrate a post-control step acquisition, assume that on January 1, 2017, Amanda Co. obtains 70 percent of Schallman, Inc., for \$350,000 cash. We also assume that the \$350,000 consideration paid represents the best available evidence for measuring the fair value of the noncontrolling interest. Therefore, Schallman Company's total fair value is assessed at \$500,000 ( $\$350,000 \div 70\%$ ). Because Schallman's net assets' book values equal their collective fair values of \$400,000, Amanda recognizes goodwill of \$100,000. Then, on January 1, 2018, when Schallman's book value has increased to \$420,000, Amanda buys another 20 percent of Schallman for \$95,000, bringing its total ownership to 90 percent. Under the acquisition method, the valuation basis for the subsidiary's net assets was established on January 1, 2017, the date Amanda obtained control. Subsequent transactions in the subsidiary's stock (purchases or sales) are now viewed as transactions in the combined entity's own stock. Therefore, when Amanda acquires additional shares post-control, it recognizes the difference between the fair value of the consideration transferred and the underlying subsidiary valuation as an adjustment to Additional Paid-In Capital.

The difference between the \$95,000 price and the underlying consolidated subsidiary value is computed as follows:

1/1/18 price paid for 20% interest.....		\$ 95,000
Noncontrolling interest (NCI) acquired:.....		
Book value (20% of \$420,000) .....	\$84,000	
Goodwill (20% of \$100,000).....	<u>20,000</u>	
Noncontrolling interest book value (20%) 1/1/18.....		<u>104,000</u>
Additional paid-in capital from 20% NCI acquisition.....		<u>\$ 9,000</u>

Amanda then prepares the following journal entry to record the acquisition of the 20 percent noncontrolling interest:

Investment in Schallman .....	104,000	
Cash .....		95,000
Additional Paid-In Capital .....		9,000

By purchasing 20 percent of Schallman for \$95,000, the consolidated entity's owners have acquired a portion of their own firm at a price \$9,000 less than consolidated book value. From a worksheet perspective, the \$104,000 increase in the investment account simply replaces the 20 percent allocation to the noncontrolling interest. Note that the \$95,000 exchanged for the 20 percent interest in Schallman's net assets does not affect consolidated asset valuation. The basis for the reported values in the consolidated financial statements was established on the date control was obtained.



## Discussion Question

### DOES GAAP UNDERVALUE POST-CONTROL STOCK ACQUISITIONS?

In Berkshire Hathaway's 2012 annual report, Warren Buffett, in discussing the company's post-control step acquisitions of Marmon Holdings, Inc., observed the following:

Marmon provides an example of a clear and substantial gap existing between book value and intrinsic value. Let me explain the odd origin of this differential.

Last year I told you that we had purchased additional shares in Marmon, raising our ownership to 80% (up from the 64% we acquired in 2008). I also told you that GAAP accounting required us to immediately record the 2011 purchase on our books at far less than what we paid. I've now had a year to think about this weird accounting rule, but I've yet to find an explanation that makes any sense—nor can Charlie or Marc Hamburg, our CFO, come up with one. My confusion increases when I am told that if we hadn't already owned 64%, the 16% we purchased in 2011 would have been entered on our books at our cost.

In 2012 (and in early 2013, retroactive to year end 2012) we acquired an additional 10% of Marmon and the same bizarre accounting treatment was required. The \$700 million write-off we immediately incurred had no effect on earnings but did reduce book value and, therefore, 2012's gain in net worth.

The cost of our recent 10% purchase implies a \$12.6 billion value for the 90% of Marmon we now own. Our balance-sheet carrying value for the 90%, however, is \$8 billion. Charlie and I believe our current purchase represents excellent value. If we are correct, our Marmon holding is worth at least \$4.6 billion more than its carrying value.

How would you explain the accounting valuations for the post-control step acquisitions to the Berkshire Hathaway executives? Do you agree or disagree with the GAAP treatment of reporting additional investments in subsidiaries when control has previously been established?

#### LO 4-10

Record the sale of a subsidiary (or a portion of its shares).

### Parent Company Sales of Subsidiary Stock—Acquisition Method

Frequently, a parent company will sell a portion or all of the shares it owns of a subsidiary. For example, when General Electric Company reported the sale of its NBC Universal business, it noted in its financial statements:

We transferred the assets of the NBCU business and Comcast transferred certain of its assets to a newly formed entity, NBC Universal LLC (NBCU LLC). In connection with the transaction, we received \$6,197 million in cash from Comcast and a 49% interest in NBCU LLC. Comcast holds the remaining 51% interest in NBCU LLC. We will account for our investment in NBCU LLC under the equity method. As a result of the transaction, we expect to recognize a small after-tax gain . . .

Importantly, the accounting effect from selling subsidiary shares depends on whether the parent continues to maintain control after the sale. If the sale of the parent's ownership interest results in the loss of control of a subsidiary as in the GE example above, it recognizes any resulting gain or loss in consolidated net income.

If the parent sells some subsidiary shares but retains control, it recognizes no gains or losses on the sale. Under the acquisition method, as long as control remains with the parent, transactions in the stock of the subsidiary are considered to be transactions in the equity of the consolidated entity. Because such transactions are considered to occur with owners, the parent records any difference between proceeds of the sale and carrying amount as additional paid-in capital.

***Sale of Subsidiary Shares with Control Maintained***

To illustrate, assume Adams Company owns 100 percent of Smith Company's 25,000 voting shares and appropriately carries the investment on its books at January 1, 2018, at \$750,000 using the equity method. Assuming Adams sells 5,000 shares to outside interests for \$165,000 on January 1, 2018, the transaction is recorded as follows:

Cash .....	165,000	
Investment in Smith .....		150,000
Additional Paid-In Capital from Noncontrolling Interest Transaction .....		15,000
To record sale of 5,000 Smith shares to noncontrolling interest with excess of sale proceeds over carrying amount attributed to additional paid-in capital.		

The \$15,000 "gain" on sale of the subsidiary shares is not recognized in income, but is reported as an increase in owners' equity. This equity treatment for the "gain" is consistent with the economic unit notion that as long as control is maintained, payments received from owners of the firm are considered contributions of capital. The ownership group of the consolidated entity specifically includes the noncontrolling interest. Therefore, the above treatment of sales to an ownership group is consistent with accounting for other stock transactions with owners (e.g., treasury stock transactions).

***Sale of Subsidiary Shares with Control Lost***

The loss of control of a subsidiary is a remeasurement event that can result in gain or loss recognition. The gain or loss is computed as the difference between the sale proceeds and the carrying amount of the shares sold. Using the Adams and Smith example above, assume now that instead of selling 5,000 shares, Adams sells 20,000 of its shares in Smith to outside interests on January 1, 2018, and keeps the remaining 5,000 shares. Assuming sale proceeds of \$675,000, we record the transaction as follows:

Cash .....	675,000	
Investment in Smith .....		600,000
Gain on Sale of Smith Investment .....		75,000
To record sale of 20,000 Smith shares, resulting in the loss of control over Smith Company.		

If the former parent retains any of its former subsidiary's shares, the retained investment should be remeasured to fair value on the date control is lost. Any resulting gain or loss from this remeasurement should be recognized in the parent's net income.

In our Adams and Smith example, Adams still retains 5,000 shares of Smith Company (25,000 original investment less 20,000 shares sold). Assuming further that the \$675,000 sale price for the 20,000 shares sold represents a reasonable value for the remaining shares of \$33.75, Adams's shares now have a fair value of \$168,750 ( $\$33.75 \times 5,000$  shares). Adams would thus record the revaluation of its retained 5,000 shares of Smith as follows:

Investment in Smith .....	18,750	
Gain on Revaluation of Retained Smith Shares to Fair Value . . .		18,750
To record the revaluation of Smith shares to a \$33.75 per share fair value from their previous equity method January 1, 2018, carrying amount of \$30.00 per share.		

The above revaluation of retained shares reflects the view that the loss of control of a subsidiary is a significant economic event that changes the fundamental relationship between the former parent and subsidiary. Also, the fair value of the retained investment provides the users of the parent's financial statements with more relevant information about the investment.

### Cost-Flow Assumptions

If it sells less than an entire investment, the parent must select an appropriate cost-flow assumption when it has made more than one purchase. In the sale of securities, the use of specific identification based on serial numbers is acceptable, although averaging or FIFO assumptions often are applied. Use of the averaging method is especially appealing because all shares are truly identical, creating little justification for identifying different cost figures with individual shares.

### Accounting for Shares That Remain

If Adams sells only a portion of the investment, it also must determine the proper method of accounting for the shares that remain. Three possible scenarios are described below:

1. Adams could have so drastically reduced its interest that the parent no longer controls the subsidiary or even has the ability to significantly influence its decision making. For example, assume that Adams's ownership drops from 80 to 5 percent. In the current period prior to the sale, the 80 percent investment is reported by means of the equity method with the market-value method used for the 5 percent that remains thereafter. Consolidated financial statements are no longer applicable.
2. Adams could still apply significant influence over Smith's operations although it no longer maintains control. A drop in the level of ownership from 80 to 30 percent normally meets this condition. In this case, the parent utilizes the equity method for the entire year. Application is based on 80 percent until the time of sale and then on 30 percent for the remainder of the year. Again, consolidated statements cease to be appropriate because control has been lost.
3. The decrease in ownership could be relatively small so that the parent continues to maintain control over the subsidiary even after the sale. Adams's reduction of its ownership in Smith from 80 to 60 percent is an example of this situation. After the disposal, consolidated financial statements are still required, but the process is based on the *end-of-year ownership percentage*. Because only the retained shares (60 percent in this case) are consolidated, the parent must separately recognize any current year income accruing to it from its terminated interest. Thus, Adams shows earnings on this portion of the investment (a 20 percent interest in Smith for the time during the year that it is held) in the consolidated income statement as a single-line item computed by means of the equity method.

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## Comparisons with International Accounting Standards

As observed in previous chapters of this text, the accounting and reporting standards for business combinations between U.S. and international standards have largely converged with FASB ASC Topic 805 and *IFRS 3R*, each of which carries the title "Business Combinations" and ASC Topic 810: Consolidation. Each set of standards requires the acquisition method and embraces a fair-value model for the assets acquired and liabilities assumed in a business combination. Both sets of standards treat exchanges between the parent and the noncontrolling interest as equity transactions, unless control is lost. However, as seen below, the accounting for the noncontrolling interest can diverge across the two reporting regimes.

- *U.S. GAAP*. In reporting the noncontrolling interest in consolidated financial statements, U.S. GAAP requires a fair-value measurement attribute, consistent with the overall valuation principles for business combinations. Thus, acquisition-date fair value provides a

basis for reporting the noncontrolling interest, which is adjusted for its share of subsidiary income and dividends subsequent to acquisition.

- *IFRS*. In contrast, *IFRS 3R* allows an option for reporting the noncontrolling interest for each business combination. Under *IFRS*, the noncontrolling interest may be measured either at its acquisition-date fair value, which can include goodwill, or at a proportionate share of the acquiree's identifiable net asset fair value, which excludes goodwill. The *IFRS* proportionate-share option effectively assumes that any goodwill created through the business combination applies solely to the controlling interest.

## Summary

1. A parent company need not acquire 100 percent of a subsidiary's stock to form a business combination. Only control over the decision-making process is necessary, a level that has historically been achieved by obtaining a majority of the voting shares. Ownership of any subsidiary stock that is retained by outside unrelated parties is collectively referred to as a noncontrolling interest.
2. A consolidation takes on an added degree of complexity when a noncontrolling interest is present. The noncontrolling interest represents a group of subsidiary owners and their equity is recognized by the parent in its consolidated financial statements.
3. The valuation principle for the noncontrolling interest is acquisition-date fair value. The fair value of the noncontrolling interest is added to the consideration transferred by the parent to determine the acquisition-date fair value of the subsidiary. This fair value is then allocated to the subsidiary's assets acquired and liabilities assumed based on their individual fair values. At the acquisition date, each of the subsidiary's assets and liabilities is included in consolidation at its individual fair value regardless of the degree of parent ownership. Any remaining excess fair value beyond the total assigned to the identifiable net assets is recognized as goodwill.
4. The fair value of the noncontrolling interest is adjusted over time for subsidiary income (less excess fair-value amortization) and subsidiary dividends.
5. Consolidated goodwill is allocated across the controlling and noncontrolling interests based on the excess of their respective acquisition-date fair values less their percentage share of the identifiable subsidiary net asset fair value. The goodwill allocation, therefore, does not necessarily correspond proportionately to the ownership interest of the parent and the noncontrolling interest.
6. Four noncontrolling interest figures appear in the annual consolidation process. First, a beginning-of-the-year balance in the book value of the subsidiary's net assets is recognized on the worksheet (through Entry S) followed by the noncontrolling interest's share of the unamortized excess acquisition-date fair values of the subsidiary's assets and liabilities (including a separate amount for goodwill if appropriate). Next, the noncontrolling interest share of the subsidiary's net income for the period (recorded by a columnar entry) is recognized. Subsidiary dividends to these unrelated owners are entered as a reduction of the noncontrolling interest. The final balance for the year is found as a summation of the Noncontrolling Interest column and is presented on the consolidated balance sheet, within the Stockholders' Equity section.
7. When a midyear business acquisition occurs, consolidated revenues and expenses should not include the subsidiary's current year preacquisition revenues and expenses. Only postacquisition subsidiary revenues and expenses are consolidated.
8. A parent can obtain control of a subsidiary by means of several separate purchases occurring over time, a process often referred to as a step acquisition. Once control is achieved, the acquisition method requires that the parent adjust to fair value all prior investments in the acquired firm and recognize any gain or loss. The fair values of these prior investments, along with the consideration transferred in the current investment that gave the parent control, and the noncontrolling interest fair value all constitute the total fair value of the acquired company.
9. When a parent sells some of its ownership shares of a subsidiary, it must establish an appropriate investment account balance to ensure an accurate accounting. If the equity method has not been used, the parent's investment balance is adjusted to recognize any income or amortization previously omitted. The resulting balance is then compared to the amount received for the stock to arrive at either an adjustment to additional paid-in capital (control maintained) or a gain or loss (control lost). Any shares still held will subsequently be reported through either consolidation, the equity method, or the fair-value method, depending on the influence retained by the parent.



## Comprehensive Illustration

### Problem

(Estimated Time: 60 to 75 Minutes) On January 1, 2014, Father Company acquired an 80 percent interest in Sun Company for \$425,000. The acquisition-date fair value of the 20 percent noncontrolling interest's ownership shares was \$102,500. Also as of that date, Sun reported total stockholders' equity of \$400,000: \$100,000 in common stock and \$300,000 in retained earnings. In setting the acquisition price, Father appraised four accounts at values different from the balances reported within Sun's financial records.

Buildings (8-year remaining life) . . . . .	Undervalued by \$20,000
Land . . . . .	Undervalued by \$50,000
Equipment (5-year remaining life) . . . . .	Undervalued by \$12,500
Royalty agreement (20-year remaining life) . . . . .	Not recorded, valued at \$30,000

As of December 31, 2018, the trial balances of these two companies are as follows:

	Father Company	Sun Company
<i>Debits</i>		
Current assets . . . . .	\$ 605,000	\$ 280,000
Investment in Sun Company . . . . .	425,000	—0—
Land . . . . .	200,000	300,000
Buildings (net) . . . . .	640,000	290,000
Equipment (net) . . . . .	380,000	160,000
Expenses . . . . .	550,000	190,000
Dividends declared . . . . .	90,000	20,000
Total debits . . . . .	<u>\$2,890,000</u>	<u>\$1,240,000</u>
<i>Credits</i>		
Liabilities . . . . .	\$ 910,000	\$ 300,000
Common stock . . . . .	480,000	100,000
Retained earnings, 1/1/18 . . . . .	704,000	480,000
Revenues . . . . .	780,000	360,000
Dividend income . . . . .	16,000	—0—
Total credits . . . . .	<u>\$2,890,000</u>	<u>\$1,240,000</u>

Included in these figures is a \$20,000 payable that Sun owes to the parent company. No goodwill impairments have occurred since the Sun Company acquisition.

### Required

- Determine consolidated totals for Father Company and Sun Company for the year 2018.
- Prepare worksheet entries to consolidate the trial balances of Father Company and Sun Company for the year 2018.
- Assume instead that the acquisition-date fair value of the noncontrolling interest was \$104,500. What balances in the December 31, 2018, consolidated statements would change?

### Solution

- The consolidation of Father Company and Sun Company begins with the allocation of the subsidiary's acquisition-date fair value as shown in Exhibit 4.13. Because this consolidation is taking place after several years, the unamortized balances for the various allocations at the beginning of the current year also should be determined (see Exhibit 4.14).

Next, the parent's method of accounting for its subsidiary should be ascertained. The continuing presence of the original \$425,000 acquisition price in the investment account indicates that Father is applying the initial value method. This same determination can be made from the Dividend Income account, which equals 80 percent of the subsidiary's dividends. Thus, Father's accounting records have ignored the increase in Sun's book value as well as the excess amortization expenses for the prior periods of ownership. These amounts have to be added to the parent's January 1, 2018, Retained Earnings account to arrive at the proper consolidated balance.

During the 2014–2017 period of ownership, Sun's Retained Earnings account increased by \$180,000 (\$480,000 – \$300,000). Father's 80 percent interest necessitates an accrual of \$144,000

**EXHIBIT 4.13** Excess  
Fair-Value Allocations

<b>FATHER COMPANY AND SUN COMPANY</b> <b>Acquisition-Date Fair-Value Allocation and Amortization</b> <b>2014–2017</b>			
	<b>Allocation</b>	<b>Remaining Life (years)</b>	<b>Annual Excess Amortization</b>
Acquisition-date fair value . . . . .	\$527,500		
Sun book value (100%) . . . . .	<u>400,000</u>		
Excess fair value . . . . .	127,500		
Allocation to specific subsidiary accounts based on fair value:			
Buildings . . . . .	\$ 20,000	8	\$ 2,500
Land . . . . .	50,000	indefinite	–0–
Equipment . . . . .	12,500	5	2,500
Royalty agreement . . . . .	<u>30,000</u>	20	<u>1,500</u>
Goodwill . . . . .	<u>\$ 15,000</u>		
Annual excess amortization expenses . . . . .			<u>\$ 6,500</u>

**Goodwill Allocation to the Controlling and Noncontrolling Interests**

	<b>Controlling Interest</b>	<b>Noncontrolling Interest</b>	<b>Total</b>
Acquisition-date fair value . . . . .	\$425,000	\$102,500	\$527,500
Relative fair value of Sun's net identifiable assets (80% and 20%) . . . . .	<u>410,000</u>	<u>102,500</u>	<u>512,500</u>
Goodwill . . . . .	<u>\$ 15,000</u>	<u>\$ –0–</u>	<u>\$ 15,000</u>

**EXHIBIT 4.14** Excess  
Fair-Value Allocation  
Balances

<b>FATHER COMPANY AND SUN COMPANY</b> <b>Unamortized Excess Fair- over Book-Value Allocation</b> <b>January 1, 2018, Balances</b>			
<b>Account</b>	<b>Excess Original Allocation</b>	<b>Excess Amortization 2014–2017</b>	<b>Balance 1/1/18</b>
Buildings . . . . .	\$ 20,000	\$10,000	\$ 10,000
Land . . . . .	50,000	–0–	50,000
Equipment . . . . .	12,500	10,000	2,500
Royalty agreement . . . . .	30,000	6,000	24,000
Goodwill . . . . .	<u>15,000</u>	<u>–0–</u>	<u>15,000</u>
Total . . . . .	<u>\$127,500</u>	<u>\$26,000</u>	<u>\$101,500</u>

(\$180,000 × 80%) for these years. In addition, the acquisition-date fair-value allocations require the recognition of \$20,800 in excess amortization expenses for this same period (\$6,500 × 80% × 4 years). Thus, a net increase of \$123,200 (\$144,000 – \$20,800) is needed to adjust the parent's beginning retained earnings balance to reflect the equity method.

Once the adjustment from the initial value method to the equity method is determined, the consolidated figures for 2018 can be calculated:

*Current Assets* = \$865,000. The parent's book value is added to the subsidiary's book value. The \$20,000 intra-entity balance is eliminated.

*Investment in Sun Company* = –0–. The intra-entity ownership is eliminated so that the subsidiary's specific assets and liabilities can be consolidated.

*Land* = \$550,000. The parent's book value is added to the subsidiary's book value plus the \$50,000 excess fair-value allocation (see Exhibit 4.13).

*Buildings (net)* = \$937,500. The parent's book value is added to the subsidiary's book value plus the \$20,000 fair-value allocation (see Exhibit 4.14) and less five years of amortization (2014 through 2018).

*Equipment (net)* = \$540,000. The parent's book value is added to the subsidiary's book value. The \$12,500 fair-value allocation has been completely amortized after five years.

*Royalty Agreement* = \$22,500. The original residual allocation from the acquisition-date fair value is recognized after taking into account five years of amortization (see Exhibit 4.13).

*Goodwill* = \$15,000. Original acquisition-date value assigned.

*Liabilities* = \$1,190,000. The parent's book value is added to the subsidiary's book value. The \$20,000 intra-entity balance is eliminated.

*Revenues* = \$1,140,000. The parent's book value is added to the subsidiary's book value.

*Expenses* = \$746,500. The parent's book value is added to the subsidiary's book value plus current year amortization expenses on the fair-value allocations (see Exhibit 4.13).

*Consolidated Net Income* = \$393,500. The combined total of consolidated revenues and expenses.

*Net Income Attributable to Noncontrolling Interest* = \$32,700. The outside owners are assigned a 20 percent share of the subsidiary's net income less excess fair-value amortizations:  $20\% \times (\$170,000 - \$6,500)$ .

*Net Income Attributable to Father Company* = \$360,800. Consolidated net income less the amount allocated to the noncontrolling interest.

*Common Stock* = \$480,000. Only the parent company's balance is reported.

*Retained Earnings, 1/1/18* = \$827,200. Only the parent company's balance after a \$123,200 increase to convert from the initial value method to the equity method.

*Dividends Declared* = \$90,000. Only parent company dividends are consolidated. Subsidiary dividends distributable to the parent are eliminated; the remainder reduce the Noncontrolling Interest balance.

*Retained Earnings 12/31/18* = \$1,098,000. The parent's adjusted beginning balance of \$827,200, plus \$360,800 net income to the controlling interest, less \$90,000 dividends declared by Father Company.

*Dividend Income* = -0-. The intra-entity dividend declarations are eliminated.

*Noncontrolling Interest in Subsidiary, 12/31/18* = \$162,000.

NCI in Sun's 1/1/18 book value ( $20\% \times \$580,000$ ) . . . . .	\$116,000
NCI in unamortized excess fair-value allocations ( $20\% \times \$86,500$ ) . . . . .	17,300
January 1, 2018, NCI in Sun's fair value . . . . .	133,300
NCI in Sun's net income [ $20\% \times (\$360,000 - 196,500)$ ] . . . . .	32,700
NCI dividend share ( $20\% \times \$20,000$ ) . . . . .	(4,000)
Noncontrolling interest in Sun Company, December 31, 2018. . . . .	<u>\$162,000</u>

- b. Six worksheet entries are necessary to produce a consolidation worksheet for Father Company and Sun Company.

#### Entry \*C

Investment in Sun Company . . . . .	123,200	
Retained Earnings, 1/1/18 (parent) . . . . .		123,200

This increment is required to adjust the parent's Retained Earnings from the initial value method to the equity method.

The amount is \$144,000 (80% of the \$180,000 increase in the subsidiary's book value during previous years) less \$20,800 in excess amortization over this same 4-year period ( $\$6,500 \times 80\% \times 4$  years).

#### Entry S

Common Stock (subsidiary) . . . . .	100,000	
Retained Earnings, 1/1/18 (subsidiary) . . . . .	480,000	
Investment in Sun Company (80%) . . . . .		464,000
Noncontrolling Interest in Sun Company (20%) . . . . .		116,000

To eliminate beginning stockholders' equity accounts of the subsidiary and recognize the beginning balance book value attributed to the outside owners (20%).

**Entry A1 and A2 Combined**

Buildings . . . . .	10,000	
Land . . . . .	50,000	
Equipment . . . . .	2,500	
Royalty Agreement . . . . .	24,000	
Goodwill . . . . .	15,000	
Investment in Sun Company . . . . .		84,200
Noncontrolling Interest in Sun Company . . . . .		17,300
To recognize unamortized excess fair- over book-value allocations as of the first day of the current year (see Exhibit 4.14). All goodwill is attributable to the controlling interest.		

**Entry I**

Dividend Income . . . . .	16,000	
Dividends Declared . . . . .		16,000
To eliminate intra-entity dividend declarations recorded by parent (using the initial value method) as income.		

**Entry E**

Depreciation Expense . . . . .	5,000	
Amortization Expense . . . . .	1,500	
Buildings . . . . .		2,500
Equipment . . . . .		2,500
Royalty Agreement . . . . .		1,500
To recognize excess amortization expenses for the current year (see Exhibit 4.13).		

**Entry P**

Liabilities . . . . .	20,000	
Current Assets . . . . .		20,000
To eliminate the intra-entity receivable and payable.		

- c. If the acquisition-date fair value of the noncontrolling interest were \$104,500, then Sun's fair value would increase by \$2,000 to \$529,500 and goodwill would increase by the same \$2,000 to \$17,000. The entire \$2,000 increase in goodwill would be allocated to the noncontrolling interest as follows:

	Controlling Interest	Noncontrolling Interest	Total
Acquisition-date fair value . . . . .	\$425,000	\$104,500	\$529,500
Relative fair value of Sun's identifiable net assets (80% and 20%) . . . . .	<u>410,000</u>	<u>102,500</u>	<u>512,500</u>
Goodwill . . . . .	<u>\$ 15,000</u>	<u>\$ 2,000</u>	<u>\$ 17,000</u>

Therefore, the consolidated balance sheet would show goodwill at \$17,000 (instead of \$15,000) and the noncontrolling interest in Sun Company balance would show \$164,000 (instead of \$162,000).

**Questions**

1. What does the term *noncontrolling interest* mean?
2. Atwater Company acquires 80 percent of the outstanding voting stock of Belwood Company. On that date, Belwood possesses a building with a \$160,000 book value but a \$220,000 fair value. At what value would this building be consolidated?
3. What is a control premium and how does it affect consolidated financial statements?
4. Where should the noncontrolling interest's claims be reported in a set of consolidated financial statements?
5. How is the noncontrolling interest in a subsidiary company calculated as of the end of a reporting period?

6. December 31 consolidated financial statements are being prepared for Allsports Company and its new subsidiary acquired on July 1 of the current year. Should Allsports adjust its consolidated balances for the preacquisition subsidiary revenues and expenses?
7. Tree, Inc., has held a 10 percent interest in the stock of Limb Company for several years. Because of the level of ownership, this investment has been accounted for using the fair-value method. At the beginning of the current year, Tree acquires an additional 70 percent interest, which provides the company with control over Limb. In preparing consolidated financial statements for this business combination, how does Tree account for the previous 10 percent ownership interest?
8. Duke Corporation owns a 70 percent equity interest in Salem Company, a subsidiary corporation. During the current year, a portion of this stock is sold to an outside party. Before recording this transaction, Duke adjusts the book value of its investment account. What is the purpose of this adjustment?
9. In question (8), how would the parent record the sales transaction?
10. In question (8), how would Duke account for the remainder of its investment subsequent to the sale of this partial interest?

## Problems

### LO 4-1

1. What is a basic premise of the acquisition method regarding accounting for a noncontrolling interest?
  - a. Consolidated financial statements should be primarily for the benefit of the parent company's stockholders.
  - b. Consolidated financial statements should be produced only if both the parent and the subsidiary are in the same basic industry.
  - c. A subsidiary is an indivisible part of a business combination and should be included in its entirety regardless of the degree of ownership.
  - d. Consolidated financial statements should not report a noncontrolling interest balance because these outside owners do not hold stock in the parent company.

### LO 4-2

2. Mittelstaedt, Inc., buys 60 percent of the outstanding stock of Sherry, Inc. Sherry owns a piece of land that cost \$212,000 but had a fair value of \$549,000 at the acquisition date. What value should be attributed to this land in a consolidated balance sheet at the date of takeover?
  - a. \$549,000
  - b. \$337,000
  - c. \$127,200
  - d. \$421,800

### LO 4-2

3. Jordan, Inc., holds 75 percent of the outstanding stock of Paxson Corporation. Paxson currently owes Jordan \$400,000 for inventory acquired over the past few months. In preparing consolidated financial statements, what amount of this debt should be eliminated?
  - a. -0-
  - b. \$100,000
  - c. \$300,000
  - d. \$400,000

### LO 4-2

4. On January 1, 2017, Grand Haven, Inc., reports net assets of \$760,000 although equipment (with a four-year remaining life) having a book value of \$440,000 is worth \$500,000 and an unrecorded patent is valued at \$45,000. Van Buren Corporation pays \$692,000 on that date to acquire an 80 percent equity ownership in Grand Haven. If the patent has a remaining life of nine years, at what amount should the patent be reported on Van Buren's consolidated balance sheet at December 31, 2018?
  - a. \$28,000
  - b. \$35,000
  - c. \$36,000
  - d. \$40,000

### LO 4-6

5. The noncontrolling interest represents an outside ownership in a subsidiary that is not attributable to the parent company. Where in the consolidated balance sheet is this outside ownership interest recognized?
  - a. In the liability section.
  - b. In a mezzanine section between liabilities and owners' equity.
  - c. In the owners' equity section.
  - d. The noncontrolling interest is not recognized in the consolidated balance sheet.

## LO 4-4

6. On January 1, 2017, Chamberlain Corporation pays \$388,000 for a 60 percent ownership in Neville. Annual excess fair-value amortization of \$15,000 results from the acquisition. On December 31, 2018, Neville reports revenues of \$400,000 and expenses of \$300,000 and Chamberlain reports revenues of \$700,000 and expenses of \$400,000. The parent figures contain no income from the subsidiary. What is consolidated net income attributable to Chamberlain Corporation?
- \$385,000
  - \$351,000
  - \$366,000
  - \$400,000

**Problems 7 and 8 relate to the following:**

On January 1, 2016, Pride Corporation purchased 90 percent of the outstanding voting shares of Star, Inc., for \$540,000 cash. The acquisition-date fair value of the noncontrolling interest was \$60,000. At January 1, 2016, Star's net assets had a total carrying amount of \$420,000. Equipment (eight-year remaining life) was undervalued on Star's financial records by \$80,000. Any remaining excess fair value over book value was attributed to a customer list developed by Star (four-year remaining life), but not recorded on its books. Star recorded net income of \$70,000 in 2016 and \$80,000 in 2017. Each year since the acquisition, Star has declared a \$20,000 dividend. At January 1, 2018, Pride's retained earnings show a \$250,000 balance.

Selected account balances for the two companies from their separate operations were as follows:

	Pride	Star
2018 Revenues .....	\$498,000	\$285,000
2018 Expenses .....	350,000	195,000

## LO 4-4

7. What is consolidated net income for 2018?
- \$194,000
  - \$197,500
  - \$203,000
  - \$238,000

## LO 4-8

8. Assuming that Pride, in its internal records, accounts for its investment in Star using the equity method, what amount of retained earnings would Pride report on its January 1, 2018, consolidated balance sheet?
- \$250,000
  - \$286,000
  - \$315,000
  - \$360,000

## LO 4-8

9. James Company acquired 85 percent of Mark-Right Company on April 1. On its December 31 consolidated income statement, how should James account for Mark-Right's revenues and expenses that occurred before April 1?
- Include 100 percent of Mark-Right's revenues and expenses and deduct the preacquisition portion as noncontrolling interest in net income.
  - Exclude 100 percent of the preacquisition revenues and 100 percent of the preacquisition expenses from their respective consolidated totals.
  - Exclude 15 percent of the preacquisition revenues and 15 percent of the preacquisition expenses from consolidated expenses.
  - Deduct 15 percent of the net combined revenues and expenses relating to the preacquisition period from consolidated net income.

## LO 4-9

10. Amie, Inc., has 100,000 shares of \$2 par value stock outstanding. Prairie Corporation acquired 30,000 of Amie's shares on January 1, 2015, for \$120,000 when Amie's net assets had a total fair value of \$350,000. On July 1, 2018, Prairie bought an additional 60,000 shares of Amie from a single stockholder for \$6 per share. Although Amie's shares were selling in the \$5 range around July 1, 2018, Prairie forecasted that obtaining control of Amie would produce significant revenue synergies to justify the premium price paid. If Amie's identifiable net assets had a fair value of \$500,000 at July 1, 2018, how much goodwill should Prairie report in its postcombination consolidated balance sheet?
- \$60,000
  - \$90,000
  - \$100,000
  - \$-0-

## LO 4-9

11. A parent buys 32 percent of a subsidiary in one year and then buys an additional 40 percent in the next year. In a step acquisition of this type, the original 32 percent acquisition should be
- Maintained at its initial value.
  - Adjusted to its equity method balance at the date of the second acquisition.
  - Adjusted to fair value at the date of the second acquisition with a resulting gain or loss recorded.
  - Adjusted to fair value at the date of the second acquisition with a resulting adjustment to additional paid-in capital.

## LO 4-4, 4-8

12. On April 1, Pujols, Inc., exchanges \$430,000 fair-value consideration for 70 percent of the outstanding stock of Ramirez Corporation. The remaining 30 percent of the outstanding shares continued to trade at a collective fair value of \$165,000. Ramirez's identifiable assets and liabilities each had book values that equaled their fair values on April 1 for a net total of \$500,000. During the remainder of the year, Ramirez generates revenues of \$600,000 and expenses of \$360,000 and declared no dividends. On a December 31 consolidated balance sheet, what amount should be reported as noncontrolling interest?
- \$219,000
  - \$237,000
  - \$234,000
  - \$250,500

## LO 4-10

13. McKinley, Inc., owns 100 percent of Jackson Company's 45,000 voting shares. On June 30, McKinley's internal accounting records show a \$192,000 equity method adjusted balance for its investment in Jackson. McKinley sells 15,000 of its Jackson shares on the open market for \$80,000 on June 30. How should McKinley record the excess of the sale proceeds over its carrying amount for the shares?
- Reduce goodwill by \$64,000.
  - Recognize a gain on sale for \$16,000.
  - Increase its additional paid-in capital by \$16,000.
  - Recognize a revaluation gain on its remaining shares of \$48,000.

**Use the following information for Problems 14 through 16:**

West Company acquired 60 percent of Solar Company for \$300,000 when Solar's book value was \$400,000. The newly comprised 40 percent noncontrolling interest had an assessed fair value of \$200,000. Also at the acquisition date, Solar had a trademark (with a 10-year remaining life) that was undervalued in the financial records by \$60,000. Also, patented technology (with a 5-year remaining life) was undervalued by \$40,000. Two years later, the following figures are reported by these two companies (stockholders' equity accounts have been omitted):

	West Company Book Value	Solar Company Book Value	Solar Company Fair Value
Current assets	\$620,000	\$300,000	\$320,000
Trademarks	260,000	200,000	280,000
Patented technology	410,000	150,000	150,000
Liabilities	(390,000)	(120,000)	(120,000)
Revenues	(900,000)	(400,000)	
Expenses	500,000	300,000	
Investment income	Not given		

## LO 4-2

14. What is the consolidated net income before allocation to the controlling and noncontrolling interests?
- \$400,000
  - \$486,000
  - \$491,600
  - \$500,000

## LO 4-4, 4-5

15. Assuming Solar Company has declared no dividends, what are the noncontrolling interest's share of the subsidiary's income and the ending balance of the noncontrolling interest in the subsidiary?
- \$26,000 and \$230,000
  - \$28,800 and \$252,000
  - \$34,400 and \$240,800
  - \$40,000 and \$252,000

LO 4-2

16. What is the consolidated trademarks balance?
- \$508,000
  - \$514,000
  - \$520,000
  - \$540,000

**Use the following information for Problems 17 through 21:**

On January 1, Park Corporation and Strand Corporation had condensed balance sheets as follows:

	Park	Strand
Current assets . . . . .	\$ 70,000	\$20,000
Noncurrent assets . . . . .	<u>90,000</u>	<u>40,000</u>
Total assets . . . . .	<u>\$160,000</u>	<u>\$60,000</u>
Current liabilities . . . . .	\$ 30,000	\$10,000
Long-term debt . . . . .	50,000	–0–
Stockholders' equity . . . . .	<u>80,000</u>	<u>50,000</u>
Total liabilities and equities . . . . .	<u>\$160,000</u>	<u>\$60,000</u>

On January 2, Park borrowed \$60,000 and used the proceeds to obtain 80 percent of the outstanding common shares of Strand. The acquisition price was considered proportionate to Strand's total fair value. The \$60,000 debt is payable in 10 equal annual principal payments, plus interest, beginning December 31. The excess fair value of the investment over the underlying book value of the acquired net assets is allocated to inventory (60 percent) and to goodwill (40 percent). On a consolidated balance sheet as of January 2, what should be the amount for each of the following?

LO 4-2

17. Current assets:
- \$105,000
  - \$102,000
  - \$100,000
  - \$90,000

LO 4-2

18. Noncurrent assets:
- \$130,000
  - \$134,000
  - \$138,000
  - \$140,000

LO 4-2

19. Current liabilities:
- \$50,000
  - \$46,000
  - \$40,000
  - \$30,000

LO 4-2

20. Noncurrent liabilities:
- \$110,000
  - \$104,000
  - \$90,000
  - \$50,000

LO 4-2

21. Stockholders' equity:
- \$80,000
  - \$90,000
  - \$95,000
  - \$130,000

(AICPA adapted)

LO 4-4, 4-5

22. On January 1, 2017, Harrison, Inc., acquired 90 percent of Starr Company in exchange for \$1,125,000 fair-value consideration. The total fair value of Starr Company was assessed at \$1,200,000. Harrison computed annual excess fair-value amortization of \$8,000 based on the difference between Starr's total fair value and its underlying book value. The subsidiary reported net



income of \$70,000 in 2017 and \$90,000 in 2018 with dividend declarations of \$30,000 each year. Apart from its investment in Starr, Harrison had net income of \$220,000 in 2017 and \$260,000 in 2018.

- a. What is the consolidated net income in each of these two years?
- b. What is the balance of the noncontrolling interest in Starr at December 31, 2018?

**LO 4-2, 4-4, 4-5**

23. On January 1, 2018, Johnsonville Enterprises, Inc., acquired 80 percent of Stayer Company's outstanding common shares in exchange for \$3,000,000 cash. The price paid for the 80 percent ownership interest was proportionately representative of the fair value of all of Stayer's shares.

At acquisition date, Stayer's books showed assets of \$4,200,000 and liabilities of \$1,600,000. The recorded assets and liabilities had fair values equal to their individual book values except that a building (10-year remaining life) with book value of \$195,000 had an appraised fair value of \$345,000. Stayer's books showed a \$175,500 carrying amount for this building at the end of 2018.

Also, at acquisition date Stayer possessed unrecorded technology processes (zero book value) with an estimated fair value of \$1,000,000 and a 20-year remaining life. For 2018 Johnsonville reported net income of \$650,000 (before recognition of Stayer's income), and Stayer separately reported earnings of \$350,000. During 2018, Johnsonville declared dividends of \$85,000 and Stayer declared \$50,000 in dividends.

Compute the amounts that Johnsonville Enterprises should report in its December 31, 2018, consolidated financial statements for the following items:

- a. Stayer's building (net of accumulated depreciation).
- b. Stayer's technology processes (net of accumulated amortization).
- c. Net income attributable to the noncontrolling interest.
- d. Net income attributable to controlling interest.
- e. Noncontrolling interest in Stayer.

**LO 4-4, 4-5, 4-7**

24. On January 1, Patterson Corporation acquired 80 percent of the 100,000 outstanding voting shares of Soriano, Inc., in exchange for \$31.25 per share cash. The remaining 20 percent of Soriano's shares continued to trade for \$30 both before and after Patterson's acquisition.

At January 1, Soriano's book and fair values were as follows:

	Book Values	Fair Values	Remaining Life
Current assets . . . . .	\$ 80,000	\$ 80,000	
Buildings and equipment . . . . .	1,250,000	1,000,000	5 years
Trademarks . . . . .	700,000	900,000	10 years
Patented technology . . . . .	940,000	2,000,000	4 years
	<u>\$2,970,000</u>		
Current liabilities . . . . .	\$ 180,000	\$ 180,000	
Long-term notes payable . . . . .	1,500,000	1,500,000	
Common stock . . . . .	50,000		
Additional paid-in capital . . . . .	500,000		
Retained earnings . . . . .	740,000		
	<u>\$2,970,000</u>		

In addition, Patterson assigned a \$600,000 value to certain unpatented technologies recently developed by Soriano. These technologies were estimated to have a three-year remaining life.

During the year, Soriano declared a \$30,000 dividend for its shareholders. The companies reported the following revenues and expenses from their separate operations for the year ending December 31.

	Patterson	Soriano
Revenues . . . . .	\$3,000,000	\$1,400,000
Expenses . . . . .	1,750,000	600,000

- a. What amount should Patterson recognize as the total value of the acquisition in its January 1 consolidated balance sheet?
- b. What valuation principle should Patterson use to report each of Soriano's identifiable assets and liabilities in its January 1 consolidated balance sheet?

- c. For years subsequent to acquisition, how will Soriano’s identifiable assets and liabilities be valued in Patterson’s consolidated financial statements?
- d. How much goodwill resulted from Patterson’s acquisition of Soriano?
- e. What is the consolidated net income for the year and what amounts are allocated to the controlling and noncontrolling interests?
- f. What is the noncontrolling interest amount reported in the December 31 consolidated balance sheet?
- g. Assume instead that, based on its share prices, Soriano’s January 1 total fair value was assessed at \$2,250,000. How would the reported amounts for Soriano’s net assets change on Patterson’s acquisition-date consolidated balance sheet?

**LO 4-9**

25. On January 1, 2017, Palka, Inc., acquired 70 percent of the outstanding shares of Sellinger Company for \$1,141,000 in cash. The price paid was proportionate to Sellinger’s total fair value, although at the acquisition date, Sellinger had a total book value of \$1,380,000. All assets acquired and liabilities assumed had fair values equal to book values except for a patent (six-year remaining life) that was undervalued on Sellinger’s accounting records by \$240,000. On January 1, 2018, Palka acquired an additional 25 percent common stock equity interest in Sellinger Company for \$415,000 in cash. On its internal records, Palka uses the equity method to account for its shares of Sellinger.

During the two years following the acquisition, Sellinger reported the following net income and dividends:

	2017	2018
Net income . . . . .	\$340,000	\$440,000
Dividends declared . . . . .	150,000	180,000

- a. Show Palka’s journal entry to record its January 1, 2018, acquisition of an additional 25 percent ownership of Sellinger Company shares.
- b. Prepare a schedule showing Palka’s December 31, 2018, equity method balance for its Investment in Sellinger account.

**LO 4-2, 4-7, 4-8**

26. Parker, Inc., acquires 70 percent of Sawyer Company for \$420,000. The remaining 30 percent of Sawyer’s outstanding shares continue to trade at a collective value of \$174,000. On the acquisition date, Sawyer has the following accounts:

	Book Value	Fair Value
Current assets . . . . .	\$ 210,000	\$ 210,000
Land . . . . .	170,000	180,000
Buildings . . . . .	300,000	330,000
Liabilities . . . . .	(280,000)	(280,000)

The buildings have a 10-year remaining life. In addition, Sawyer holds a patent worth \$140,000 that has a five-year remaining life but is not recorded on its financial records. At the end of the year, the two companies report the following balances:

	Parker	Sawyer
Revenues . . . . .	\$(900,000)	\$(600,000)
Expenses . . . . .	600,000	400,000

- a. Assume that the acquisition took place on January 1. What figures would appear in a consolidated income statement for this year?
- b. Assume that the acquisition took place on April 1. Sawyer’s revenues and expenses occurred uniformly throughout the year. What amounts would appear in a consolidated income statement for this year?

**LO 4-2, 4-4, 4-5**

27. On January 1, Beckman, Inc., acquires 60 percent of the outstanding stock of Calvin for \$36,000. Calvin Co. has one recorded asset, a specialized production machine with a book value of \$10,000 and no liabilities. The fair value of the machine is \$50,000, and the remaining useful life is estimated to be 10 years. Any remaining excess fair value is attributable to an unrecorded process

trade secret with an estimated future life of four years. Calvin's total acquisition-date fair value is \$60,000.

At the end of the year, Calvin reports the following in its financial statements:

Revenues	\$50,000	Machine	\$ 9,000	Common stock	\$10,000
Expenses	<u>20,000</u>	Other assets	<u>26,000</u>	Retained earnings	<u>25,000</u>
Net income	<u>\$30,000</u>	Total assets	<u>\$35,000</u>	Total equity	<u>\$35,000</u>
Dividends declared	<u>\$ 5,000</u>				

Determine the amounts that Beckman should report in its year-end consolidated financial statements for noncontrolling interest in subsidiary income, noncontrolling interest, Calvin's machine (net of accumulated depreciation), and the process trade secret.

**LO 4-1, 4-5, 4-6**

28. Plaza, Inc., acquires 80 percent of the outstanding common stock of Stanford Corporation on January 1, 2018, in exchange for \$900,000 cash. At the acquisition date, Stanford's total fair value, including the noncontrolling interest, was assessed at \$1,125,000. Also at the acquisition date, Stanford's book value was \$690,000.

Several individual items on Stanford's financial records had fair values that differed from their book values as follows:

	<b>Book Value</b>	<b>Fair Value</b>
Tradenames (indefinite life) . . . . .	\$ 360,000	\$383,000
Property and equipment (net, 8-year remaining life) . . . . .	290,000	330,000
Patent (14-year remaining life) . . . . .	132,000	272,000

For internal reporting purposes, Plaza, Inc., employs the equity method to account for this investment. The following account balances are for the year ending December 31, 2018, for both companies.

	<b>Plaza</b>	<b>Stanford</b>
Revenues . . . . .	\$(1,400,000)	\$ (825,000)
Cost of goods sold . . . . .	774,000	395,750
Depreciation expense . . . . .	328,000	36,250
Amortization expense . . . . .	—0—	28,000
Equity in income of Stanford . . . . .	<u>(280,000)</u>	<u>—0—</u>
Net income . . . . .	<u>\$ (578,000)</u>	<u>\$ (365,000)</u>
Retained earnings, 1/1/18 . . . . .	\$(1,275,000)	\$ (530,000)
Net income . . . . .	(578,000)	(365,000)
Dividends declared . . . . .	<u>300,000</u>	<u>50,000</u>
Retained earnings, 12/31/18 . . . . .	<u>\$(1,553,000)</u>	<u>\$ (845,000)</u>
Current assets . . . . .	\$ 860,000	\$ 432,250
Investment in Stanford . . . . .	1,140,000	—0—
Tradenames . . . . .	240,000	360,000
Property and equipment (net) . . . . .	1,030,000	253,750
Patents . . . . .	<u>—0—</u>	<u>104,000</u>
Total assets . . . . .	<u>\$3,270,000</u>	<u>\$ 1,150,000</u>
Accounts payable . . . . .	\$ (142,000)	\$ (145,000)
Common stock . . . . .	(300,000)	(120,000)
Additional paid-in capital . . . . .	(1,275,000)	(40,000)
Retained earnings (above) . . . . .	<u>(1,553,000)</u>	<u>(845,000)</u>
Total liabilities and equities . . . . .	<u>\$(3,270,000)</u>	<u>\$(1,150,000)</u>

At year-end, there were no intra-entity receivables or payables.

Prepare a worksheet to consolidate the financial statements of Plaza, Inc., and its subsidiary Stanford.

**LO 4-3, 4-5, 4-7**

29. On January 1, 2016, Parflex Corporation exchanged \$344,000 cash for 90 percent of Eagle Corporation's outstanding voting stock. Eagle's acquisition date balance sheet follows:

Cash and receivables	\$ 15,000	Liabilities	\$ 76,000
Inventory	35,000	Common stock	150,000
Property and equipment (net)	350,000	Retained earnings	174,000
	<u>\$400,000</u>		<u>\$400,000</u>

On January 1, 2016, Parflex prepared the following fair-value allocation schedule:

Consideration transferred by Parflex	\$344,000
10% noncontrolling interest fair value	<u>36,000</u>
Fair value of Eagle	380,000
Book value of Eagle	<u>324,000</u>
Excess fair over book value	56,000
to equipment (undervalued, remaining life of 9 years)	<u>18,000</u>
to goodwill (indefinite life)	<u>\$ 38,000</u>

The companies' financial statements for the year ending December 31, 2018, follow:

	Parflex	Eagle
Sales	\$ (862,000)	\$(366,000)
Cost of goods sold	515,000	209,000
Depreciation expense	191,200	67,000
Equity in Eagle's earnings	<u>(79,200)</u>	<u>—0—</u>
Separate company net income	<u>\$ (235,000)</u>	<u>\$ (90,000)</u>
Retained earnings 1/1	\$ (500,000)	\$(278,000)
Net income	(235,000)	(90,000)
Dividends declared	<u>130,000</u>	<u>27,000</u>
Retained earnings 12/31	<u>\$ (605,000)</u>	<u>\$(341,000)</u>
Cash and receivables	\$135,000	\$ 82,000
Inventory	255,000	136,000
Investment in Eagle	488,900	—0—
Property and equipment (net)	<u>964,000</u>	<u>328,000</u>
Total assets	<u>\$ 1,842,900</u>	<u>\$ 546,000</u>
Liabilities	\$ (722,900)	(55,000)
Common stock—Parflex	(515,000)	—0—
Common stock—Eagle	—0—	(150,000)
Retained earnings 12/31	<u>(605,000)</u>	<u>(341,000)</u>
Total liabilities and owners' equity	<u>\$(1,842,900)</u>	<u>\$(546,000)</u>

At year-end, there were no intra-entity receivables or payables.

- Compute the goodwill allocation to the controlling and noncontrolling interest.
- Show how Parflex determined its "Investment in Eagle" account balance.
- Determine the amounts that should appear on Parflex's December 31, 2018, consolidated statement of financial position and its 2018 consolidated income statement.

**LO 4-3, 4-5, 4-7**

30. On January 1, 2017, Holland Corporation paid \$8 per share to a group of Zeeland Corporation shareholders to acquire 60,000 shares of Zeeland's outstanding voting stock, representing a 60 percent ownership interest. The remaining 40,000 shares of Zeeland continued to trade in the market close to its recent average of \$6.50 per share both before and after the acquisition by Holland. Zeeland's acquisition date balance sheet follows:

Current assets	\$ 14,000	Liabilities	\$ 212,000
Property and equipment (net)	268,000	Common stock	100,000
Patents	<u>190,000</u>	Retained earnings	<u>160,000</u>
	<u>\$472,000</u>		<u>\$472,000</u>

On January 1, 2017, Holland assessed the carrying amount of Zeeland's equipment (5-year remaining life) to be undervalued by \$55,000. Holland also determined that Zeeland possessed

unrecorded patents (10-year remaining life) worth \$285,000. Zeeland's acquisition-date fair values for its current assets and liabilities were equal to their carrying amounts. Any remaining excess of Zeeland's acquisition-date fair value over its book value was attributed to goodwill.

The companies' financial statements for the year ending December 31, 2018, follow:

	Holland	Zeeland
Sales .....	\$ (640,500)	\$(428,500)
Cost of goods sold .....	325,000	200,000
Depreciation expense .....	80,000	34,000
Amortization expense .....	14,000	21,000
Other operating expenses .....	52,000	63,500
Equity in Zeeland earnings .....	(42,300)	-0-
Separate company net income .....	<u>\$ (211,800)</u>	<u>\$(110,000)</u>
Retained earnings 1/1 .....	\$ (820,200)	\$(296,500)
Net income .....	(211,800)	(110,000)
Dividends declared .....	50,000	30,000
Retained earnings 12/31 .....	<u>\$ (982,000)</u>	<u>\$(376,500)</u>
Current assets .....	\$ 125,000	\$ 81,500
Investment in Zeeland .....	562,500	-0-
Property and equipment (net) .....	837,000	259,000
Patents .....	149,000	147,500
Total assets .....	<u>\$ 1,673,500</u>	<u>\$ 488,000</u>
Liabilities .....	\$ (371,500)	\$ (11,500)
Common stock - Holland .....	(320,000)	-0-
Common stock - Zeeland .....	-0-	(100,000)
Retained earnings 12/31 .....	(982,000)	(376,500)
Total liabilities and owners equity .....	<u>\$(1,673,500)</u>	<u>\$(488,000)</u>

At year-end, there were no intra-entity receivables or payables.

- a. Compute the amount of goodwill recognized in Holland's acquisition of Zeeland and the allocation of goodwill to the controlling and noncontrolling interest.
  - b. Show how Holland determined its December 31, 2018, Investment in Zeeland account balance.
  - c. Prepare a worksheet to determine the amounts that should appear on Holland's December 31, 2018, consolidated financial statements.
31. On January 1, 2018, Morey, Inc., exchanged \$178,000 for 25 percent of Amsterdam Corporation. Morey appropriately applied the equity method to this investment. At January 1, the book values of Amsterdam's assets and liabilities approximated their fair values.

On June 30, 2018, Morey paid \$560,000 for an additional 70 percent of Amsterdam, thus increasing its overall ownership to 95 percent. The price paid for the 70 percent acquisition was proportionate to Amsterdam's total fair value. At June 30, the carrying amounts of Amsterdam's assets and liabilities approximated their fair values. Any remaining excess fair value was attributed to goodwill.

Amsterdam reports the following amounts at December 31, 2018 (credit balances shown in parentheses):

Revenues .....	\$(210,000)
Expenses .....	140,000
Retained earnings, January 1 .....	(200,000)
Dividends declared, October 1 .....	20,000
Common stock .....	(500,000)

Amsterdam's revenue and expenses were distributed evenly throughout the year and no changes in Amsterdam's stock have occurred.

Using the acquisition method, compute the following:

- a. The acquisition-date fair value of Amsterdam to be included in Morey's June 30 consolidated financial statements.

- b. The revaluation gain (or loss) reported by Morey for its 25 percent investment in Amsterdam on June 30.
- c. The amount of goodwill recognized by Morey on its December 31 balance sheet (assume no impairments have been recognized).
- d. The noncontrolling interest amount reported by Morey on its
  - June 30 consolidated balance sheet.
  - December 31 consolidated balance sheet.

**LO 4-10**

32. Posada Company acquired 7,000 of the 10,000 outstanding shares of Sabathia Company on January 1, 2016, for \$840,000. The subsidiary's total fair value was assessed at \$1,200,000 although its book value on that date was \$1,130,000. The \$70,000 fair value in excess of Sabathia's book value was assigned to a patent with a five-year remaining life.

On January 1, 2018, Posada reported a \$1,085,000 equity method balance in the Investment in Sabathia Company account. On October 1, 2018, Posada sells 1,000 shares of the investment for \$191,000. During 2018, Sabathia reported net income of \$120,000 and declared dividends of \$40,000. These amounts are assumed to have occurred evenly throughout the year.

- a. How should Posada report the 2018 income that accrued to the 1,000 shares prior to their sale?
- b. What is the effect on Posada's financial statements from this sale of 1,000 shares?
- c. How should Posada report in its financial statements the 6,000 shares of Sabathia it continues to hold?

**LO 4-5**

33. On January 1, 2016, Telconnect acquires 70 percent of Bandmor for \$490,000 cash. The remaining 30 percent of Bandmor's shares continued to trade at a total value of \$210,000. The new subsidiary reported common stock of \$300,000 on that date, with retained earnings of \$180,000. A patent was undervalued in the company's financial records by \$30,000. This patent had a five-year remaining life. Goodwill of \$190,000 was recognized and allocated proportionately to the controlling and noncontrolling interests. Bandmor earns net income and declares cash dividends as follows:

Year	Net Income	Dividends
2016	\$ 75,000	\$39,000
2017	96,000	44,000
2018	110,000	60,000

On December 31, 2018, Telconnect owes \$22,000 to Bandmor.

- a. If Telconnect has applied the equity method, what consolidation entries are needed as of December 31, 2018?
- b. If Telconnect has applied the initial value method, what Entry \*C is needed for a 2018 consolidation?
- c. If Telconnect has applied the partial equity method, what Entry \*C is needed for a 2018 consolidation?
- d. What noncontrolling interest balances will appear in consolidated financial statements for 2018?

**LO 4-2, 4-3, 4-5**

34. Miller Company acquired an 80 percent interest in Taylor Company on January 1, 2016. Miller paid \$664,000 in cash to the owners of Taylor to acquire these shares. In addition, the remaining 20 percent of Taylor shares continued to trade at a total value of \$166,000 both before and after Miller's acquisition.

On January 1, 2016, Taylor reported a book value of \$600,000 (Common Stock = \$300,000; Additional Paid-In Capital = \$90,000; Retained Earnings = \$210,000). Several of Taylor's buildings that had a remaining life of 20 years were undervalued by a total of \$80,000.

During the next three years, Taylor reports income and declares dividends as follows:

Year	Net Income	Dividends
2016	\$ 70,000	\$10,000
2017	90,000	15,000
2018	100,000	20,000

Determine the appropriate answers for each of the following questions:

- a. What amount of excess depreciation expense should be recognized in the consolidated financial statements for the initial years following this acquisition?

- b. If a consolidated balance sheet is prepared as of January 1, 2016, what amount of goodwill should be recognized?
- c. If a consolidation worksheet is prepared as of January 1, 2016, what Entry S and Entry A should be included?
- d. On the separate financial records of the parent company, what amount of investment income would be reported for 2016 under each of the following accounting methods?
- The equity method.
  - The partial equity method.
  - The initial value method.
- e. On the parent company's separate financial records, what would be the December 31, 2018, balance for the Investment in Taylor Company account under each of the following accounting methods?
- The equity method.
  - The partial equity method.
  - The initial value method.
- f. As of December 31, 2017, Miller's Buildings account on its separate records has a balance of \$800,000 and Taylor has a similar account with a \$300,000 balance. What is the consolidated balance for the Buildings account?
- g. What is the balance of consolidated goodwill as of December 31, 2018?
- h. Assume that the parent company has been applying the equity method to this investment. On December 31, 2018, the separate financial statements for the two companies present the following information:

	Miller Company	Taylor Company
Common stock . . . . .	\$500,000	\$300,000
Additional paid-in capital . . . . .	280,000	90,000
Retained earnings, 12/31/18 . . . . .	620,000	425,000

What will be the consolidated balance of each of these accounts?

35. Following are several account balances taken from the records of Karson and Reilly as of December 31, 2018. A few asset accounts have been omitted here. All revenues, expenses, and dividend declarations occurred evenly throughout the year. Annual tests have indicated no goodwill impairment.

	Karson	Reilly
Sales . . . . .	\$ (800,000)	\$(500,000)
Cost of goods sold . . . . .	400,000	280,000
Operating expenses . . . . .	200,000	100,000
Investment income . . . . .	not given	–0–
Retained earnings, 1/1 . . . . .	(1,400,000)	(700,000)
Dividends declared . . . . .	80,000	20,000
Trademarks . . . . .	600,000	200,000
Royalty agreements . . . . .	700,000	300,000
Licensing agreements . . . . .	400,000	400,000
Liabilities . . . . .	(500,000)	(200,000)
Common stock (\$10 par value) . . . . .	(400,000)	(100,000)
Additional paid-in capital . . . . .	(500,000)	(600,000)

On July 1, 2018, Karson acquired 80 percent of Reilly for \$1,330,000 cash consideration. In addition, Karson agreed to pay additional cash to the former owners of Reilly if certain performance measures are achieved after three years. Karson assessed a \$30,000 fair value for the contingent performance obligation as of the acquisition date and as of December 31, 2018.

On July 1, 2018, Reilly's assets and liabilities had book values equal to their fair value except for some trademarks (with five-year remaining lives) that were undervalued by \$150,000. Karson estimated Reilly's total fair value at \$1,700,000 on July 1, 2018.

For the following items, what balances would be reported on Karson's December 31, 2018, consolidated financial statements?

Sales	Consolidated Net Income
Expenses	Retained Earnings, 1/1
Noncontrolling Interest in Subsidiary's Net Income	Trademarks Goodwill

**LO 4-5**

36. Nascent, Inc., acquires 60 percent of Sea-Breeze Corporation for \$414,000 cash on January 1, 2015. The remaining 40 percent of the Sea-Breeze shares traded near a total value of \$276,000 both before and after the acquisition date. On January 1, 2015, Sea-Breeze had the following assets and liabilities:

	Book Value	Fair Value
Current assets	\$ 150,000	\$ 150,000
Land	200,000	200,000
Buildings (net) (6-year remaining life)	300,000	360,000
Equipment (net) (4-year remaining life)	300,000	280,000
Patent (10-year remaining life)	–0–	100,000
Liabilities	(400,000)	(400,000)

The companies' financial statements for the year ending December 31, 2018, follow:

	Nascent	Sea-Breeze
Revenues	\$ (600,000)	\$ (300,000)
Operating expenses	410,000	210,000
Investment income	(42,000)	–0–
Net income	<u>\$ (232,000)</u>	<u>\$ (90,000)</u>
Retained earnings, 1/1/18	\$ (700,000)	\$ (300,000)
Net income	(232,000)	(90,000)
Dividends declared	92,000	70,000
Retained earnings, 12/31/18	<u>\$ (840,000)</u>	<u>\$ (320,000)</u>
Current assets	\$ 330,000	\$ 100,000
Land	220,000	200,000
Buildings (net)	700,000	200,000
Equipment (net)	400,000	500,000
Investment in Sea-Breeze	414,000	–0–
Total assets	<u>\$ 2,064,000</u>	<u>\$ 1,000,000</u>
Liabilities	\$ (500,000)	\$ (200,000)
Common stock	(724,000)	(480,000)
Retained earnings, 12/31/18	<u>(840,000)</u>	<u>(320,000)</u>
Total liabilities and equities	<u>\$ (2,064,000)</u>	<u>\$ (1,000,000)</u>

Answer the following questions:

- How can the accountant determine that the parent has applied the initial value method?
- What is the annual excess amortization initially recognized in connection with this acquisition?
- If the parent had applied the equity method, what investment income would the parent have recorded in 2018?
- What amount should the parent report as retained earnings in its January 1, 2018, consolidated balance sheet?
- What is consolidated net income for 2018 and what amounts are attributable to the controlling and noncontrolling interests?
- Within consolidated statements at January 1, 2018, what balance is included for the subsidiary's Buildings account?
- What is the consolidated Buildings reported balance as of December 31, 2018?



LO 4-1, 4-5, 4-7



37. On January 1, 2017, Paloma Corporation exchanged \$1,710,000 cash for 90 percent of the outstanding voting stock of San Marco Company. The consideration transferred by Paloma provided a reasonable basis for assessing the total January 1, 2017, fair value of San Marco Company. At the acquisition date, San Marco reported the following owners' equity amounts in its balance sheet:

Common stock . . . . .	\$400,000
Additional paid-in capital . . . . .	60,000
Retained earnings . . . . .	265,000

In determining its acquisition offer, Paloma noted that the values for San Marco's recorded assets and liabilities approximated their fair values. Paloma also observed that San Marco had developed internally a customer base with an assessed fair value of \$800,000 that was not reflected on San Marco's books. Paloma expected both cost and revenue synergies from the combination.

At the acquisition date, Paloma prepared the following fair-value allocation schedule:

Fair value of San Marco Company . . . . .	\$1,900,000
Book value of San Marco Company . . . . .	<u>725,000</u>
Excess fair value . . . . .	1,175,000
to customer base (10-year remaining life) . . . . .	<u>800,000</u>
to goodwill . . . . .	\$ 375,000

At December 31, 2018, the two companies report the following balances:

	Paloma	San Marco
Revenues . . . . .	\$(1,843,000)	\$ (675,000)
Cost of goods sold . . . . .	1,100,000	322,000
Depreciation expense . . . . .	125,000	120,000
Amortization expense . . . . .	275,000	11,000
Interest expense . . . . .	27,500	7,000
Equity in income of San Marco . . . . .	<u>(121,500)</u>	<u>—0—</u>
Net income . . . . .	<u>\$ (437,000)</u>	<u>\$ (215,000)</u>
Retained earnings, 1/1 . . . . .	\$(2,625,000)	\$ (395,000)
Net income . . . . .	(437,000)	(215,000)
Dividends declared . . . . .	<u>350,000</u>	<u>25,000</u>
Retained earnings, 12/31 . . . . .	<u>\$(2,712,000)</u>	<u>\$ (585,000)</u>
Current assets . . . . .	\$ 1,204,000	\$ 430,000
Investment in San Marco . . . . .	1,854,000	—0—
Buildings and equipment . . . . .	931,000	863,000
Copyrights . . . . .	<u>950,000</u>	<u>107,000</u>
Total assets . . . . .	<u>\$ 4,939,000</u>	<u>\$ 1,400,000</u>
Accounts payable . . . . .	\$ (485,000)	\$ (200,000)
Notes payable . . . . .	(542,000)	(155,000)
Common stock . . . . .	(900,000)	(400,000)
Additional paid-in capital . . . . .	(300,000)	(60,000)
Retained earnings, 12/31 . . . . .	<u>(2,712,000)</u>	<u>(585,000)</u>
Total liabilities and equities . . . . .	<u>\$(4,939,000)</u>	<u>\$(1,400,000)</u>

At year-end, there were no intra-entity receivables or payables.

- Determine the consolidated balances for this business combination as of December 31, 2018.
  - If instead the noncontrolling interest's acquisition-date fair value is assessed at \$167,500, what changes would be evident in the consolidated statements?
38. The Holtz Corporation acquired 80 percent of the 100,000 outstanding voting shares of Devine, Inc., for \$7.20 per share on January 1, 2017. The remaining 20 percent of Devine's shares also traded actively at \$7.20 per share before and after Holtz's acquisition. An appraisal made on that date determined that all book values appropriately reflected the fair values of Devine's underlying accounts except that a building with a five-year future life was undervalued by \$85,500 and a fully amortized

LO 4-5, 4-6, 4-7

trademark with an estimated 10-year remaining life had a \$64,000 fair value. At the acquisition date, Devine reported common stock of \$100,000 and a retained earnings balance of \$226,500.

Following are the separate financial statements for the year ending December 31, 2018:

	Holtz Corporation	Devine, Inc.
Sales .....	\$ (641,000)	\$(399,000)
Cost of goods sold .....	198,000	176,000
Operating expenses .....	273,000	126,000
Dividend income .....	(16,000)	–0–
Net income .....	<u>\$ (186,000)</u>	<u>\$(97,000)</u>
Retained earnings, 1/1/18 .....	\$ (762,000)	\$(296,500)
Net income (above) .....	(186,000)	(97,000)
Dividends declared .....	70,000	20,000
Retained earnings, 12/31/18 .....	<u>\$ (878,000)</u>	<u>\$(373,500)</u>
Current assets .....	\$ 121,000	\$ 120,500
Investment in Devine, Inc. ....	576,000	–0–
Buildings and equipment (net) ..	887,000	335,000
Trademarks .....	149,000	236,000
Total assets .....	<u>\$ 1,733,000</u>	<u>\$ 691,500</u>
Liabilities .....	\$ (535,000)	\$(218,000)
Common stock .....	(320,000)	(100,000)
Retained earnings, 12/31/18 (above) ..	(878,000)	(373,500)
Total liabilities and equities .....	<u>\$ (1,733,000)</u>	<u>\$(691,500)</u>

At year-end, there were no intra-entity receivables or payables.

- Prepare a worksheet to consolidate these two companies as of December 31, 2018.
- Prepare a 2018 consolidated income statement for Holtz and Devine.
- If instead the noncontrolling interest shares of Devine had traded for \$4.76 surrounding Holtz's acquisition date, what is the impact on goodwill?

LO 4-1, 4-5, 4-6

**excel**

39. Padre, Inc., buys 80 percent of the outstanding common stock of Sierra Corporation on January 1, 2018, for \$802,720 cash. At the acquisition date, Sierra's total fair value, including the noncontrolling interest, was assessed at \$1,003,400 although Sierra's book value was only \$690,000. Also, several individual items on Sierra's financial records had fair values that differed from their book values as follows:

	Book Value	Fair Value
Land .....	\$ 65,000	\$ 290,000
Buildings and equipment (10-year remaining life) .....	287,000	263,000
Copyright (20-year remaining life) .....	122,000	216,000
Notes payable (due in 8 years) .....	(176,000)	(157,600)

For internal reporting purposes, Padre, Inc., employs the equity method to account for this investment. The following account balances are for the year ending December 31, 2018, for both companies.

	Padre	Sierra
Revenues .....	\$(1,394,980)	\$ (684,900)
Cost of goods sold .....	774,000	432,000
Depreciation expense .....	274,000	11,600
Amortization expense .....	0	6,100
Interest expense .....	52,100	9,200
Equity in income of Sierra .....	(177,120)	–0–
Net income .....	<u>\$ (472,000)</u>	<u>\$ (226,000)</u>

(continued)

(continued)

	Padre	Sierra
Retained earnings, 1/1/18	\$(1,275,000)	\$ (530,000)
Net income	(472,000)	(226,000)
Dividends declared	260,000	65,000
Retained earnings, 12/31/18	<u>\$(1,487,000)</u>	<u>\$ (691,000)</u>
Current assets	\$ 856,160	\$ 764,700
Investment in Sierra	927,840	–0–
Land	360,000	65,000
Buildings and equipment (net)	909,000	275,400
Copyright	–0–	115,900
Total assets	<u>\$ 3,053,000</u>	<u>\$ 1,221,000</u>
Accounts payable	\$ (275,000)	\$ (194,000)
Notes payable	(541,000)	(176,000)
Common stock	(300,000)	(100,000)
Additional paid-in capital	(450,000)	(60,000)
Retained earnings (above)	<u>(1,487,000)</u>	<u>(691,000)</u>
Total liabilities and equities	<u>\$(3,053,000)</u>	<u>\$(1,221,000)</u>

At year-end, there were no intra-entity receivables or payables.

Prepare a worksheet to consolidate the financial statements of these two companies.

40. Adams Corporation acquired 90 percent of the outstanding voting shares of Barstow, Inc., on December 31, 2016. Adams paid a total of \$603,000 in cash for these shares. The 10 percent non-controlling interest shares traded on a daily basis at fair value of \$67,000 both before and after Adams's acquisition. On December 31, 2016, Barstow had the following account balances:

	Book Value	Fair Value
Current assets	\$160,000	\$160,000
Land	120,000	150,000
Buildings (10-year remaining life)	220,000	200,000
Equipment (5-year remaining life)	160,000	200,000
Patents (10-year remaining life)	–0–	50,000
Notes payable (due in 5 years)	(200,000)	(180,000)
Common stock	(180,000)	
Retained earnings, 12/31/16	(280,000)	

December 31, 2018, adjusted trial balances for the two companies follow:

	Adams Corporation	Barstow, Inc.
<i>Debits</i>		
Current assets	\$ 610,000	\$ 250,000
Land	380,000	150,000
Buildings	490,000	250,000
Equipment	873,000	150,000
Investment in Barstow, Inc.	702,000	–0–
Cost of goods sold	480,000	90,000
Depreciation expense	100,000	55,000
Interest expense	40,000	15,000
Dividends declared	110,000	70,000
Total debits	<u>\$3,785,000</u>	<u>\$1,030,000</u>
<i>Credits</i>		
Notes payable	\$ 860,000	\$ 230,000
Common stock	510,000	180,000
Retained earnings, 1/1/18	1,367,000	340,000
Revenues	940,000	280,000
Investment income	108,000	–0–
Total credits	<u>\$3,785,000</u>	<u>\$1,030,000</u>

LO 4-1, 4-5

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At year-end, there were no intra-entity receivables or payables.

- Prepare schedules for acquisition-date fair-value allocations and amortizations for Adams's investment in Barstow.
- Determine Adams's method of accounting for its investment in Barstow. Support your answer with a numerical explanation.
- Without using a worksheet or consolidation entries, determine the balances to be reported as of December 31, 2018, for this business combination.
- To verify the figures determined in requirement (c), prepare a consolidation worksheet for Adams Corporation and Barstow, Inc., as of December 31, 2018.

**LO 4-1, 4-4, 4-8**

41. Following are the individual financial statements for Gibson and Davis for the year ending December 31, 2018:

	Gibson	Davis
Sales . . . . .	\$ (600,000)	\$ (300,000)
Cost of goods sold . . . . .	300,000	140,000
Operating expenses . . . . .	174,000	60,000
Dividend income . . . . .	(24,000)	–0–
Net income . . . . .	<u>\$ (150,000)</u>	<u>\$ (100,000)</u>
Retained earnings, 1/1/18 . . . . .	\$ (700,000)	\$ (400,000)
Net income . . . . .	(150,000)	(100,000)
Dividends declared . . . . .	80,000	40,000
Retained earnings, 12/31/18 . . . . .	<u>\$ (770,000)</u>	<u>\$ (460,000)</u>
Cash and receivables . . . . .	\$ 248,000	\$ 100,000
Inventory . . . . .	500,000	190,000
Investment in Davis . . . . .	528,000	–0–
Buildings (net) . . . . .	524,000	600,000
Equipment (net) . . . . .	400,000	400,000
Total assets . . . . .	<u>\$ 2,200,000</u>	<u>\$ 1,290,000</u>
Liabilities . . . . .	(800,000)	(490,000)
Common stock . . . . .	(630,000)	(340,000)
Retained earnings, 12/31/18 . . . . .	(770,000)	(460,000)
Total liabilities and stockholders' equity	<u>\$ (2,200,000)</u>	<u>\$ (1,290,000)</u>

Gibson acquired 60 percent of Davis on April 1, 2018, for \$528,000. On that date, equipment owned by Davis (with a five-year remaining life) was overvalued by \$30,000. Also on that date, the fair value of the 40 percent noncontrolling interest was \$352,000. Davis earned income evenly during the year but declared the \$40,000 dividend on November 1, 2018.

- Prepare a consolidated income statement for the year ending December 31, 2018.
- Determine the consolidated balance for each of the following accounts as of December 31, 2018:

Goodwill	Buildings (net)
Equipment (net)	Dividends Declared
Common Stock	

**LO 4-2, 4-3, 4-6, 4-7, 4-8**

42. On July 1, 2018, Truman Company acquired a 70 percent interest in Atlanta Company in exchange for consideration of \$720,000 in cash and equity securities. The remaining 30 percent of Atlanta's shares traded closely near an average price that totaled \$290,000 both before and after Truman's acquisition.

In reviewing its acquisition, Truman assigned a \$100,000 fair value to a patent recently developed by Atlanta, even though it was not recorded within the financial records of the subsidiary. This patent is anticipated to have a remaining life of five years.

The following financial information is available for these two companies for 2018. In addition, the subsidiary's income was earned uniformly throughout the year. The subsidiary declared dividends quarterly.

	Truman	Atlanta
Revenues .....	\$ (670,000)	\$ (400,000)
Operating expenses .....	402,000	280,000
Income of subsidiary .....	(35,000)	–0–
Net income .....	<u>\$ (303,000)</u>	<u>\$ (120,000)</u>
Retained earnings, 1/1/18 .....	\$ (823,000)	\$ (500,000)
Net income (above) .....	(303,000)	(120,000)
Dividends declared .....	145,000	80,000
Retained earnings, 12/31/18 .....	<u>\$ (981,000)</u>	<u>\$ (540,000)</u>
Current assets .....	\$ 481,000	\$ 390,000
Investment in Atlanta .....	727,000	–0–
Land .....	388,000	200,000
Buildings .....	701,000	630,000
Total assets .....	<u>\$ 2,297,000</u>	<u>\$ 1,220,000</u>
Liabilities .....	\$ (816,000)	\$ (360,000)
Common stock .....	(95,000)	(300,000)
Additional paid-in capital .....	(405,000)	(20,000)
Retained earnings, 12/31/18 .....	(981,000)	(540,000)
Total liabilities and stockholders' equity .....	<u>\$ (2,297,000)</u>	<u>\$ (1,220,000)</u>

Answer each of the following:

- How did Truman allocate Atlanta's acquisition-date fair value to the various assets acquired and liabilities assumed in the combination?
  - How did Truman allocate the goodwill from the acquisition across the controlling and noncontrolling interests?
  - How did Truman derive the Investment in Atlanta account balance at the end of 2018?
  - Prepare a worksheet to consolidate the financial statements of these two companies as of December 31, 2018. At year-end, there were no intra-entity receivables or payables.
43. On January 1, 2017, Allan Company bought a 15 percent interest in Sysinger Company. The acquisition price of \$184,500 reflected an assessment that all of Sysinger's accounts were fairly valued within the company's accounting records. During 2017, Sysinger reported net income of \$100,000 and declared cash dividends of \$30,000. Allan possessed the ability to influence significantly Sysinger's operations and, therefore, accounted for this investment using the equity method. On January 1, 2018, Allan acquired an additional 80 percent interest in Sysinger and provided the following fair-value assessments of Sysinger's ownership components:

Consideration transferred by Allan for 80% interest .....	\$1,400,000
Fair value of Allan's 15% previous ownership .....	262,500
Noncontrolling interest's 5% fair value .....	87,500
Total acquisition-date fair value for Sysinger Company .....	<u>\$1,750,000</u>

Also, as of January 1, 2018, Allan assessed a \$400,000 value to an unrecorded customer contract recently negotiated by Sysinger. The customer contract is anticipated to have a remaining life of four years. Sysinger's other assets and liabilities were judged to have fair values equal to their book values. Allan elects to continue applying the equity method to this investment for internal reporting purposes.

At December 31, 2018, the following financial information is available for consolidation:

	Allan Company	Sysinger Company
Revenues .....	\$ (931,000)	\$ (380,000)
Operating expenses .....	615,000	230,000
Equity earnings of Sysinger .....	(47,500)	–0–
Gain on revaluation of Investment in Sysinger to fair value .....	(67,500)	–0–
Net income .....	<u>\$ 431,000</u>	<u>\$ 150,000</u>

(continued)

(continued)

	Allan Company	Sysinger Company
Retained earnings, January 1	\$ (965,000)	\$ (600,000)
Net income	(431,000)	(150,000)
Dividends declared	140,000	40,000
Retained earnings, December 31	<u>\$(1,256,000)</u>	<u>\$ (710,000)</u>
Current assets	\$ 288,000	\$ 540,000
Investment in Sysinger (equity method)	1,672,000	–0–
Property, plant, and equipment	826,000	590,000
Patented technology	850,000	370,000
Customer contract	–0–	–0–
Total assets	<u>\$ 3,636,000</u>	<u>\$ 1,500,000</u>
Liabilities	\$(1,300,000)	\$ (90,000)
Common stock	(900,000)	(500,000)
Additional paid-in capital	(180,000)	(200,000)
Retained earnings, December 31	<u>(1,256,000)</u>	<u>(710,000)</u>
Total liabilities and equities	<u>\$(3,636,000)</u>	<u>\$(1,500,000)</u>

- How should Allan allocate Sysinger's total acquisition-date fair value (January 1, 2018) to the assets acquired and liabilities assumed for consolidation purposes?
- Show how the following amounts on Allan's preconsolidation 2018 statements were derived:
  - Equity in earnings of Sysinger.
  - Gain on revaluation of Investment in Sysinger to fair value.
  - Investment in Sysinger.
- Prepare a worksheet to consolidate the financial statements of these two companies as of December 31, 2018.

At year-end, there were no intra-entity receivables or payables.

- On January 1, 2017, Bretz, Inc., acquired 60 percent of the outstanding shares of Keane Company for \$573,000 in cash. The price paid was proportionate to Keane's total fair value although at the date of acquisition, Keane had a total book value of \$810,000. All assets acquired and liabilities assumed had fair values equal to book values except for a copyright (six-year remaining life) that was undervalued in Keane's accounting records by \$120,000. During 2017, Keane reported net income of \$150,000 and declared cash dividends of \$80,000. On January 1, 2018, Bretz bought an additional 30 percent interest in Keane for \$300,000.

The following financial information is for these two companies for 2018. Keane issued no additional capital stock during either 2017 or 2018. Also, at year-end, there were no intra-entity receivables or payables.

	Bretz, Inc.	Keane Company
Revenues	\$ (402,000)	\$ (300,000)
Operating expenses	200,000	120,000
Equity in Keane earnings	(144,000)	–0–
Net income	<u>\$ (346,000)</u>	<u>\$ (180,000)</u>
Retained earnings, 1/1	\$ (797,000)	\$ (500,000)
Net income (above)	(346,000)	(180,000)
Dividends declared	143,000	60,000
Retained earnings, 12/31	<u>\$(1,000,000)</u>	<u>\$ (620,000)</u>
Current assets	\$ 224,000	\$ 190,000
Investment in Keane Company	994,500	–0–
Trademarks	106,000	600,000
Copyrights	210,000	300,000
Equipment (net)	380,000	110,000
Total assets	<u>\$ 1,914,500</u>	<u>\$ 1,200,000</u>

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(continued)

	Bretz, Inc.	Keane Company
Liabilities . . . . .	\$ (453,000)	\$ (200,000)
Common stock . . . . .	(400,000)	(300,000)
Additional paid-in capital . . . . .	(60,000)	(80,000)
Additional paid-in capital—step acquisition . . . . .	(1,500)	—0—
Retained earnings, 12/31 . . . . .	<u>(1,000,000)</u>	<u>(620,000)</u>
Total liabilities and equities . . . . .	<u>\$ (1,914,500)</u>	<u>\$ (1,200,000)</u>

- Show the journal entry Bretz made to record its January 1, 2018, acquisition of an additional 30 percent of Keane Company shares.
- Prepare a schedule showing how Bretz determined the Investment in Keane Company balance as of December 31, 2018.
- Prepare a consolidated worksheet for Bretz, Inc., and Keane Company for December 31, 2018.

## Develop Your Skills

### ACCOUNTING THEORY RESEARCH CASE



The FASB ASC paragraph 810-10-45-16 states: “The noncontrolling interest shall be reported in the consolidated statement of financial position within equity, separately from the parent’s equity. That amount shall be clearly identified and labeled, for example, as noncontrolling interest in subsidiaries.”

However, prior to issuing this current reporting requirement, the FASB considered several alternative display formats for the noncontrolling interest. Access the precodification standard, *SFAS 160*, “Noncontrolling Interest in Consolidated Financial Statements,” at [www.fasb.org](http://www.fasb.org) to answer the following:

- What alternative financial statement display formats did the FASB consider for the noncontrolling interest?
- What criteria did the FASB use to evaluate the desirability of each alternative?
- In what specific ways did FASB *Concept Statement 6* affect the FASB’s evaluation of these alternatives?

### RESEARCH CASE: STARBUCKS’ STEP ACQUISITIONS OF STARBUCKS COFFEE JAPAN

Since 1995, Starbucks Corporation had owned a 39.5 percent equity interest in Starbucks Coffee Japan, Ltd. (“Starbucks Japan”). Its joint venture partner, Sazaby League of Japan also owned a 39.5 percent equity interest in Starbucks Japan. The remaining 21 percent equity interest was held by public shareholders and option holders.

On October 31, 2014, Starbucks acquired all of Sazaby League’s shares of Starbucks Coffee Japan, bringing Starbucks’ total ownership to 79 percent. Starbucks paid Sazaby \$508.7 million for the additional 39.5 percent ownership. Later in 2014, Starbucks acquired the remaining 21 percent of Starbucks Coffee Japan. Access Starbucks’ 2015 10-K annual report and answer the following:

- What amount did Starbucks estimate for the October 31, 2014, acquisition-date fair value of Starbucks Japan? (*Hint*: include the acquisition-date estimated fair value of the remaining 21 percent noncontrolling interest in Starbucks Japan total fair value.)
- How did Starbucks allocate the acquisition-date fair value of Starbucks Japan among the assets acquired and liabilities assumed?
- How does Starbucks explain the three different valuation bases for the following items?
  - Amount paid to Sazaby for 39.5 percent share purchase
  - The fair value of Starbucks’ pre-existing 39.5 equity interest
  - The fair value of the 21 percent noncontrolling interest

4. How did Starbucks account for its 39.5 percent ownership interest in Starbucks Japan prior to the acquisition of its controlling interest?
5. Upon acquisition of its controlling interest on October 31, 2014, how did Starbucks account for the change in fair value of its original 39.5 percent ownership interest?
6. Upon acquisition of the 21 percent noncontrolling interest, how did Starbucks account for the difference between the amount paid and the underlying carrying amount of Starbucks Japan?

## RESEARCH CASE: COSTCO'S NONCONTROLLING INTERESTS

Costco Wholesale Corporation owns and operates membership warehouses in the United States, Canada, United Kingdom, Mexico, Japan, Australia, and Spain. Costco also engages in retail operations through majority owned subsidiaries in Korea and Taiwan. The outside equity interests (not owned by Costco) in the Korean and Taiwanese subsidiaries are presented collectively as noncontrolling interests in Costco's consolidated financial statements.

Access Costco's 2015 10-K annual report and answer the following:

1. How does Costco present the noncontrolling interest in the following financial statements?
  - Consolidated Balance Sheet
  - Consolidated Income Statement
  - Consolidated Statement of Other Comprehensive Income
  - Consolidated Statement of Cash Flows
2. Explain how Costco's presentations of the noncontrolling interest reflect the acquisition method for consolidated financial reporting as a single economic entity.

## BARDEEN ELECTRIC: FASB ASC AND IFRS RESEARCH CASE

On October 18, 2017, Armstrong Auto Corporation ("Armstrong") announced its plan to acquire 80 percent of the outstanding 500,000 shares of Bardeen Electric Corporation's ("Bardeen") common stock in a business combination following regulatory approval. Armstrong will account for the transaction in accordance with ASC 805, "Business Combinations."

On December 1, 2017, Armstrong purchased an 80 percent controlling interest in Bardeen's outstanding voting shares. On this date, Armstrong paid \$40 million in cash and issued one million shares of Armstrong common stock to the selling shareholders of Bardeen. Armstrong's share price was \$26 on the announcement date and \$24 on the acquisition date.

Bardeen's remaining 100,000 shares of common stock had been purchased for \$3,000,000 by a small number of original investors. These shares have never been actively traded. Using other valuation techniques (comparable firms, discounted cash flow analysis, etc.), Armstrong estimated the fair value of Bardeen's noncontrolling shares at \$16,500,000.

The parties agreed that Armstrong would issue to the selling shareholders an additional one million shares contingent upon the achievement of certain performance goals during the first 24 months following the acquisition. The acquisition-date fair value of the contingent stock issue was estimated at \$8 million.

Bardeen has a research and development (R&D) project underway to develop a superconductive electrical/magnetic application. Total costs incurred to date on the project equal \$4,400,000. However, Armstrong estimates that the technology has a fair value of \$11 million. Armstrong considers this R&D as in-process because it has not yet reached technological feasibility and additional R&D is needed to bring the project to completion. No assets have been recorded in Bardeen's financial records for the R&D costs to date.

Bardeen's other assets and liabilities (at fair values) include the following:

Cash	\$ 425,000
Accounts receivable	788,000
Land	3,487,000
Building	16,300,000
Machinery	39,000,000
Patents	7,000,000
Accounts payable	(1,500,000)



Neither the receivables nor payables involve Armstrong.

Answer the following questions citing relevant support from the ASC and IFRS.

1. What is the total consideration transferred by Armstrong to acquire its 80 percent controlling interest in Bardeen?
2. What values should Armstrong assign to identifiable intangible assets as part of the acquisition accounting?
3. What is the acquisition-date value assigned to the 20 percent noncontrolling interest? What are the potential noncontrolling interest valuation alternatives available under IFRS?
4. Under U.S. GAAP, what amount should Armstrong recognize as goodwill from the Bardeen acquisition? What alternative goodwill valuations are allowed under IFRS?

# Consolidated Financial Statements— Intra-Entity Asset Transactions

Chapter 1 analyzed the deferral and subsequent recognition of gross profits created by inventory transfers between two affiliated companies in connection with equity method accounting. The central theme of that discussion is that intra-entity<sup>1</sup> profits cannot be recognized until the goods are ultimately sold to an unrelated party or consumed in the production process. This same accounting logic applies to transactions between companies within a business combination. Such sales within a single economic entity create neither profits nor losses. In reference to this issue, FASB ASC 810-10-45-1 states,

As consolidated financial statements are based on the assumption that they represent the financial position and operating results of a single economic entity, such statements shall not include gain or loss on transactions among the entities in the consolidated group. Accordingly, any intra-entity profit or loss on assets remaining within the consolidated group shall be eliminated; the concept usually applied for this purpose is gross profit or loss.

The elimination of the accounting effects created by intra-entity transfers is one of the most significant problems encountered in the consolidation process. Such transfers are especially common in companies organized as a vertically integrated chain of organizations. For example, after acquiring its bottling companies PepsiCo noted,

we acquired PBG and PAS to create a more fully integrated supply chain and go-to-market business model, improving the effectiveness and efficiency of the distribution of our brands and enhancing our revenue growth.

<sup>1</sup>The FASB *Accounting Standards Codification (ASC)* uses the term *intra-entity* to describe transfers of assets across entities affiliated through common ownership or other control mechanisms. The term indicates that although such transfers occur across separate legal entities, they are nonetheless made within a consolidated entity. In addition to the term *intra-entity*, such transfers are routinely referred to as *intercompany*.

## Learning Objectives

After studying this chapter, you should be able to:

- LO 5-1** Understand why intra-entity asset transfers create accounting effects within the financial records of affiliated companies that must be eliminated or adjusted in preparing consolidated financial statements.
- LO 5-2** Demonstrate the consolidation procedures to eliminate intra-entity sales and purchases balances.
- LO 5-3** Explain why consolidated entities defer intra-entity gross profit in ending inventory and the consolidation procedures required to subsequently recognize profits.
- LO 5-4** Understand that the consolidation process for inventory transfers is designed to defer the intra-entity gross profit remaining in ending inventory from the year of transfer into the year of disposal or consumption.
- LO 5-5** Explain the difference between upstream and downstream intra-entity transfers and how each affects the computation of noncontrolling interest balances.
- LO 5-6** Prepare the consolidation entry to defer any gain created by an intra-entity transfer of land from the accounting records of the year of transfer and subsequent years.
- LO 5-7** Prepare the consolidation entries to remove the effects of upstream and downstream intra-entity fixed asset transfers across affiliated entities.

Entities such as Pepsico reduce their costs by developing affiliations in which one operation furnishes products to another. As *Mergers & Acquisitions* observed,

Downstream acquisitions . . . are aimed at securing critical sources of materials and components, streamlining manufacturing and materials planning, gaining economies of scale, entering new markets, and enhancing overall competitiveness. Manufacturers that combine with suppliers are often able to assert total control over such critical areas as product quality and resource planning.<sup>2</sup>

Intra-entity asset transactions take several forms. In particular, inventory transfers are especially prevalent. However, the sale of land and depreciable assets also can occur between the parties within a combination. This chapter examines the consolidation procedures for each of these different types of intra-entity asset transfers.<sup>3</sup>

**LO 5-1**

Understand why intra-entity asset transfers create accounting effects within the financial records of affiliated companies that must be eliminated or adjusted in preparing consolidated financial statements.

## Intra-Entity Inventory Transfers

As previous chapters discussed, companies that make up a business combination frequently retain their legal identities as separate operating centers and maintain their own record-keeping. Thus, inventory sales between these companies trigger the independent accounting systems of both parties. The seller duly records revenue, and the buyer simultaneously enters the purchase into its accounts. For internal reporting purposes, recording an inventory transfer as a sale/purchase provides vital data to help measure the operational efficiency of each enterprise.<sup>4</sup>

Despite the internal information benefits of accounting for the transaction in this manner, from a consolidated perspective neither a sale nor a purchase has occurred. *An intra-entity transfer is merely the internal movement of inventory, an event that creates no net change in the financial position of the business combination taken as a whole.* Thus, in producing consolidated financial statements, the recorded effects of these transfers are eliminated so that consolidated statements reflect only transactions (and thus profits) with outside parties. Worksheet entries serve this purpose; they adapt the financial information reported by the separate companies to the perspective of the consolidated enterprise. The entire impact of the intra-entity transfer must be identified and then removed. Deleting the effects of the actual transfer is described here first.

**LO 5-2**

Demonstrate the consolidation procedures to eliminate intra-entity sales and purchases balances.

### The Sales and Purchases Accounts

To account for related companies as a single economic entity requires eliminating all intra-entity sales/purchases balances. For example, if Arlington Company makes an \$80,000 inventory sale to Zirkin Company, an affiliated party within a business combination, both parties record the transfer in their internal records as a normal sale/purchase. The following consolidation worksheet entry is then necessary to remove the resulting balances from the externally reported figures. Cost of Goods Sold is reduced here under the assumption that the Purchases account usually is closed out prior to the consolidation process.

Consolidation Entry T1		
Sales .....	80,000	
Cost of Goods Sold (purchases component) .....		80,000
To eliminate effects of intra-entity transfer of inventory. (Labeled "T1" in reference to the transferred inventory.)		

<sup>2</sup> "Acquiring along the Value Chain," *Mergers & Acquisitions*, June-July 1996, p. 8.

<sup>3</sup> In practice, the terms *intra-entity transaction* and *intra-entity transfer* are used interchangeably. Some argue that the use of the term *transaction* should be reserved for activities with entities outside the consolidated group.

<sup>4</sup> For all intra-entity transfers, the two parties involved view the events from different perspectives. Thus, the transfer is both a sale and a purchase, often creating both a receivable and a payable. To indicate the dual nature of such transfers, these accounts are indicated within this text as sales/purchases, receivables/payables, and so on.

In the preparation of consolidated financial statements, the preceding elimination must be made for all intra-entity inventory transfers. The total recorded (intra-entity) sales figure is deleted regardless of whether the transfer was downstream (from parent to subsidiary) or upstream (from subsidiary to parent). Furthermore, any gross profit included in the transfer price does not affect this sales/purchases elimination. Because the entire amount of the transfer occurred between related parties, the total effect must be removed in preparing the consolidated statements.

### Intra-Entity Gross Profit—Year of Transfer (Year 1)

Removal of the sale/purchase is often just the first in a series of consolidation entries necessitated by inventory transfers. Despite the previous elimination, gross profits in ending inventory created by such sales can still exist in the accounting records at year-end. These profits initially result when the merchandise is priced at more than historical cost. Actual transfer prices are established in several ways, including the normal sales price of the inventory, sales price less a specified discount, or at a predetermined markup above cost. For example, in past financial statements, Ford Motor Company explained that

intercompany sales among geographic areas consist primarily of vehicles, parts, and components manufactured by the company and various subsidiaries and sold to different entities within the consolidated group; transfer prices for these transactions are established by agreement between the affected entities.

Regardless of the method used for this pricing decision, gross profits that remain in inventory at year-end as a result of intra-entity sales during the period must be removed in arriving at consolidated figures.

#### All Inventory Remains at Year-End

In the preceding illustration, assume that Arlington acquired or produced this inventory at a cost of \$50,000 and then sold it to Zirkin, an affiliated party, at the indicated \$80,000 price. From a consolidated perspective, the inventory still has a historical cost of only \$50,000. However, Zirkin’s records now reflect the inventory at the \$80,000 transfer price. In addition, because of the markup, Arlington’s records show a \$30,000 gross profit from this intra-entity sale. However, because the transaction did not occur with an outside party, recognition of this profit is not appropriate for the combination as a whole.

Thus, although the consolidation entry **TI** shown earlier eliminated the sale/purchase figures, the \$30,000 inflation created by the transfer price still exists in two areas of the individual statements:

- Ending inventory remains overstated by \$30,000.
- Gross profit is artificially overstated by this same amount.

Correcting the ending inventory requires only reducing the asset. However, correcting gross profit requires a careful analysis of the effect of the intra-entity transfer on the Cost of Goods Sold account. The ending inventory total serves as a negative component within the Cost of Goods Sold computation; it represents the portion of acquired inventory that was not sold. Thus, the \$30,000 overstatement of the inventory that is still held incorrectly decreases this expense (the inventory that was sold). *Despite Entry **TI**, the inflated ending inventory figure causes Cost of Goods Sold to be too low and, thus, profits to be too high by \$30,000.* For consolidation purposes, we increase Cost of Goods Sold by this amount through a worksheet adjustment that properly removes the gross profit from consolidated net income.

Consequently, if all of the transferred inventory is retained by the business combination at the end of the year, the following worksheet entry also must be included to eliminate the effects of the seller’s gross profit that remains within the buyer’s ending inventory:

**LO 5-3**  
Explain why consolidated entities defer intra-entity gross profit in ending inventory and the consolidation procedures required subsequently to recognize profits.

#### Consolidation Entry G—Year of Transfer (Year 1)

##### All Inventory Remains

Cost of Goods Sold (ending inventory component) .....	30,000	
Inventory (balance sheet account) .....		30,000
To remove gross profit in ending inventory created by intra-entity sale.		



## Discussion Question

### EARNINGS MANAGEMENT

Enron Corporation's 2001 third-quarter 10-Q report disclosed the following activities with LJM2, a nonconsolidated special purpose entity (SPE) that was formed by Enron:

In June 2000, LJM2 purchased dark fiber optic cable from Enron for a purchase price of \$100 million. LJM2 paid Enron \$30 million in cash and the balance in an interest-bearing note for \$70 million. Enron recognized \$67 million in pretax earnings in 2000 related to the asset sale. Pursuant to a marketing agreement with LJM2, Enron was compensated for marketing the fiber to others and providing operation and maintenance services to LJM2 with respect to the fiber. LJM2 sold a portion of the fiber to industry participants for \$40 million, which resulted in Enron recognizing agency fee revenue of \$20.3 million.

As investigations later discovered, Enron controlled LJM2 in many ways.

The FASB ASC now requires the consolidation of SPEs (as variable interest entities) that are essentially controlled by their primary beneficiary.

By selling goods to SPEs that it controlled but did not consolidate, did Enron overstate its earnings? What effect does consolidation have on the financial reporting for transactions between a firm and its controlled entities?

This entry (labeled **G** for gross profit) reduces the consolidated Inventory account to its original \$50,000 historical cost. Furthermore, increasing Cost of Goods Sold by \$30,000 effectively removes the intra-entity amount from recognized gross profit. Thus, this worksheet entry resolves both reporting problems created by the transfer price markup.

#### *Only a Portion of Inventory Remains*

Obviously, a company does not buy inventory to hold it for an indefinite time. It either uses the acquired items within the company's operations or resells them to unrelated, outside parties. Intra-entity profits ultimately are recognized by subsequently consuming or reselling these goods. Therefore, only the transferred inventory still held at year-end continues to be recorded in the separate statements at a value more than the historical cost. For this reason, *the ending inventory intra-entity gross profit elimination (Entry G) is based not on total intra-entity sales but only on the amount of transferred merchandise retained within the business at the end of the year.*

To illustrate, assume that Arlington transferred inventory costing \$50,000 to Zirkin, a related company, for \$80,000, thus recording a gross profit of \$30,000. Assume further that by year-end Zirkin has resold \$60,000 of these goods to unrelated parties but retains the other \$20,000 (for resale in the following year). From the viewpoint of the consolidated company, it has now completed the revenue recognition process on the \$60,000 portion of the intra-entity sale and need not make an adjustment for consolidation purposes.

Nonetheless, any gross profit recorded in connection with the \$20,000 in merchandise that remains is still a component within Zirkin's Inventory account. Because the gross profit rate was 37½ percent (\$30,000 gross profit/\$80,000 transfer price), this retained inventory is stated at a value \$7,500 more than its original cost (\$20,000 × 37½%). The required reduction (Entry **G**) is not the entire \$30,000 shown previously but only the \$7,500 intra-entity gross profit that remains in ending inventory.

**Consolidation Entry G—Year of Transfer (Year 1)**

**25% of Inventory Remains (replaces previous entry)**

Cost of Goods Sold (ending inventory component) .....	7,500	
Inventory .....		7,500
To defer the intra-entity gross profit in ending inventory in year of transfer.		

**LO 5-4**

Understand that the consolidation process for inventory transfers is designed to defer the intra-entity gross profit in ending inventory from the year of transfer into the year of disposal or consumption.

**Intra-Entity Gross Profit—Year Following Transfer (Year 2)**

Whenever intra-entity profit is present in ending inventory, one further consolidation entry is eventually required. Although Entry **G** removes the gross profit from the *consolidated* inventory balances in the year of transfer, the \$7,500 overstatement remains within the separate financial records of the buyer and seller. The effects of this deferred gross profit are carried into their beginning balances in the subsequent year. Hence, a worksheet adjustment is necessary in the period following the transfer. For consolidation purposes, the ending inventory portion of intra-entity gross profit must be adjusted in two successive years (from ending inventory in the year of transfer and from beginning inventory of the next period).

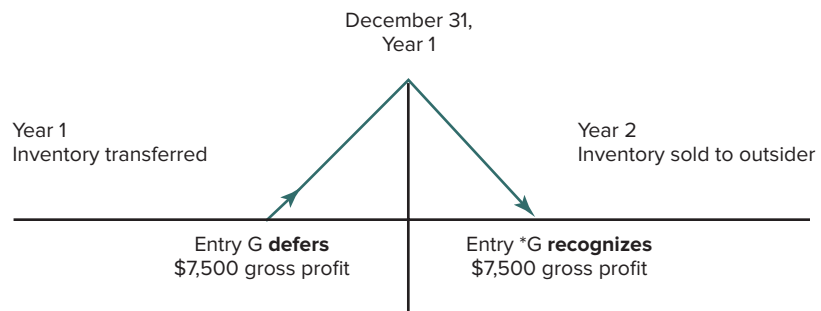
Referring again to Arlington’s sale of inventory to Zirkin, the \$7,500 intra-entity gross profit is still in Zirkin’s Inventory account at the start of the subsequent year. Once again, the overstatement is removed within the consolidation process but this time from the beginning inventory balance (which appears in the financial statements only as a positive component of cost of goods sold). This elimination is termed *Entry \*G*. The asterisk indicates that a previous year transfer created the intra-entity gross profits.

**Consolidation Entry \*G—Year Following Transfer (Year 2)**

Retained Earnings (beginning balance of seller) .....	7,500	
Cost of Goods Sold (beginning inventory component) .....		7,500
To remove from retained earnings the gross profit in beginning inventory and to currently recognize the profit through a reduction in cost of goods sold.		

Reducing Cost of Goods Sold (beginning inventory) through this worksheet entry increases the gross profit reported for this second year. For consolidation purposes, the gross profit on the transfer is recognized in the period in which the items are actually sold to outside parties. As shown in the following diagram, Entry **G** initially deferred the \$7,500 intra-entity gross profit in the year of transfer. Entry **\*G** now increases consolidated net income (by decreasing cost of goods sold) to reflect the sales activity with outside parties in the current year.

In Entry **\*G**, removal of the \$7,500 from beginning inventory (within Cost of Goods Sold) appropriately increases current net income and should not pose a significant conceptual problem. However, the rationale for decreasing the seller’s beginning Retained Earnings deserves further explanation. This reduction removes the intra-entity gross profit in ending inventory



(recognized by the seller in the year of transfer) so that the profit is reported in the period when a sale to an outside party takes place. Despite the consolidation entries in Year 1, the \$7,500 gross profit remained on this company's separate books and was closed to Retained Earnings at the end of the period. Recall that consolidation entries are never posted to the individual affiliate's books. Therefore, from a consolidated view, the buyer's Cost of Goods Sold (through the beginning inventory component) and the seller's Retained Earnings accounts as of the beginning of Year 2 contain the intra-entity profit, and must both be reduced in Entry \*G.<sup>5</sup>

### ***Intra-Entity Beginning Inventory Profit Adjustment—Downstream Sales When Parent Uses Equity Method***

The worksheet eliminations for intra-entity sales/purchases (Entry TI) and intra-entity gross profit in ending inventory (Entry G) are both standard, regardless of the circumstances of the consolidation. In contrast, for one specific situation, the consolidation entry to recognize intra-entity beginning inventory gross profit differs from the Entry \*G just presented. If (1) the original transfer is downstream (intra-entity sales made by the parent), and (2) the parent applies the equity method for internal accounting purposes, then the **Investment in Subsidiary** account replaces the parent's beginning Retained Earnings in Consolidation Entry \*G as follows:

**Consolidation Entry \*G—Year Following Transfer (Year 2) (replaces previous Entry \*G for downstream transfers when the equity method is used)**

Investment in Subsidiary . . . . .	7,500	
Cost of Goods Sold (beginning inventory component) . . . . .		7,500
To recognize previously deferred intra-entity downstream inventory gross profit as part of current year net income when the parent uses the equity method.		

Why debit the Investment in Subsidiary (and not the parent's beginning Retained Earnings) account in this situation? When the parent uses the equity method in its internal records, it recognizes beginning inventory gross profits on its books (and defers intra-entity ending inventory gross profits) as part of its equity income accruals. Therefore, both the parent's net income and retained earnings appropriately reflect consolidated balances.

Consolidation Entry I, however, removes the current year equity income accruals from the Investment in Subsidiary account as part of the investment account elimination sequence. With the equity income removed, the beginning inventory intra-entity profit reappears as a credit to the Investment in Subsidiary account's beginning of the year balance. Following our example, Consolidation Entry \*G is thus needed to transfer the original \$7,500 Year 1 Investment in Subsidiary account credit to a Year 2 earnings credit (through Cost of Goods Sold). Consolidation Entry \*G also ensures that the Investment in Subsidiary account is brought to a zero balance on the worksheet.<sup>6</sup>

<sup>5</sup>For upstream intra-entity profit in beginning inventory, the subsidiary's retained earnings remain overstated and must be adjusted through Consolidation Entry \*G.

<sup>6</sup>An acceptable alternative to recognizing intra-entity inventory profits in the subsidiary's beginning inventory (downstream sale) when the parent uses the equity method (\*G) is as follows:

Equity in Subsidiary Earnings	7,500
Cost of Goods Sold	7,500

In this case, Consolidation Entry I removes the *remaining* amount of the Equity in Subsidiary Earnings against the Investment in Subsidiary account. In either alternative adjustment for recognizing intra-entity inventory gross profits in beginning inventory, the final consolidated balances are exactly the same: Equity in Subsidiary Earnings = 0, Investment in Subsidiary = 0, and Cost of Goods Sold is reduced by \$7,500.

**EXHIBIT 5.1**  
**Relationship between Gross Profit Rate and Markup on Cost**

In determining appropriate amounts of intra-entity profits for deferral and subsequent recognition in consolidated financial reports, two alternative—but mathematically related—profit percentages are often seen. Recalling that  $\text{Gross Profit} = \text{Sales} - \text{Cost of Goods Sold}$ , then

$$\text{Gross profit rate (GPR)} = \frac{\text{Gross profit}}{\text{Sales}} = \frac{MC}{1 + MC}$$

$$\text{Markup on cost (MC)} = \frac{\text{Gross profit}}{\text{Cost of goods sold}} = \frac{GPR}{1 - GPR}$$

<i>Example:</i>	Sales (transfer price)	\$1,000
	Cost of goods sold	800
	Gross profit	<u>\$ 200</u>

Here the  $GPR = (200/1,000) = 20\%$  and the  $MC = (200/800) = 25\%$ . In most intra-entity purchases and sales, the sales (transfer) price is known and therefore the  $GPR$  is the simplest percentage to use to determine the amount of intra-entity profit.

$$\text{Intra-entity profit} = \text{Transfer price} \times GPR$$

Instead, if the markup on cost is available, it readily converts to a  $GPR$  by the preceding formula. In this case  $(0.25/1.25) = 20\%$ .

To summarize, for **intra-entity beginning inventory profits resulting from downstream transfers when the parent applies the equity method:**

- The parent's beginning retained earnings reflect the consolidated balance from application of the equity method and need no adjustment.
- The parent's Investment in Subsidiary account as of the beginning of Year 2 contains a credit from the deferral of Year 1 intra-entity downstream profits.
- Worksheet Entry \*G debits the Investment account and credits Cost of Goods Sold, effectively recognizing the profit in the year of sale to outsiders.

Finally, various markup percentages determine the dollar values for intra-entity profit deferrals. Exhibit 5.1 shows formulas for both the gross profit rate and markup on cost and the relationship between the two.

**LO 5-5**

Explain the difference between upstream and downstream intra-entity transfers and how each affects the computation of noncontrolling interest balances.

**Intra-Entity Gross Profit—Effect on Noncontrolling Interest**

The worksheet entries just described appropriately account for the effects of intra-entity inventory transfers on business combinations. However, one question remains: What impact do these procedures have on the measurement of a noncontrolling interest? In regard to this issue, paragraph 810-10-45-18 of the FASB ASC states,

The amount of intra-entity profit or loss to be eliminated in accordance with paragraph 810-10-45-1 is not affected by the existence of a noncontrolling interest. The complete elimination of the intra-entity income or loss is consistent with the underlying assumption that consolidated financial statements represent the financial position and operating results of a single economic entity. The elimination of the intra-entity income or loss may be allocated between the parent and noncontrolling interests.

The last sentence indicates that alternative approaches are available in computing the noncontrolling interest's share of a subsidiary's net income. According to this pronouncement, gross profits in inventory resulting from intra-entity transfers *may or may not* affect recognition of outside ownership. Because the amount attributed to a noncontrolling interest reduces consolidated net income, the handling of this issue can affect the reported profitability of a business combination.

To illustrate, assume that Large Company owns 70 percent of the voting stock of Small Company. To avoid extraneous complications, assume that no amortization expense resulted from this acquisition. Assume further that Large reports current net income (from separate



operations) of \$500,000 while Small earns \$100,000. During the current period, intra-entity transfers of \$200,000 occur with a total markup of \$90,000. At the end of the year, a \$40,000 intra-entity gross profit remains within the inventory accounts.

Clearly, the consolidated net income prior to the reduction for the 30 percent noncontrolling interest is \$560,000, the two net income balances less the intra-entity gross profit in ending inventory. The problem facing the accountant is the computation of the noncontrolling interest's share of Small's net income. Because of the flexibility allowed by the FASB ASC, this figure may be reported as either \$30,000 (30 percent of the \$100,000 earnings of the subsidiary) or \$18,000 (30 percent of reported net income after that figure is reduced by the \$40,000 intra-entity gross profit in ending inventory).

To appropriately measure this noncontrolling interest allocation, the direction of the intra-entity transfer must be considered. If a transfer is downstream (the parent sells inventory to the subsidiary), a logical view would seem to be that the intra-entity gross profit in inventory is that of the parent company. The parent made the original sale; therefore, the gross profit is included in its financial records. Because the subsidiary's net income is unaffected, little justification exists for adjusting the noncontrolling interest to reflect the deferral of the intra-entity gross profit. Consequently, in the example of Large and Small, if the transfers were downstream, the 30 percent noncontrolling interest would be \$30,000 based on Small's reported net income of \$100,000.

In contrast, when the subsidiary sells inventory to the parent (an upstream transfer), the subsidiary recognizes the entire gross profit in its financial records even though part of the gross profit is deferred from a consolidation perspective. A reasonable conclusion is that because the subsidiary created the gross profit, owners of the noncontrolling interest are entitled to a portion of that profit.

In this textbook, the noncontrolling interest's share of consolidated net income is computed based on the reported net income of the subsidiary after adjusting for intra-entity gross profit in inventories from *upstream* sales. Returning to Large Company and Small Company, if the \$40,000 intra-entity gross profit results from an upstream sale from subsidiary to parent, only \$60,000 of Small's \$100,000 net income should be recognized currently for consolidation purposes. The allocation to the noncontrolling interest is, therefore, reported as \$18,000, or 30% of the \$60,000 subsidiary net income after adjusting for the intra-entity profit remaining in ending inventory.

Although the noncontrolling interest figure is based here on the subsidiary's reported net income adjusted for the effects of upstream intra-entity transfers, GAAP, as quoted earlier, does not require this treatment. Giving effect to upstream transfers in this calculation but not to downstream transfers is no more than an attempt to select the most logical approach from among acceptable alternatives.<sup>7</sup>

### Intra-Entity Inventory Transfers Summarized

To assist in overcoming the complications created by intra-entity transfers, we demonstrate the consolidation process in three different ways:

1. Before proceeding to a numerical example, review the impact of intra-entity transfers on consolidated figures. Ultimately, the accountant must understand how the balances reported by a business combination are derived when intra-entity gross profit in inventory result from either upstream or downstream sales.
2. Next, two different consolidation worksheets are produced: one for downstream transfers and the other for upstream. The various consolidation procedures used in these worksheets are explained and analyzed.
3. Finally, several of the consolidation worksheet entries are shown side by side to illustrate the differences created by the direction of the transfers.

<sup>7</sup>The 100 percent allocation of downstream profits to the parent affects its application of the equity method. As seen later in this chapter, in applying the equity method, the parent removes 100 percent of intra-entity profits resulting from downstream sales from its investment and equity earnings accounts rather than its percentage ownership in the subsidiary.

### The Development of Consolidated Totals

A summary of the effects of intra-entity inventory transfers on consolidated totals follows:

*Revenues.* Parent and subsidiary balances are combined, but all intra-entity transfers are then removed.

*Cost of Goods Sold.* Parent and subsidiary balances are combined, but all intra-entity transfers are removed. The resulting total is decreased by any intra-entity gross profit in beginning inventory (thus raising net income) and increased by any intra-entity gross profit in ending inventory (reducing net income).

*Net Income Attributable to the Noncontrolling Interest.* The subsidiary's reported net income is adjusted for any excess acquisition-date fair-value amortizations and the effects of intra-entity gross profits in inventory from upstream transfers (but not downstream transfers) and then multiplied by the percentage of outside ownership.

*Retained Earnings at the Beginning of the Year.* As discussed in previous chapters, if the equity method is applied, the parent's balance mirrors the consolidated total. When any other method is used, the parent's beginning Retained Earnings must be converted to the equity method by Entry \*C. Accruals for this purpose must recognize (1) the effects on reported subsidiary net income of intra-entity gross profits in beginning inventory that arose from upstream sales in the prior year, and (2) prior years' excess acquisition-date fair-value amortizations.

*Inventory.* Parent and subsidiary balances are combined. Any intra-entity gross profit remaining at the end of the current year is removed to adjust the reported balance to historical cost.

*Noncontrolling Interest in Subsidiary at End of Year.* The final total begins with the noncontrolling interest at the beginning of the year. This figure is based on the subsidiary's book value on that date plus its share of any unamortized acquisition-date excess fair value less its share of gross profits in beginning inventory that arose from upstream sales in the prior year. The beginning balance is updated by adding the portion of the subsidiary's net income assigned to these outside owners (as described above) and subtracting the noncontrolling interest's share of subsidiary dividends.

### Intra-Entity Inventory Transfers Illustrated: Parent Uses Equity Method

To examine the various consolidation procedures required by intra-entity inventory transfers, assume that Top Company acquires 80 percent of the voting stock of Bottom Company on January 1, 2017. The parent pays \$400,000 and the acquisition-date fair value of the noncontrolling interest is \$100,000. Top allocates the entire \$50,000 excess fair value over book value to adjust a database owned by Bottom to fair value. The database has an estimated remaining life of 20 years. Top Company applies the equity method to its investment in Bottom.<sup>8</sup>

The subsidiary reports net income of \$30,000 in 2017 and \$70,000 in 2018, the current year. The subsidiary declares dividends of \$20,000 in the first year and \$50,000 in the second. After the takeover, intra-entity inventory transfers between the two companies occurred as shown in Exhibit 5.2. A \$10,000 intra-entity receivable and payable also exists as of December 31, 2018.

#### EXHIBIT 5.2 Intra-Entity Transfers

	2017	2018
Transfer prices	\$80,000	\$100,000
Historical cost . . . . .	60,000	70,000
Gross profit . . . . .	<u>\$20,000</u>	<u>\$ 30,000</u>
Inventory remaining at year-end (at transfer price) . . .	\$16,000	\$ 20,000
Gross profit percentage . . . . .	25%	30%
Gross profit remaining in year-end inventory . . . . .	<u>\$ 4,000</u>	<u>\$ 6,000</u>

<sup>8</sup>Later in this chapter, we extend the example to when the parent applies the initial value method.

**EXHIBIT 5.3****Investment Balances—  
Equity Method—  
Downstream Sales**

<b>Investment in Bottom Company Analysis 1/1/17 to 12/31/18</b>		
Consideration paid (fair value) 1/1/17.....		\$ 400,000
Bottom Company reported net income for 2017.....	\$30,000	
Database amortization.....	(2,500)	
Bottom Company adjusted 2017 net income.....	<u>\$27,500</u>	
Top's ownership percentage.....	80%	
Top's share of Bottom Company's net income.....	<u>\$22,000</u>	
Deferred profit from Top's 2017 downstream sales.....	(4,000)	
Equity in earnings of Bottom Company, 2017.....		\$ 18,000
Top's share of Bottom Company dividends, 2017 (80%).....		<u>(16,000)</u>
Balance 12/31/17.....		<u>\$ 402,000</u>
Bottom Company reported net income for 2018.....	\$70,000	
Database amortization.....	(2,500)	
Bottom Company adjusted 2018 net income.....	<u>\$67,500</u>	
Top's ownership percentage.....	80%	
Top's share of Bottom Company's net income.....	<u>\$54,000</u>	
Recognized profit from Top's 2017 downstream sales.....	4,000	
Deferred profit from Top's 2018 downstream sales.....	<u>(6,000)</u>	
Equity in earnings of Bottom Company, 2018.....		\$ 52,000
Top's share of Bottom Company dividends, 2018 (80%).....		<u>(40,000)</u>
Balance 12/31/18.....		<u><u>\$ 414,000</u></u>

The 2018 consolidation of Top and Bottom is presented twice. First, we assume the intra-entity transfers are downstream from parent to subsidiary. Second, consolidated figures are recomputed with the transfers being viewed as upstream. This distinction between upstream and downstream transfer becomes significant when the parent uses the equity method and in the presence of a noncontrolling interest.

***Downstream Inventory Transfers: Parent Uses the Equity Method***

To understand the consolidation procedures for intra-entity inventory transfers, it's useful first to analyze the parent's internal accounting for the investment. Under the equity method, the parent's investment-related accounts are subjected to (1) income accrual, (2) excess fair over book value amortization, (3) adjustments required by intra-entity gross profit in inventory, and (4) dividends. Exhibit 5.3 shows the changes to the Investment in Bottom Company from the acquisition date until the end of the current year (2018).

Note in particular the computations of Top's equity in earnings of Bottom Company in Exhibit 5.3. First, the calculations for equity method income are identical to those presented in Chapter 4, with the addition of an adjustment for intra-entity profits. Also observe that the \$4,000 intra-entity profit deferred in 2017 is subsequently recognized in 2018. Thus, the \$4,000 intra-entity profit is not eliminated but simply reallocated across time to the period when it is recognized by the consolidated entity. Next observe that, because the inventory transfers are downstream from parent to subsidiary, 100 percent of the profit deferral and subsequent recognition is allocated to the parent's equity earnings and investment account. As a result, the intra-entity profit reallocation across time affects neither Bottom's net income nor the noncontrolling interest.

Exhibit 5.4 presents the worksheet to consolidate these two companies for the year ending December 31, 2018. Most of the worksheet entries found in Exhibit 5.4 are described and analyzed in previous chapters of this textbook. Thus, we examine only three of these entries in detail along with the computation of the net income attributable to the noncontrolling interest.

First, Consolidation Entry \*G adjusts for the intra-entity gross profit carried over in the beginning inventory from the 2017 intra-entity downstream transfers.

## EXHIBIT 5.4 Downstream Inventory Transfers

TOP COMPANY AND BOTTOM COMPANY						
Consolidation Worksheet						
Investment: Equity Method		For Year Ending December 31, 2018			Ownership: 80%	
Accounts	Top Company	Bottom Company	Consolidation Entries		Noncontrolling Interest	Consolidated Totals
			Debit	Credit		
<b>Income Statement</b>						
Sales	(600,000)	(300,000)	(TI) 100,000			(800,000)
Cost of goods sold	320,000	180,000	(G) 6,000	(*G) 4,000 (TI) 100,000		402,000
Operating expenses	170,000	50,000	(E) 2,500			222,500
Equity in earnings of Bottom	(52,000)		(I) 52,000 <sup>‡</sup>			–0–
Separate company net income	(162,000)	(70,000)				
Consolidated net income						(175,500)
Net income attributable to noncontrolling interest					(13,500) <sup>†</sup>	13,500
Net income to Top Company						(162,000)
<b>Statement of Retained Earnings</b>						
Retained earnings, 1/1/18						
Top Company	(652,000)					(652,000)
Bottom Company		(310,000)	(S) 310,000			
Net income (above)	(162,000)	(70,000)				(162,000)
Dividends declared	70,000	50,000		(D) 40,000	10,000	70,000
Retained earnings, 12/31/18	(744,000)	(330,000)				(744,000)
<b>Balance Sheet</b>						
Cash and receivables	280,000	120,000		(P) 10,000		390,000
Inventory	220,000	160,000		(G) 6,000		374,000
Investment in Bottom	414,000		(D) 40,000 (*G) 4,000	(I) 52,000 (S) 368,000		–0–
				(A) 38,000		
Land	410,000	200,000				610,000
Plant assets (net)	190,000	170,000				360,000
Database			(A) 47,500	(E) 2,500		45,000
Total assets	1,514,000	650,000				1,779,000
Liabilities	(340,000)	(170,000)	(P) 10,000			(500,000)
Noncontrolling interest in Bottom Company, 1/1/18				(S) 92,000		
				(A) 9,500	(101,500)	
Noncontrolling interest in Bottom Company, 12/31/18					(105,000)	(105,000)
Common stock	(430,000)	(150,000)	(S) 150,000			(430,000)
Retained earnings, 12/31/18 (above)	(744,000)	(330,000)				(744,000)
Total liabilities and equities	(1,514,000)	(650,000)	722,000	722,000		(1,779,000)

Note: Parentheses indicate a credit balance.

<sup>†</sup>Because intra-entity sales are made downstream (by the parent), the subsidiary's adjusted net income is the \$70,000 reported less \$2,500 excess amortization figure with a 20% allocation to the noncontrolling interest (\$13,500).

<sup>‡</sup>Boxed items highlight differences with upstream transfers examined in Exhibit 5.6.

Consolidation entries:

(\*G) Recognition of intra-entity beginning inventory gross profit in current period consolidated net income. Downstream sales are attributed to parent.

(S) Elimination of subsidiary's stockholders' equity accounts along with recognition of the noncontrolling interest as of January 1.

(A) Allocation of excess fair value over subsidiary's book value, unamortized balance as of January 1.

(I) Elimination of intra-entity income remaining after \*G elimination.

(D) Elimination of intra-entity dividend.

(E) Recognition of amortization expense for current year on excess fair value allocated to database.

(P) Elimination of intra-entity receivable/payable balances.

(TI) Elimination of intra-entity sales/purchases balances.

(G) Deferral of intra-entity ending inventory gross profit from current period consolidated net income and removal of intra-entity gross profit from ending inventory.

**Consolidation Entry \*G**

Investment in Bottom .....	4,000	
Cost of Goods Sold .....		4,000
To remove 2017 intra-entity gross profit in inventory from seller's beginning balance and recognize the gross profit in 2018 following sales to outsiders. Top uses the equity method and intra-entity sales were downstream.		

The gross profit rate (Exhibit 5.2) on these items was 25 percent (\$20,000 gross profit/\$80,000 transfer price), indicating an intra-entity profit of \$4,000 (25 percent of the remaining \$16,000 in inventory). To recognize this gross profit in 2018, Entry \*G reduces Cost of Goods Sold (or the beginning inventory component of that expense) by that amount. The reduction in Cost of Goods Sold creates an increase in current year net income. From a consolidation perspective, the gross profit is correctly recognized in 2018 when the inventory is sold to an outside party. The debit to the Investment in Bottom account becomes part of the sequence of adjustments to bring that account to a zero balance in consolidation.

**Consolidation Entry TI**

Sales .....	100,000	
Cost of Goods Sold .....		100,000
To eliminate current year intra-entity sales/purchases.		

Entry TI eliminates the intra-entity sales/purchases for 2018. The entire \$100,000 transfer recorded by the two parties during the current period is removed to arrive at consolidated figures for the business combination.

**Consolidation Entry G**

Cost of Goods Sold .....	6,000	
Inventory .....		6,000
To defer intra-entity gross profit in ending inventory.		

Entry G defers the intra-entity gross profit remaining in ending inventory at the end of 2018. The \$20,000 in transferred merchandise (Exhibit 5.2) that Bottom has not yet sold has a gross profit rate of 30 percent (\$30,000 gross profit/\$100,000 transfer price); thus, the intra-entity gross profit amounts to \$6,000. On the worksheet, Entry G eliminates this overstatement in the Inventory asset balance as well as the ending inventory (credit) component of Cost of Goods Sold. Because the gross profit must be deferred, the increase in this expense appropriately decreases consolidated net income.

***Net Income Attributable to the Noncontrolling Interest***

In this first illustration, the intra-entity transfers are downstream. Thus, the deferred intra-entity gross profits are considered to relate solely to the parent company, creating no effect on the subsidiary or the outside ownership. For this reason, the noncontrolling interest's share of consolidated net income is unaffected by the downstream intra-entity profit deferral and subsequent recognition. Therefore, Top allocates \$13,500 of Bottom's net income to the noncontrolling interest computed as 20 percent of \$67,500 (\$70,000 reported net income less \$2,500 current year database excess fair-value amortization).

By including these entries along with the other routine worksheet eliminations and adjustments, the accounting information generated by Top and Bottom is brought together into a single set of consolidated financial statements. However, this process does more than simply

delete intra-entity transfers; it also affects reported net income. A \$4,000 gross profit is removed on the worksheet from 2017 figures and subsequently recognized in 2018 (Entry \*G). A \$6,000 gross profit is deferred in a similar fashion from 2018 (Entry G) and subsequently recognized in 2019. However, these changes do not affect the noncontrolling interest because the transfers were downstream.

### ***Special Equity Method Procedures for Deferred Intra-Entity Profits from Downstream Transfers***

Exhibit 5.3 presents the parent's equity method investment accounting procedures in the presence of deferred intra-entity gross profits resulting from downstream inventory transfers. This application of the equity method differs from that presented in Chapter 1 for a significant influence (typically 20 to 50 percent ownership) investment. For significant influence investments, an investor company defers intra-entity gross profits in inventory only to the extent of its percentage ownership, regardless of whether the profits resulted from upstream or downstream transfers. In contrast, Exhibit 5.3 shows a 100 percent deferral in 2017, with a subsequent 100 percent recognition in 2018, for intra-entity gross profits resulting from Top's inventory transfers to Bottom, its 80 percent-owned subsidiary.

Why the distinction? When control (rather than just significant influence) exists, 100 percent of all intra-entity gross profits are removed from consolidated net income regardless of the direction of the underlying sale.<sup>9</sup> The 100 percent intra-entity profit deferral on Top's books for downstream sales ensures that none of the deferral will be allocated to the noncontrolling interest. As discussed previously, when the parent is the seller in an intra-entity transfer, little justification exists to allocate a portion of the gross profit deferral to the noncontrolling interest. In contrast, for an upstream sale, the subsidiary recognizes the gross profit on its books. Because the noncontrolling interest owns a portion of the subsidiary (but not of the parent), partial allocation of intra-entity gross profit deferrals and subsequent recognitions to the noncontrolling interest is appropriate when resulting from upstream sales.

### ***Upstream Inventory Transfers: Parent Uses the Equity Method***

A different set of consolidation procedures is necessary if the intra-entity transfers are upstream from Bottom to Top. As previously discussed, upstream gross profits are attributed to the subsidiary rather than to the parent company. Therefore, had these transfers been upstream, both the \$4,000 beginning inventory gross profit recognition (Entry \*G) and the \$6,000 intra-entity gross profit deferral (Entry G) would be considered adjustments to Bottom's reported totals.

In contrast to the downstream example in Exhibit 5.3, Exhibit 5.5 includes the intra-entity profit deferrals and subsequent recognitions in the adjustments to Bottom's net income. Because the inventory transfers are upstream from subsidiary to parent, only 80 percent of the profit deferral and subsequent recognition is allocated to the parent's equity earnings and investment account. As a result, the intra-entity profit reallocation across time affects both the subsidiary's reported net income and the noncontrolling interest. Similar to the previous example, the \$4,000 intra-entity profit is not eliminated, but simply reallocated across time to the period when it is recognized by the consolidated entity.

To illustrate the effects of upstream inventory transfers, in Exhibit 5.6, we consolidate the financial statements of Top and Bottom again. *The individual records of the two companies are changed from Exhibit 5.4 to reflect the parent's application of the equity method for upstream sales.* This change creates several important differences between Exhibits 5.4 and 5.6.

<sup>9</sup> When only significant influence is present, purchasing-related decisions are typically made in conjunction with the interests of other outside owners of the investee. Profits are partially deferred because sales are considered to be partially made to the other outside owners. When control is present, decision making usually rests exclusively with the majority owner, providing little basis for objective profit measurement in the presence of intra-entity sales.

**EXHIBIT 5.5**  
**Investment Balances—**  
**Equity Method—Upstream**  
**Sales**

<b>Investment in Bottom Company Analysis 1/1/17 to 12/31/18</b>		
Consideration paid (fair value) 1/1/17 .....		\$400,000
Bottom Company reported net income for 2017 .....	\$30,000	
Database amortization .....	(2,500)	
Deferred profit from Bottom's 2017 upstream sales. ....	<u>(4,000)</u>	
Bottom Company adjusted 2017 net income .....	\$23,500	
Top's ownership percentage .....	<u>80%</u>	
Equity in earnings of Bottom Company, 2017 .....		\$ 18,800
Top's share of Bottom Company dividends, 2017 (80%). ...		<u>(16,000)</u>
Balance 12/31/17 .....		\$402,800
Bottom Company reported net income for 2018 .....	\$70,000	
Database amortization .....	(2,500)	
Recognized profit from Bottom's 2017 upstream sales ..	4,000	
Deferred profit from Bottom's 2018 upstream sales .....	<u>(6,000)</u>	
Bottom Company's adjusted 2018 net income .....	\$65,500	
Top's ownership percentage .....	<u>80%</u>	
Equity in earnings of Bottom Company, 2018 .....		\$ 52,400
Top's share of Bottom Company dividends, 2018 (80%). ...		<u>(40,000)</u>
Balance 12/31/18 .....		<u>\$415,200</u>

Because the intra-entity sales are upstream, the \$4,000 beginning intra-entity gross profit (Entry \*G) deferral no longer involves a debit to the parent's Investment in Bottom account. Recall that Top and Bottom, as separate legal entities, maintain independent accounting information systems. Thus, when it transferred inventory to Top in 2017, Bottom recorded the transfer as a regular sale even though the counterparty (Top) is a member of the consolidated group. Because \$16,000 of these transfers remain in Top's inventory, \$4,000 of gross profit (25 percent) is deferred from a consolidated perspective as of January 1, 2018. Also from a consolidated standpoint, Bottom's January 1, 2018, Retained Earnings are overstated by the \$4,000 gross profit from the 2017 intra-entity transfers. Thus, Exhibit 5.6 shows a worksheet adjustment that reduces Bottom's January 1, 2018, Retained Earnings balance. Similar to Exhibit 5.4, the credit to Cost of Goods Sold increases consolidated net income to recognize the profit in 2018 from sales to outsiders as follows:

<b>Consolidation Entry *G</b>		
Retained earnings—Bottom .....	4,000	
Cost of Goods Sold .....		4,000
To remove 2017 intra-entity gross profit in inventory from seller's beginning balance and recognize the gross profit in 2018 following sales to outsiders. Top uses the equity method and intra-entity sales were upstream.		

Following this adjustment, Bottom's beginning Retained Earnings on the worksheet becomes \$306,000. Reassigning the \$4,000 gross profit from 2017 into 2018 dictates the adjustment of the subsidiary's beginning Retained Earnings balance (as the seller of the goods) to \$306,000 from the \$310,000 found in the company's separate records on the worksheet.

Consolidation Entry S eliminates a portion of the parent's investment account and provides the initial noncontrolling interest balance. This worksheet entry also removes the stockholders equity accounts of the subsidiary as of the beginning of the current year. Thus, the

## EXHIBIT 5.6 Upstream Inventory Transfers

TOP COMPANY AND BOTTOM COMPANY Consolidation Worksheet For Year Ending December 31, 2018						
<i>Investment: Equity Method</i>					<i>Ownership: 80%</i>	
Accounts	Top Company	Bottom Company	Consolidation Entries		Noncontrolling Interest	Consolidated Totals
			Debit	Credit		
<b>Income Statement</b>						
Sales	(600,000)	(300,000)	(TI) 100,000			(800,000)
Cost of goods sold	320,000	180,000	(G) 6,000	(*G) 4,000 (TI) 100,000		402,000
Operating expenses	170,000	50,000	(E) 2,500			222,500
Equity in earnings of Bottom	(52,400)		(I) 52,400 <sup>†</sup>			
Separate company net income	(162,400)	(70,000)				
Consolidated net income						(175,500)
Net income attributable to noncontrolling interest					(13,100) <sup>†</sup>	13,100
Net income to Top Company						(162,400)
<b>Statement of Retained Earnings</b>						
Retained earnings, 1/1/18						
Top Company	(652,800)					(652,800)
Bottom Company		(310,000)	(*G) 4,000 (S) 306,000			
Net income (above)	(162,400)	(70,000)				(162,400)
Dividends declared	70,000	50,000		(D) 40,000	10,000	70,000
Retained earnings, 12/31/18	(745,200)	(330,000)				(745,200)
<b>Balance Sheet</b>						
Cash and receivables	280,000	120,000		(P) 10,000		390,000
Inventory	220,000	160,000		(G) 6,000		374,000
Investment in Bottom	415,200		(D) 40,000	(I) 52,400 (S) 364,800 (A) 38,000		—0—
Land	410,000	200,000				610,000
Plant assets (net)	190,000	170,000				360,000
Database			(A) 47,500	(E) 2,500		45,000
Total assets	1,515,200	650,000				1,779,000
Liabilities	(340,000)	(170,000)	(P) 10,000			(500,000)
Noncontrolling interest in Bottom Company, 1/1/18				(S) 91,200 (A) 9,500	(100,700)	
Noncontrolling interest in Bottom Company, 12/31/18					(103,800)	(103,800)
Common stock	(430,000)	(150,000)	(S) 150,000			(430,000)
Retained earnings, 12/31/18 (above)	(745,200)	(330,000)				(745,200)
Total liabilities and equities	(1,515,200)	(650,000)	718,400	718,400		(1,779,000)

Note: Parentheses indicate a credit balance.

<sup>†</sup>Because intra-entity sales were upstream, the subsidiary's \$70,000 net income is decreased for the \$6,000 gross profit deferred into next year and increased for \$4,000 gross profit deferred from the previous year. After further reduction for \$2,500 excess amortization, the resulting \$65,500 provides the noncontrolling interest with a \$13,100 allocation (20%).

<sup>‡</sup>Boxed items highlight differences with downstream transfers examined in Exhibit 5.4. Consolidation entries:

(\*G) Recognition of intra-entity beginning inventory gross profit in current period consolidated net income. Upstream sales are attributed to the subsidiary.

(S) Elimination of adjusted stockholders' equity accounts along with recognition of the noncontrolling interest as of January 1.

(A) Allocation of excess fair value over subsidiary's book value, unamortized balance as of January 1.

(I) Elimination of intra-entity income.

(D) Elimination of intra-entity dividends.

(E) Recognition of amortization expense for current year on database.

(P) Elimination of intra-entity receivable/payable balances.

(TI) Elimination of intra-entity sales/purchases balances.

(G) Deferral of intra-entity ending inventory gross profit from current period consolidated net income and removal of intra-entity gross profit from ending inventory.



above \$4,000 reduction in Bottom’s January 1, 2018, Retained Earnings to defer the intra-entity gross profit affects Entry **S**. After posting Entry **\*G**, only \$306,000 remains as the subsidiary’s January 1, 2018, Retained Earnings, which along with Bottom’s common stock is eliminated as follows:

<b>Consolidation Entry S</b>			
Common Stock—Bottom	.....	150,000	
Retained earnings—Bottom	.....	306,000	
Investment in Bottom	.....		364,800
Noncontrolling Interest	.....		91,200

This combined equity elimination figure (\$456,000) above forms the basis for the 20 percent noncontrolling interest (\$91,200) and the elimination of the 80 percent parent company investment (\$364,800).

In comparing the consolidated totals across Exhibits 5.4 and 5.6, note that consolidated net income, inventory, total assets, and total liabilities and equities are all identical. The sole effect of the direction of the intra-entity inventory transfers (upstream or downstream) resides in the allocation of the temporary income effects of profit deferral and subsequent recognition to the controlling and noncontrolling interests.

Finally, to complete the consolidation, the noncontrolling interest’s share of consolidated net income entered on the worksheet is \$13,100, computed as follows:

Bottom reported net income, 2018	.....	\$70,000
Excess fair-value database amortization (\$50,000/20 years)	.....	(2,500)
2017 intra-entity gross profit recognized	.....	4,000
2018 intra-entity gross profit deferred	.....	(6,000)
Bottom 2018 net income adjusted	.....	\$65,500
Noncontrolling interest percentage	.....	20%
Net income attributable to the noncontrolling interest, 2018	.....	<u>\$13,100</u>

Upstream transfers affect this computation although the downstream sales in the previous example did not. Thus, the noncontrolling interest balance reported previously in the income statement in Exhibit 5.4 differs from the allocation in Exhibit 5.6.

**Consolidations—Downstream versus Upstream Transfers**

To help clarify the effect of downstream and upstream transfers when the parent uses the equity method, we compare two of the worksheet entries in more detail:

<b>Downstream Transfers</b>		<b>Upstream Transfers</b>	
(Exhibit 5.4)		(Exhibit 5.6)	
<b>Entry *G</b>		<b>Entry *G</b>	
Investment in Bottom	.....	Retained Earnings, 1/1/18—Bottom	.....
Cost of Goods Sold	.....	Cost of Goods Sold	.....
	4,000		4,000
			4,000
To remove 2017 intra-entity gross profit from seller’s beginning balance and recognize the gross profit in 2018.		To remove 2017 intra-entity gross profit from seller’s beginning balance and recognize the gross profit in 2018.	

Downstream Transfers		Upstream Transfers	
Entry S		Entry S	
Common stock— Bottom . . . . .	150,000	Common stock— Bottom . . . . .	150,000
Retained Earnings, 1/1/18—Bottom . . . . .	310,000	Retaining Earnings, 1/1/18—Bottom (as adjusted) . . . . .	306,000
Investment in Bottom (80%) . . . . .	368,000	Investment in Bottom (80%) . . . . .	364,800
Noncontrolling interest—1/1/18 . . . . .	92,000	Noncontrolling interest—1/1/18 (20%) . . . . .	91,200
<p>To remove subsidiary's stockholders' equity accounts and portion of investment balance. Book value at beginning of year is appropriate.</p>		<p>To remove subsidiary's stockholders' equity accounts (as adjusted in Entry *G) and portion of investment balance. Adjusted book value at beginning of year is appropriate.</p>	
<p><b>Net Income Attributable to the Noncontrolling Interest</b> = \$13,500. 20% of Bottom's reported net income less excess database amortization</p>		<p><b>Net Income Attributable to the Noncontrolling Interest</b> = \$13,100. 20% of Bottom's net income (after adjustment for intra-entity gross profit in inventory and excess database amortization).</p>	

### Effects of Alternative Investment Methods on Consolidation

In Exhibits 5.3 through 5.6 the parent company utilized the equity method. When the parent uses either the initial value or the partial equity method, consolidation procedures normally continue to follow the same patterns analyzed in the previous chapters of this textbook. However, these alternative methods lack the full accrual properties of the equity method. Therefore, an additional worksheet adjustment (\*C) is needed to ensure the consolidated financial statements reflect a full accrual GAAP basis. As was the case previously, the worksheet adjustments depend on whether the intra-entity inventories result from downstream or upstream sales.

Using the same example, we now assume the parent applies the **initial value method**. Given that the subsidiary declares and pays dividends of \$20,000 in 2017 and \$50,000 in 2018, Top records dividend income of \$16,000 ( $\$20,000 \times 80\%$ ) and \$40,000 ( $\$50,000 \times 80\%$ ) during these two years.

Exhibits 5.7 and 5.8 present the worksheets to consolidate these two companies for the year ending December 31, 2018. As in the previous examples, most of the worksheet entries found in Exhibits 5.7 and 5.8 are described and analyzed in previous chapters of this textbook. Additionally, many of the worksheet entries required by intra-entity sales are identical to those used when the parent applies the equity method. Thus, only Consolidation Entries \*C and \*G are examined in detail separately for downstream intra-entity sales (Exhibit 5.7) and upstream intra-entity sales (Exhibit 5.8).

#### ***Downstream Transfers—Consolidation Entries \*C and \*G: Parent Uses Initial Value Method***

Consolidation Entry \*C is required in periods subsequent to acquisition whenever the parent does not apply the equity method. This adjustment converts the parent's beginning Retained Earnings to a full-accrual consolidated total. In the current illustration, Top did not accrue its portion of the 2017 increase in Bottom's book value [ $(\$30,000 \text{ net income less } \$20,000 \text{ in dividends}) \times 80\%$ , or \$8,000] or record the \$2,000 amortization expense for this same period.

## EXHIBIT 5.7 Downstream Inventory Transfers

TOP COMPANY AND BOTTOM COMPANY						
Consolidation Worksheet						
Investment: Initial Value Method						
For Year Ending December 31, 2018						
Ownership: 80%						
Accounts	Top Company	Bottom Company	Consolidation Entries		Noncontrolling Interest	Consolidated Totals
			Debit	Credit		
<b>Income Statement</b>						
Sales	(600,000)	(300,000)	(TI) 100,000			(800,000)
Cost of goods sold	320,000	180,000	(G) 6,000	(*G) 4,000		402,000
				(TI) 100,000		
Operating expenses	170,000	50,000	(E) 2,500			222,500
Dividend income	(40,000)		(I) 40,000			
Separate company net income	(150,000)	(70,000)				
Consolidated net income						(175,500)
Net income attributable to noncontrolling interest					(13,500) <sup>‡</sup>	13,500
Net income to Top Company						(162,000)
<b>Statement of Retained Earnings</b>						
Retained Earnings, 1/1/18						
Top Company	(650,000)		(*G) 4,000	(*C) 6,000		(652,000)
Bottom Company		(310,000)	(S) 310,000 <sup>‡</sup>			
Net income (above)	(150,000)	(70,000)				(162,000)
Dividends declared	70,000	50,000		(I) 40,000	10,000	70,000
Retained earnings, 12/31/18	(730,000)	(330,000)				(744,000)
<b>Balance Sheet</b>						
Cash and receivables	280,000	120,000		(P) 10,000		390,000
Inventory	220,000	160,000		(G) 6,000		374,000
Investment in Bottom	400,000		(*C) 6,000			–0–
				(S) 368,000		
				(A) 38,000		
Land	410,000	200,000				610,000
Plant assets (net)	190,000	170,000				360,000
Database	–0–	–0–	(A) 47,500	(E) 2,500		45,000
Total assets	1,500,000	650,000				1,779,000
Liabilities	(340,000)	(170,000)	(P) 10,000			(500,000)
Noncontrolling interest in Bottom Company, 1/1/18				(S) 92,000		
				(A) 9,500	(101,500)	
Noncontrolling interest in Bottom Company, 12/31/18					105,000	(105,000)
Common stock	(430,000)	(150,000)	(S) 150,000			(430,000)
Retained earnings, 12/31/18 (above)	(730,000)	(330,000)				(744,000)
Total liabilities and equities	(1,500,000)	(650,000)	676,000	676,000		(1,779,000)

Note: Parentheses indicate a credit balance.

<sup>†</sup>Because intra-entity sales are made downstream (by the parent), the subsidiary's adjusted net income is the \$70,000 reported figure less \$2,500 excess amortization with a 20% allocation to the noncontrolling interest (\$13,500).

<sup>‡</sup>Boxed items highlight differences with upstream transfers examined in Exhibit 5.8.

Consolidation entries:

(\*G) Recognition of intra-entity beginning inventory gross profit in current period consolidated net income. Downstream sales are attributed to the parent.

(\*C) Recognition of increase in book value and amortization relating to ownership of subsidiary for year prior to the current year.

(S) Elimination of subsidiary's stockholders' equity accounts along with recognition of the noncontrolling interest as of January 1.

(A) Allocation of subsidiary's fair value in excess of book value, unamortized balance as of January 1.

(I) Elimination of intra-entity dividends recorded by parent as dividend income.

(E) Recognition of amortization expense for current year on database.

(P) Elimination of intra-entity receivable/payable balances.

(TI) Elimination of intra-entity sales/purchases balances.

(G) Deferral of intra-entity ending inventory gross profit from current period consolidated net income and removal of intra-entity gross profit from ending inventory.

## EXHIBIT 5.8 Upstream Inventory Transfers

TOP COMPANY AND BOTTOM COMPANY Consolidation Worksheet For Year Ending December 31, 2018						
<i>Investment: Initial Value Method</i>				<i>Ownership: 80%</i>		
Accounts	Top Company	Bottom Company	Consolidation Entries		Noncontrolling Interest	Consolidated Totals
			Debit	Credit		
<b>Income Statement</b>						
Sales	(600,000)	(300,000)	(TI) 100,000			(800,000)
Cost of goods sold	320,000	180,000	(G) 6,000	(*G) 4,000		402,000
				(TI) 100,000		
Operating expenses	170,000	50,000	(E) 2,500			222,500
Dividend income	(40,000)		(I) 40,000			
Separate company net income	(150,000)	(70,000)				
Consolidated net income						(175,500)
Net income attributable to noncontrolling interest					{13,100}†	13,100
Net income to Top Company						(162,400)
<b>Statement of Retained Earnings</b>						
Retained earnings, 1/1/18						
Top Company	(650,000)			(*C) 2,800		(652,800)
Bottom Company		(310,000)	(*G) 4,000			
			(S) 306,000‡			
Net income (above)	(150,000)	(70,000)				(162,400)
Dividends declared	70,000	50,000		(I) 40,000	10,000	70,000
Retained earnings, 12/31/18	(730,000)	(330,000)				(745,200)
<b>Balance Sheet</b>						
Cash and receivables	280,000	120,000		(P) 10,000		390,000
Inventory	220,000	160,000		(G) 6,000		374,000
Investment in Bottom	400,000		(*C) 2,800			–0–
				(S) 364,800		
				(A) 38,000		
Land	410,000	200,000				610,000
Plant assets (net)	190,000	170,000				360,000
Database	–0–	–0–	(A) 47,500	(E) 2,500		45,000
Total assets	1,500,000	650,000				1,779,000
Liabilities	(340,000)	(170,000)	(P) 10,000			(500,000)
Noncontrolling interest in Bottom Company, 1/1/18				(S) 91,200		
				(A) 9,500	(100,700)	
Noncontrolling interest in Bottom Company, 12/31/18					(103,800)	(103,800)
Common stock	(430,000)	(150,000)	(S) 150,000			(430,000)
Retained earnings, 12/31/18 (above)	(730,000)	(330,000)				(745,200)
Total liabilities and equities	(1,500,000)	(650,000)	668,800	668,800		(1,779,000)

Note: Parentheses indicate a credit balance.

†Because intra-entity sales were upstream, the subsidiary's \$70,000 net income is decreased for the \$6,000 gross profit deferred into next year and increased for \$4,000 gross profit deferred from the previous year. After further reduction for \$2,500 excess amortization, the resulting \$65,500 provides the noncontrolling interest with a \$13,100 allocation (20%).

‡Boxed items highlight differences with downstream transfers examined in Exhibit 5.7. Consolidation entries:

(\*G) Recognition of intra-entity beginning inventory gross profit in current period consolidated net income. Upstream sales are attributed to the subsidiary.

(\*C) Recognition of increase in book value and amortization relating to ownership of subsidiary for year prior to the current year.

(S) Elimination of adjusted stockholders' equity accounts along with recognition of the noncontrolling interest as of January 1.

(A) Allocation of subsidiary's fair value in excess of book value, unamortized balance as of January 1.

(I) Elimination of intra-entity dividends recorded by parent as dividend income.

(E) Recognition of amortization expense for current year on fair value allocated to value of database.

(P) Elimination of intra-entity receivable/payable balances. (TI) Elimination of intra-entity sales/purchases balances.

(G) Deferral of intra-entity ending inventory gross profit from current period consolidated net income and removal of intra-entity gross profit from ending inventory.



## Discussion Question

### WHAT PRICE SHOULD WE CHARGE OURSELVES?

Slagle Corporation is a large manufacturing organization. Over the past several years, it has obtained an important component used in its production process exclusively from Harrison, Inc., a relatively small company in Topeka, Kansas. Harrison charges \$90 per unit for this part:

Variable cost per unit . . . . .	\$40
Fixed cost assigned per unit . . . . .	30
Markup . . . . .	<u>20</u>
Total price . . . . .	<u>\$90</u>

In hope of reducing manufacturing costs, Slagle purchases all of Harrison's outstanding common stock. This new subsidiary continues to sell merchandise to a number of outside customers as well as to Slagle. Thus, for internal reporting purposes, Slagle views Harrison as a separate profit center.

A controversy has now arisen among company officials about the amount that Harrison should charge Slagle for each component. The administrator in charge of the subsidiary wants to continue the \$90 price. He believes this figure best reflects the division's profitability: "If we are to be judged by our profits, why should we be punished for selling to our own parent company? If that occurs, my figures will look better if I forget Slagle as a customer and try to market my goods solely to outsiders."

In contrast, the vice president in charge of Slagle's production wants the price set at variable cost, total cost, or some derivative of these numbers. "We bought Harrison to bring our costs down. It only makes sense to reduce the transfer price; otherwise the benefits of acquiring this subsidiary are not apparent. I pushed the company to buy Harrison; if our operating results are not improved, I will get the blame."

Will the decision about the transfer price affect consolidated net income? Which method would be easiest for the company's accountant to administer? As the company's accountant, what advice would you give to these officials?

Because the parent recognized neither number in its financial records, the worksheet process adjusts the parent's beginning retained earnings by \$6,000 as follows:

#### Consolidation Entry \*C

Investment in Bottom . . . . .	6,000	
Retained Earnings—Top . . . . .		6,000
To convert Top's retained earnings to the accrual basis. Intra-entity sales were downstream and therefore do not affect the adjustment.		

The intra-entity inventory transfers do not affect this entry because they were downstream; the gross profits had no impact on the net income recognized by the subsidiary.

Under the initial value method, the parent makes no entries in its internal financial records to adjust for the intra-entity sales. Because in this case the sales are downstream, the parent's January 1, 2018, Retained Earnings will be overstated from a consolidated view by the intra-entity \$4,000 gross profit in beginning inventory recognized from its 2017 intra-entity sales.

Consolidation entry \*G corrects this overstatement and appropriately recognizes (through the credit to Cost of Goods Sold) the profit in the current year as follows:

<b>Consolidation Entry *G</b>		
Retained Earnings—Top .....	4,000	
Cost of Goods Sold .....		4,000
To remove 2017 intra-entity gross profit in inventory from seller's beginning balance and recognize the gross profit in 2018 following sales to outsiders. Top uses the initial value method and intra-entity sales were downstream.		

Note that the above entry \*G simply reassigns the intra-entity beginning inventory gross profit from downstream transfers to 2018 from 2017.

**Upstream Transfers—Consolidation Entries \*C and \*G: Parent Uses Initial Value Method**

We now change the example by assuming the intra-entity transfers are upstream from Bottom to Top. In this case, the \$4,000 intra-entity gross profit remaining in Top's 2017 ending inventory has been recorded by Bottom as part of its 2017 net income and retained earnings. Because \$4,000 of Bottom's 2017 net income is deferred until 2018, the increase in the subsidiary's book value in the previous year is only \$6,000 rather than \$10,000 (\$30,000 net income less \$20,000 in dividends) as reported. Consequently, conversion to the equity method (Entry \*C) requires an increase of just \$2,800:

\$6,000 net increase (after intra-entity profit deferral) in subsidiary's book value during 2017 × 80%	\$4,800
2017 amortization expense (80% × \$2,500)	<u>(2,000)</u>
Increase in parent's beginning retained earnings (Entry *C)	<u>\$2,800</u>

In applying the initial value method in its financial records, the parent did not recognize the increase in subsidiary book value, excess fair-value amortization, or any effects from intra-entity transfers remaining in inventory. The worksheet process thus adjusts the parent's beginning retained earnings by \$2,800 as shown here.

<b>Consolidation Entry *C</b>		
Investment in Bottom .....	2,800	
Retained Earnings—Top .....		2,800
To convert Top's retained earnings to the accrual basis. Intra-entity sales were upstream.		

In this case the intra-entity inventory transfers affect Consolidation Entry \*C because they were downstream; the gross profits directly affected the net income recognized by the subsidiary.

Using the initial value method, the parent makes no entries in its internal financial records to adjust for the intra-entity sales. Because in this case the sales are upstream, the subsidiary's January 1, 2018, Retained Earnings will be overstated from a consolidated view by the intra-entity gross profit in beginning inventory. Consolidation entry \*G corrects this overstatement and appropriately recognizes the profit in the current year as follows:

<b>Consolidation Entry *G</b>		
Retained Earnings—Bottom .....	4,000	
Cost of Goods Sold .....		4,000
To remove 2017 intra-entity gross profit in inventory from seller's beginning balance and recognize the gross profit in 2018 following sales to outsiders. Top uses the initial value method and intra-entity sales were upstream.		

Note again how the above entry \*G simply reassigns the intra-entity beginning inventory gross profit to 2018 from 2017.

Finally, if the parent had applied the **partial equity method** in its internal records, little would change in the consolidation processes previously described for the equity method. The primary change would involve inclusion of a Consolidation Entry \*C. Because the parent would have recorded changes in reported subsidiary book value, the \*C adjustment would be computed only for (1) previous years' excess fair over book value amortizations and (2) the immediate past year's intra-entity profit deferral.

### LO 5-6

Prepare the consolidation entry to defer any gain created by an intra-entity transfer of land from the accounting records of the year of transfer and subsequent years.

## Intra-Entity Land Transfers

Although not as prevalent as inventory transactions, intra-entity sales of other assets occur occasionally. The final two sections of this chapter examine the worksheet procedures that noninventory transfers necessitate. We first analyze land transactions and then discuss the effects created by the intra-entity sale of depreciable assets such as buildings and equipment.

### Accounting for Land Transactions

The consolidation procedures necessitated by intra-entity land transfers partially parallel those for intra-entity inventory. As with inventory, the sale of land creates a series of effects on the individual records of the two companies. The worksheet process must then adjust the account balances to reflect the perspective of a single economic entity.

By reviewing the sequence of events occurring in an intra-entity land sale, the similarities to inventory transfers can be ascertained as well as the unique features of this transaction.

1. The original seller of the land reports a gain (losses are rare in intra-entity asset transfers), even though the transaction occurred between related parties. At the same time, the acquiring company capitalizes the inflated transfer price rather than the land's historical cost to the business combination.
2. The gain the seller recorded is closed into Retained Earnings at the end of the year. From a consolidated perspective, this account has been artificially increased by a related party. Thus, both the buyer's Land account and the seller's Retained Earnings account continue to contain the intra-entity gain.
3. The gain on the original transfer is recognized in consolidated net income only when the land is subsequently disposed of to an outside party. Therefore, appropriate consolidation techniques must be designed to eliminate the intra-entity gain each period until the time of resale.

Clearly, two characteristics encountered in inventory transfers also exist in intra-entity land transactions: inflated book values and intra-entity gains subsequently culminated through sales to outside parties. Despite these similarities, significant differences exist. Because of the nature of the transaction, the individual companies do not use sales/purchases accounts when land is transferred. Instead, the seller establishes a separate gain account when it removes the land from its books. And because it's an intra-entity gain, the balance must be eliminated when preparing consolidated statements.

In addition, the subsequent resale of land to an outside party does not always occur in the year immediately following the transfer. Although inventory is normally disposed of within a relatively short time, the buyer often holds land for years if not permanently. Thus, the overvalued Land account can remain on the acquiring company's books indefinitely. As long as the land is retained, the effects of the intra-entity gain (the equivalent of Entry \*G in inventory transfers) must be eliminated for each subsequent consolidation. By repeating this worksheet entry every year, the consolidated financial statements properly state both the Land and the Retained Earnings accounts.

### Eliminating Intra-Entity Gains—Land Transfers

To illustrate these worksheet procedures, assume that Hastings Company and Patrick Company are related parties. On July 1, 2018, Hastings sold land that originally cost \$60,000 to Patrick at a \$100,000 transfer price. The seller reports a \$40,000 gain; the buyer records the

land at the \$100,000 acquisition price. At the end of this fiscal period, the intra-entity effect of this transaction must be eliminated for consolidation purposes:

<b>Consolidation Entry TL (year of transfer)</b>		
Gain on Sale of Land .....	40,000	
Land .....		40,000
To eliminate effects of intra-entity transfer of land. (Labeled “TL” in reference to the transferred land.)		

This worksheet entry eliminates the intra-entity gain from the 2018 consolidated statements and returns the land to its recorded value at date of transfer, for consolidated purposes. However, as with the transfer of inventory, the effects created by the original transaction remain in the financial records of the individual companies for as long as the property is held. The gain recorded by Hastings carries through to Retained Earnings while Patrick’s Land account retains the inflated transfer price. *Therefore, for every subsequent consolidation until the land is eventually sold, the elimination process must be repeated.* Including the following entry on each subsequent worksheet removes the intra-entity gain from the asset and from the earnings reported by the combination:

<b>Consolidation Entry *GL (every year following transfer)</b>		
Retained Earnings (beginning balance of seller) .....	40,000	
Land .....		40,000
To eliminate effects of intra-entity transfer of land made in a previous year. (Labeled “*GL” in reference to the gain on a land transfer occurring in a prior year.)		

Note that the reduction in Retained Earnings is changed to an increase in the Investment in Subsidiary account when the original sale is downstream and the parent has applied the equity method. In that specific situation, equity method adjustments have already corrected the timing of the parent’s intra-entity gain. Removing the gain has created a reduction in the Investment account that is appropriately allocated to the subsidiary’s Land account on the worksheet. Conversely, if sales were upstream, the Retained Earnings of the seller (the subsidiary) continue to be overstated even if the parent applies the equity method.

One final consolidation concern exists in accounting for intra-entity transfers of land. If the property is ever sold to an outside party, the company making the sale records a gain or loss based on its recorded book value. However, this cost figure is actually the internal transfer price. The gain or loss being recognized is incorrect for consolidation purposes; it has not been computed by comparison to the land’s historical cost. Again, the separate financial records fail to reflect the transaction from the perspective of the single economic entity.

Therefore, if the company eventually sells the land, it must recognize the gain deferred at the time of the original transfer. Gain recognition is appropriate once the property is sold to outsiders. On the worksheet, the gain is removed one last time from beginning Retained Earnings (or the investment account, if applicable). In this instance, though, the worksheet entry reclassifies the amount as a recognized gain. Thus, the gain recognition is reallocated from the year of transfer into the fiscal period in which the land is sold to the unrelated party.

Returning to the previous illustration, Hastings acquired land for \$60,000 and sold it to Patrick, a related party, for \$100,000. Consequently, the \$40,000 intra-entity gain was eliminated on the consolidation worksheet in the year of transfer as well as in each succeeding period. However, if this land is subsequently sold to an outside party for \$115,000, Patrick recognizes only a \$15,000 gain. From the viewpoint of the business combination, the land (having been bought for \$60,000) was actually sold at a \$55,000 gain. To correct the reporting, the following consolidation entry must be made in the year that the property is sold to



the unrelated party. This adjustment increases the \$15,000 gain recorded by Patrick to the consolidated balance of \$55,000:

Consolidation Entry *GL (year of sale to outside party)	
Retained Earnings (Hastings) . . . . .	40,000
Gain on Sale of Land . . . . .	40,000
To remove intra-entity gain from year of transfer so that total profit can be recognized in the current period when land is sold to an outside party.	

As in the accounting for inventory transfers, the entire consolidation process demonstrated here accomplishes two major objectives:

1. It reports historical cost for the transferred land for as long as it remains within the business combination.
2. It defers income recognition until the land is sold to outside parties.

### Recognizing the Effect on Noncontrolling Interest—Land Transfers

The preceding discussion of intra-entity land transfers ignores the possible presence of a noncontrolling interest. In constructing financial statements for an economic entity that includes outside ownership, the guidelines already established for inventory transfers remain applicable.

If the original sale was a *downstream* transaction, neither the annual deferral nor the eventual recognition of the intra-entity gain has any effect on the noncontrolling interest. The rationale for this treatment, as previously indicated, is that profits from downstream transfers relate solely to the parent company.

Conversely, if the transfer is made *upstream*, deferral and recognition of gains are attributed to the subsidiary and, hence, to the noncontrolling interest. As with inventory, all noncontrolling interest balances are computed on the reported earnings of the subsidiary after adjustment for any upstream transfers.

To reiterate, the accounting consequences stemming from land transfers are these:

1. In the year of transfer, any intra-entity gain is deferred and the Land account is reduced to historical cost. When an upstream sale creates the gain, the amount also is excluded in calculating the noncontrolling interest's share of the subsidiary's net income for that year.
2. Each year thereafter, the intra-entity gain will be removed from the seller's beginning Retained Earnings. If the transfer was upstream, eliminating this earlier gain directly affects the balances recorded within both Entry \*C (if conversion to the equity method is required) and Entry S. The additional equity accrual (Entry \*C, if needed) as well as the elimination of beginning Stockholders' Equity (Entry S) must be based on the newly adjusted balance in the subsidiary's Retained Earnings. This deferral process also has an impact on the noncontrolling interest's share of the subsidiary's net income, but only in the year of transfer and the eventual year of sale.
3. If the land is ever sold to an outside party, the original gain is recognized and reported in consolidated net income.

#### LO 5-7

Prepare the consolidation entries to remove the effects of upstream and downstream intra-entity fixed asset transfers across affiliated entities.

## Intra-Entity Transfer of Depreciable Assets

Just as related parties can transfer inventory and land, the intra-entity sale of a host of other assets is possible. Equipment, patents, franchises, buildings, and other long-lived assets can be involved. Accounting for such intra-entity transactions resembles that demonstrated for land sales. However, the subsequent calculation of depreciation or amortization provides an added challenge in the development of consolidated financial statements.<sup>10</sup>

<sup>10</sup> To avoid redundancy within this analysis, all further references are made to depreciation expense alone, although this discussion is equally applicable to the amortization of intangible assets and the depletion of wasting assets.

## Deferral and Subsequent Recognition of Intra-Entity Gains

When faced with intra-entity sales of depreciable assets, financial reporting objectives remain unchanged: *defer intra-entity gains, re-establish historical cost balances, and recognize appropriate income within the consolidated financial statements.* More specifically, we defer gains created by intra-entity transfers until such time as the subsequent use or resale of the asset consummates the original transaction. For inventory sales, the culminating disposal normally occurs currently or in the year following the transfer. In contrast, transferred land may be kept indefinitely, thus deferring the recognition of the intra-entity profit indefinitely.

When depreciable asset sales occur across firms within a consolidated entity, the accounting effects for both the seller and buyer of the depreciable asset must be analyzed in preparing consolidated financial statements. For example, assume a parent company sells a delivery truck to its subsidiary at a transfer price in excess of the parent's carrying amount for the asset. In recording the sale, the parent recognizes a gain on its books. Clearly, this is an intra-entity gain that must be removed in consolidation.

In the subsidiary's financial records, the purchased truck is recorded at the transfer price and subsequently depreciated. However, because of the parent-subsidiary control relationship, no sale of the truck occurred with an outside entity. Consequently, from a consolidated reporting perspective, the carrying amount of the truck account becomes overstated and further results in overstated depreciation expense and accumulated depreciation. The resulting overstatements of the truck, depreciation expense, and accumulated depreciation must also be removed in consolidation.

However, as the subsidiary uses the truck to generate revenues over time, the decline in the truck's future economic benefit can be viewed as an indirect, gradual sale to outsiders. From a consolidated perspective, as the truck is consumed in producing revenues from outsiders, it becomes gradually "sold" and the intra-entity gain can be gradually recognized. Thus, for depreciable asset transfers, the ultimate recognition of any gain on sale typically occurs over a period of several years.

Because of the long-term nature of depreciable assets, so long as the entity owns the asset, the effects of an intra-entity transfer must be accounted for in preparing the consolidated entity's financial statements. In the year of the intra-entity fixed asset transfer, consolidation procedures to remove the intra-entity gain and its effects on the asset, depreciation expense, and accumulated depreciation are relatively straightforward. First, a worksheet entry eliminates the gain and returns the asset and accumulated depreciation accounts to their pre-transfer amounts. Then, a second worksheet entry accordingly reduces the overstated current year depreciation expense and related accumulated depreciation.

In years subsequent to the intra-entity asset transfer, we observe that the gain on sale recognized by the seller has now been closed to Retained Earnings. The overstated depreciation expense also has been closed to the Retained Earnings of the buyer. Consolidation worksheet entries thus reflect the net effect of the gain on sale and the overstated depreciation on the affiliate's separate accounting records. Below we provide an illustration of the consolidated worksheet entries in the year of the intra-entity transfer followed by the year subsequent to the intra-entity transfer.

## Depreciable Asset Intra-Entity Transfers Illustrated

To examine the consolidation procedures required by the intra-entity transfer of a depreciable asset, assume that Able Company sells equipment to Baker Company at the current market value of \$90,000. Able originally acquired the equipment for \$100,000 several years ago; since that time, it has recorded \$40,000 in accumulated depreciation. The transfer is made on January 1, 2017, when the equipment has a 10-year remaining life.<sup>11</sup>

<sup>11</sup> Although this example assumes an intra-entity gain on sale, intra-entity losses may occur as well. If the loss cannot be attributed to an asset impairment, then parallel consolidation procedures to those provided in the example, reflecting a loss, would be appropriate.

### Year of Intra-Entity Transfer

The 2017 effects on the separate financial accounts of the two companies can be quickly enumerated:

1. Baker, as the buyer, enters the equipment into its records at the \$90,000 transfer price. However, from a consolidated view the asset has not been sold, and therefore the \$60,000 book value (\$100,000 cost less \$40,000 accumulated depreciation) remains appropriate.
2. Able, as the seller, reports a \$30,000 gain, although the consolidated entity has not yet sold the asset to outsiders. After preparation of the 12/31/17 consolidated financial statements, Able then closes this gain to its Retained Earnings account.
3. Assuming application of the straight-line depreciation method with no salvage value, Baker records expense of \$9,000 at the end of 2017 (\$90,000 transfer price/10 years). The proper depreciation expense for consolidation, however, is based on the asset's carrying amount to the consolidated entity at the date of the intra-entity transfer. Consolidated depreciation expense for this asset would thus be \$6,000 (\$60,000 carrying amount/10 remaining years). This requires a \$3,000 consolidated worksheet adjustment to depreciation expense.

To report these events as seen by the consolidated entity, we first acknowledge that an asset write-up cannot be recognized based on an intra-entity transfer. A consolidated worksheet entry must therefore return the asset to its pre-transfer carrying amount based on historical cost. Moreover, both the \$30,000 intra-entity gain and the \$3,000 overstatement in depreciation expense must be eliminated on the worksheet. The two consolidation entries for 2017 are shown below:

Consolidation Entry TA (year of transfer) <sup>12</sup>		
Gain on Sale of Equipment .....	30,000	
Equipment .....	10,000	
Accumulated Depreciation .....		40,000
To remove intra-entity gain and return equipment accounts to balances based on original historical cost. (Labeled "TA" in reference to transferred asset.)		

Consolidation Entry ED (year of transfer)		
Accumulated Depreciation .....	3,000	
Depreciation Expense .....		3,000
To eliminate overstatement of depreciation expense caused by inflated transfer price. (Labeled "ED" in reference to excess depreciation.) <i>Entry must be repeated for all 10 years of the equipment's remaining life.</i>		

From the viewpoint of a single consolidated entity, these entries accomplish several objectives:

- Reinstate the asset's historical cost of \$100,000.
- Return the January 1, 2017, book value to the appropriate \$60,000 figure by recognizing accumulated depreciation of \$40,000.
- Eliminate the \$30,000 intra-entity gain recorded by Able so the amount does not appear in the consolidated income statement.

<sup>12</sup> If the worksheet uses only one account for a net depreciated asset, this entry would have been

Gain on sale	30,000	
Equipment (net)		30,000
To reduce the \$90,000 to original \$60,000 book value at date of transfer rather than reinstating original balances.		

- Reduce depreciation for the year from \$9,000 to \$6,000, the appropriate expense based on pre-transfer carrying amount of the asset.
- Although the gain is eliminated, the credit to depreciation expense increases consolidated net income serving as a partial recognition of the gain for 2017.

Over the remaining life of the asset, consolidation entries serve to reallocate the gain from the year of transfer to each of the 10 years following the transfer as the asset is consumed in the production process. Recall that for intra-entity gross profit in ending inventory, the ultimate recognition of the profit deferral was achieved on the consolidated worksheet through a credit to *cost of goods sold*. In a parallel fashion, deferred intra-entity profits on depreciable asset transfers are achieved on the consolidated worksheet through a credit to *depreciation expense*.

In the year of the intra-entity depreciable asset transfer, the preceding consolidation entries **TA** and **ED** are applicable regardless of whether the transfer was upstream or downstream. They are likewise applicable regardless of whether the parent applies the equity method, initial value method, or partial equity method of accounting for its investment. As discussed subsequently, however, in the years following the intra-entity transfer, we make a slight modification to consolidation entry **\*TA** for downstream transfers when the equity method is applied.

**Years Following the Intra-Entity Transfer**

Again, the preceding worksheet entries do not actually remove the effects of the intra-entity transfer from the individual records of these two organizations. Both the intra-entity gain and the excess depreciation expense remain on the separate books and are closed into Retained Earnings of the respective companies at year-end. Similarly, the Equipment account with the related Accumulated Depreciation continues to hold balances based on the transfer price, not historical cost. *Thus, for every subsequent period, the separately reported figures must be adjusted on the worksheet to present the consolidated totals from a single entity’s perspective.*

To derive worksheet entries at any future point, the balances in the accounts of the individual companies must be ascertained and compared to the figures appropriate for the consolidated entity. As an illustration, the separate records of Able and Baker two years after the transfer (December 31, 2018) follow. Consolidated totals are calculated based on the original historical cost of \$100,000 and accumulated depreciation of \$40,000.

Account	Individual Records	Consolidated Perspective	Worksheet Adjustments
Equipment 12/31/18	\$90,000	\$100,000	\$10,000
Accumulated Depreciation 12/31/18	(18,000)	(52,000)*	(34,000)
Depreciation Expense for 2018	9,000	6,000	(3,000)
1/1/18 Retained Earnings effect	(21,000)†	6,000	27,000

Note: Parentheses indicate a credit balance.  
 \*Accumulated depreciation before transfer \$(40,000) plus 2 years × \$(6,000). †Intra-entity transfer gain (\$30,000) less one year’s depreciation of \$9,000.

Because the intra-entity transfer’s effects remain in the separate financial records, the various accounts must be adjusted in each subsequent consolidation. Moreover, the amounts involved must be updated every period because of the continual impact of depreciation recorded by the buyer. Continuing our example, to adjust the individual figures to the consolidated totals derived above, the 2018 worksheet includes the following entries:

Consolidation Entry *TA (year following transfer)	
Equipment .....	10,000
Retained Earnings, 1/1/18 (Able) .....	27,000
Accumulated Depreciation .....	37,000
To return the Equipment account to original historical cost and adjust the 1/1/18 balances of Retained Earnings and Accumulated Depreciation.	

Consolidation Entry ED (year following transfer)		
Accumulated Depreciation .....	3,000	
Depreciation Expense .....		3,000
To remove excess depreciation expense on the intra-entity transfer price and adjust Accumulated Depreciation to its 12/31/18 consolidated balance.		
Note that the \$34,000 increase in 12/31/18 consolidated Accumulated Depreciation results from a \$37,000 credit in Entry *TA and a \$3,000 debit in Entry ED.		

We observe that in consolidation entry \*TA, \$27,000 of the original intra-entity gain on sale is removed from Retained Earnings. Then, in consolidation entry ED, the \$3,000 credit to Depreciation Expense serves to increase consolidated net income by \$3,000. Essentially, the remaining intra-entity gain as of the beginning of the year is removed from Retained Earnings and partially recognized as a current year increase in consolidated net income (via the decrease in depreciation expense).<sup>13</sup>

The \*TA adjustment to the Equipment account remains constant over the life of the asset. However, the \*TA adjustments to beginning Retained Earnings and Accumulated Depreciation vary with each succeeding consolidation. At December 31, 2017, the individual companies closed out both the intra-entity gain of \$30,000 and \$9,000 depreciation expense on their books. *Importantly, the \$9,000 depreciation expense was overstated by \$3,000 from a consolidated perspective.* Therefore, as reflected in Entry \*TA, the beginning Retained Earnings account for the 2018 consolidation is overstated by a net amount of only \$27,000 rather than \$30,000. *Over the life of the asset, the intra-entity gain in consolidated retained earnings will be systematically reduced to zero as excess depreciation expense (\$3,000) is closed out each year on the books of the company that possesses the asset.* Hence, on subsequent consolidation worksheets, the beginning Retained Earnings account decreases by this amount: \$27,000 in 2018, \$24,000 in 2019, \$21,000 in the following period, and so on. This reduction continues until, at the end of 10 years, the intra-entity gain has been completely recognized in the consolidation process.

Similarly, the change in beginning Accumulated Depreciation varies with each succeeding consolidation. At December 31, 2017, the buyer recorded a \$3,000 overstatement of depreciation expense and Accumulated Depreciation. Therefore, as reflected in Entry \*TA, the Accumulated Depreciation account at the beginning of 2018 is undervalued by a net amount of only \$37,000 rather than \$40,000.

If this equipment is ever resold to an outside party, the remaining portion of the gain is immediately recognized by the consolidated entity. As in the previous discussion of land, the remaining intra-entity profit existing at the date of resale must be recognized on the consolidated income statement to arrive at the appropriate amount of gain or loss on the sale.

### Years Following Downstream Intra-Entity Depreciable Asset Transfers—Parent Uses Equity Method

Consolidation entry \*TA requires a slight modification when the intra-entity depreciable asset transfer is downstream and the parent uses the equity method. In applying the equity method, the parent adjusts its book income for both the original transfer gain and periodic depreciation expense adjustments. Thus, in downstream intra-entity transfers when the equity method is used, from a consolidated view, the parent's Retained Earnings balance has been already reduced for the gain. Therefore, continuing with the previous example, the following worksheet consolidation entries would be made for a downstream sale assuming that (1) Able is the parent and (2) Able has applied the equity method to account for its investment in Baker.

<sup>13</sup> Alternatively, because the straight line method is used, the depreciation expense adjustment can also be computed as the original gain on sale divided by the remaining life of the transferred asset (\$30,000/10 years).

<b>Consolidation Entry *TA (year following transfer)</b>		
Equipment .....	10,000	
Investment in Baker .....	27,000	
Accumulated Depreciation .....		37,000
<b>Consolidation Entry ED (year following transfer)</b>		
Accumulated Depreciation .....	3,000	
Depreciation Expense .....		3,000

In Entry \*TA, note that the Investment in Baker account replaces the parent's Retained Earnings. This temporary increase to the Investment account then effectively allocates the adjustments necessitated by the intra-entity transfer to the appropriate subsidiary Equipment and Accumulated Depreciation accounts.

### Effect on Noncontrolling Interest—Depreciable Asset Transfers

Because of the lack of official guidance, no easy answer exists as to the assignment of any income effects created within the consolidation process. Consistent with the previous sections of this chapter, all income is assigned here to the original seller. In Entry \*TA, for example, the beginning Retained Earnings account of Able (the seller) is reduced. Both the intra-entity gain on the transfer and the excess depreciation expense subsequently recognized are assigned to that party.

Thus, again, downstream sales are assumed to have no effect on any noncontrolling interest values. The parent rather than the subsidiary made the sale. Conversely, the impact on net income created by upstream sales must be considered in computing the balances attributed to these outside owners. Currently, this approach is one of many acceptable alternatives. However, in its future deliberations on consolidation policies and procedures, the FASB could mandate a specific allocation pattern.

## Summary

1. The transfer of assets, especially inventory, between the members of a consolidated entity is a common practice. In producing consolidated financial statements, any effects on the separate accounting records created by such transfers must be removed because the transactions did not occur with an outside unrelated party.
2. Inventory transfers are the most prevalent form of intra-entity asset transaction. Despite being only a transfer, one company records a sale while the other reports a purchase. These balances are reciprocals that must be offset on the worksheet in the process of producing consolidated figures.
3. Additional accounting problems result if inventory is transferred at a markup. Any portion of the merchandise still held at year-end is valued at more than historical cost because of the inflation in price. Furthermore, the gross profit that the seller reports on these goods must be deferred from a consolidation perspective. Thus, this gross profit must be removed from the ending Inventory account, a figure that appears as an asset on the balance sheet and as a negative component within cost of goods sold.
4. Intra-entity inventory gross profits in ending inventory also create a consolidation problem in the year following the transfer. Within the separate accounting systems, the seller closes the gross profit to Retained Earnings. The buyer's ending Inventory balance becomes the next period's beginning balance (within Cost of Goods Sold). Therefore, the inflation must be removed again but this time in the subsequent year. The seller's beginning Retained Earnings is decreased to eliminate the intra-entity gross profit while Cost of Goods Sold is reduced to remove the overstatement from the beginning inventory component. However, when the parent applies the equity method and sales are downstream, the parent's Retained Earnings are correctly stated from a consolidated view. Therefore, in this case, the Investment in Subsidiary account is used in the beginning intra-entity inventory profit adjustment, instead of the parent's Retained Earnings. Through this process, the intra-entity profit is deferred from the year of transfer so that recognition can be made at the point of disposal or consumption.

5. The deferral and subsequent recognition of intra-entity gross profits raise a question concerning the measurement of noncontrolling interest balances: Does the change in the period of recognition alter these calculations? Although the issue is currently under debate, no formal answer to this question is yet found in official accounting pronouncements. In this textbook, the deferral of profits from upstream transfers (from subsidiary to parent) is assumed to affect the noncontrolling interest whereas downstream transactions (from parent to subsidiary) do not. When upstream transfers are involved, noncontrolling interest values are based on the gross profit recognized after adjustment for any intra-entity gross profit remaining in inventory.
6. Inventory is not the only asset that can be transferred between the members of a consolidated entity. For example, transfers of land sometimes occur. Again, if the transfer price exceeds original cost, the buyer's records state the asset at an inflated value while the seller recognizes an intra-entity gain. As with inventory, the consolidation process must return the asset's recorded balance to cost while deferring the gain. Repetition of this procedure is necessary in every consolidation for as long as the land remains within the consolidated entity.
7. The consolidation process required by the intra-entity transfer of depreciable assets differs somewhat from that demonstrated for inventory and land. The intra-entity gain created by the transaction must still be deferred along with an adjustment for the asset's overstatement. However, because of subsequent depreciation, these adjustments systematically change from period to period. Additionally, because the excess depreciation is closed annually to Retained Earnings, the overstatement of the equity account resulting from the intra-entity gain is constantly reduced. To produce consolidated figures at any point in time, the remaining overstatement in these figures (as well as in the current depreciation expense) must be determined and removed. Overall, the intra-entity gain is removed from the year of the depreciable asset transfer and subsequently recognized over the remaining life of the asset. Consolidation worksheet entries that serve to reduce depreciation expense become the vehicle for recognizing the annual portion of the intra-entity gain.

## Comprehensive Illustration

### Problem

*(Estimated Time: 45 to 65 Minutes)* On January 1, 2016, Daisy Company acquired 80 percent of Rose Company for \$594,000 in cash. Rose's total book value on that date was \$610,000 and the fair value of the noncontrolling interest was \$148,500. The newly acquired subsidiary possessed a trademark (10-year remaining life) that, although unrecorded on Rose's accounting records, had a fair value of \$75,000. Any remaining excess acquisition-date fair value was attributed to goodwill.

Daisy decided to acquire Rose so that the subsidiary could furnish component parts for the parent's production process. During the ensuing years, Rose sold inventory to Daisy as follows:

Year	Cost to Rose Company	Transfer Price	Gross Profit Rate	Transferred Inventory Still Held at End of Year (at transfer price)
2016	\$100,000	\$140,000	28.6%	\$20,000
2017	100,000	150,000	33.3	30,000
2018	120,000	160,000	25.0	68,000

Any transferred merchandise that Daisy retained at year-end was always put into production during the following period.

On January 1, 2017, Daisy sold Rose several pieces of equipment that had a 10-year remaining life and were being depreciated on the straight-line method with no salvage value. This equipment was transferred at an \$80,000 price, although it had an original \$100,000 cost to Daisy and a \$44,000 book value at the date of exchange.

On January 1, 2018, Daisy sold land to Rose for \$50,000, its fair value at that date. The original cost had been only \$22,000. By the end of 2018, Rose had made no payment for the land.

The following separate financial statements are for Daisy and Rose as of December 31, 2018. Daisy has applied the equity method to account for this investment.

	Daisy Company	Rose Company
Sales . . . . .	\$ (900,000)	\$ (500,000)
Cost of goods sold . . . . .	598,000	300,000
Operating expenses . . . . .	210,000	80,000
Gain on sale of land . . . . .	(28,000)	–0–
Equity in earnings of Rose Company . . . . .	(60,000)	–0–
Net income. . . . .	<u>\$ (180,000)</u>	<u>\$ (120,000)</u>
Retained earnings, 1/1/18. . . . .	\$ (620,000)	\$ (430,000)
Net income. . . . .	(180,000)	(120,000)
Dividends declared. . . . .	55,000	50,000
Retained earnings, 12/31/18 . . . . .	<u>\$ (745,000)</u>	<u>\$ (500,000)</u>
Cash and accounts receivable. . . . .	\$ 348,000	\$ 410,000
Inventory. . . . .	430,400	190,000
Investment in Rose Company. . . . .	737,600	–0–
Land. . . . .	454,000	280,000
Equipment . . . . .	270,000	190,000
Accumulated depreciation . . . . .	(180,000)	(50,000)
Total assets . . . . .	<u>\$ 2,060,000</u>	<u>\$ 1,020,000</u>
Liabilities. . . . .	(715,000)	(120,000)
Common stock . . . . .	(600,000)	(400,000)
Retained earnings, 12/31/18 . . . . .	(745,000)	(500,000)
Total liabilities and equities. . . . .	<u>\$ (2,060,000)</u>	<u>\$ (1,020,000)</u>

### Required

Answer the following questions:

- By how much did Rose's book value increase during the period from January 1, 2016, through December 31, 2017?
- During the initial years after the takeover, what annual amortization expense was recognized in connection with the acquisition-date excess of fair value over book value?
- What amount of intra-entity gross profit exists within the parent's inventory figures at the beginning and at the end of 2018?
- Equipment has been transferred between the companies. What amount of additional depreciation is recognized in 2018 because of this transfer?
- The parent reports Income of Rose Company of \$60,000 for 2018. How was this figure calculated?
- Without using a worksheet, determine consolidated totals.
- Prepare the December 31, 2018, worksheet entries required by the transfers of inventory, land, and equipment.

### Solution

- The subsidiary's acquisition-date book value is given as \$610,000. At the beginning of 2018, the company's common stock and retained earnings total is \$830,000 (\$400,000 and \$430,000, respectively). In the previous years, Rose's book value has apparently increased by \$220,000 (\$830,000 – \$610,000).
- To determine amortization, an allocation of Daisy's acquisition-date fair value must first be made. The \$75,000 allocation needed to show Daisy's equipment at fair value leads to additional annual expense of \$7,500 for the initial years of the combination. The \$57,500 assigned to goodwill is not subject to amortization.

#### Acquisition-Date Fair-Value Allocation and Excess Amortization Schedule

Consideration paid by Daisy for 80% of Rose . . . . .	\$ 594,000
Noncontrolling interest (20%) fair value . . . . .	148,500
Rose's fair value at acquisition date . . . . .	<u>\$ 742,500</u>
Book value of Rose Company . . . . .	(610,000)
Excess fair value over book value . . . . .	<u>\$ 132,500</u>



		Remaining Life (Years)	Annual Excess Amortizations	Excess Amortizations 2016–2018	Unamortized Balance, 12/31/18
Trademark . . . . .	\$ 75,000	10	\$ 7,500	\$ 22,500	\$52,500
Goodwill . . . . .	57,500	indefinite	–0–	–0–	57,500
Totals . . . . .	<u>\$132,500</u>		<u>\$ 7,500</u>	<u>\$ 22,500</u>	

- c. Of the inventory transferred to Daisy during 2017, \$30,000 is still held at the beginning of 2018. This merchandise contains an intra-entity gross profit of \$10,000 ( $\$30,000 \times 33.3\%$  gross profit rate for that year). At year-end, \$17,000 ( $\$68,000$  remaining inventory  $\times 25\%$  gross profit rate) remains as intra-entity gross profit in the ending inventory.
- d. Additional depreciation for the net addition of 2018 is \$3,600. Equipment with a book value of \$44,000 was transferred at a price of \$80,000. The net of \$36,000 to this asset's account balances would be written off over 10 years for an extra \$3,600 per year during the consolidation process.
- e. According to the separate statements given, the subsidiary reports net income of \$120,000. However, in determining the net income allocation between the parent and the noncontrolling interest, this reported figure must be adjusted for the effects of *any upstream transfers*. Because Rose sold the inventory upstream to Daisy, the \$10,000 gross profit deferred in requirement (c) from 2017 into the current period is attributed to the subsidiary (as the seller). Likewise, the \$17,000 intra-entity gross profit at year-end is viewed as a reduction in Rose's net income.

All other transfers are downstream and not considered to have an effect on the subsidiary. Therefore, the Equity in earnings of Rose Company balance can be verified as follows:

Company's reported net income—2018 . . . . .	\$ 120,000
Recognition of 2017 intra-entity gross profit . . . . .	10,000
Deferral of 2018 intra-entity gross profit . . . . .	(17,000)
Excess amortization expense—2018 (see requirement [b]) . . . . .	<u>(7,500)</u>
Recognized subsidiary net income from consolidated perspective . . . . .	105,500
Parent's ownership percentage . . . . .	<u>80%</u>
Equity income before downstream transfer effects . . . . .	\$ 84,400
Adjustments attributed to parent's ownership . . . . .	
Deferral of intra-entity gain—land . . . . .	(28,000)
Removal of excess depreciation (see requirement [d]) . . . . .	<u>3,600</u>
Equity in earnings of Rose Company—2018 . . . . .	<u>\$ 60,000</u>

- f. Each of the 2018 consolidated totals for this business combination can be determined as follows:
- Sales* = \$1,240,000. The parent's balance is added to the subsidiary's balance less the \$160,000 in intra-entity transfers for the period.
- Cost of Goods Sold* = \$745,000. The computation begins by adding the parent's balance to the subsidiary's balance less the \$160,000 in intra-entity transfers for the period. The \$10,000 intra-entity gross profit in inventory from the previous year is deducted to recognize this income currently. Next, the \$17,000 ending intra-entity gross profit is added to cost of goods sold to defer the income until a later year when the goods are sold to an outside party.
- Operating Expenses* = \$293,900. The parent's balance is added to the subsidiary's balance. Annual excess fair-value amortization of \$7,500 [see requirement (b)] is also included. Excess depreciation of \$3,600 resulting from the transfer of equipment [see requirement (e)] is removed.
- Gain on Sale of Land* = 0. This amount is eliminated for consolidation purposes because the transaction was intra-entity.
- Equity in Earnings of Rose Company* = 0. The equity earnings figure is removed and replaced with the subsidiary's actual revenues and expenses in the consolidated financial statements.
- Net Income Attributable to Noncontrolling Interest* = \$21,100. Requirement (e) shows the subsidiary's net income from a consolidated perspective as \$105,500 after adjustments for intra-entity upstream gains and excess fair-value amortization. Because outsiders hold 20 percent of the subsidiary, a \$21,100 allocation ( $\$105,500 \times 20\%$ ) is made.
- Consolidated Net Income* = \$201,100 computed as Sales less Cost of Goods Sold and Operating Expenses. The consolidated net income is then distributed: \$21,100 to the noncontrolling interest and \$180,000 to the parent company owners.

*Retained Earnings, 1/1/18* = \$620,000. The equity method has been applied; therefore, the parent's balance equals the consolidated total.

*Dividends Declared* = \$55,000. Only the parent's dividends are shown in the consolidated statements. Distributions from the subsidiary to the parent are eliminated as intra-entity transfers. Any dividends distributable to the noncontrolling interest reduce the ending balance attributed to these outside owners.

*Cash and Accounts Receivable* = \$708,000. The two balances are added after removal of the \$50,000 intra-entity receivable created by the transfer of land.

*Inventory* = \$603,400. The two balances are added after removal of the \$17,000 ending intra-entity gross profit [see requirement (c)].

*Investment in Rose Company* = 0. The investment balance is eliminated and replaced with actual assets and liabilities of the subsidiary.

*Land* = \$706,000. The two balances are added. The \$28,000 intra-entity gain created by the transfer is removed.

*Equipment* = \$480,000. The two balances are added. Because of the intra-entity transfer, \$20,000 must also be included to adjust the \$80,000 transfer price to the original \$100,000 cost of the asset.

*Accumulated Depreciation* = \$278,800. The balances are combined and adjusted for \$52,400 to reinstate the historical balance for the equipment transferred across affiliates (\$56,000 written off at date of transfer less \$3,600 for the previous year's depreciation on the intra-entity gain). Then, an additional \$3,600 is removed for the current year's depreciation on the intra-entity gain.

*Trademark* = \$52,500. The amount from the original \$75,000 acquisition-date excess fair-value allocation less three years' amortization at \$7,500 per year.

*Goodwill* = \$57,500. The amount from the original allocation of Rose's acquisition-date fair value.

*Total Assets* = \$2,328,600. This figure is a summation of the preceding consolidated assets.

*Liabilities* = \$785,000. The two balances are added after removal of the \$50,000 intra-entity payable created by the transfer of land.

*Noncontrolling Interest in Subsidiary, 12/31/18* = \$198,600. This figure is composed of several different balances:

Rose 20% book value (adjusted for upstream intra-entity profits) at 1/1/18 . . . . .	\$164,000
20% of 1/1/18 unamortized excess fair-value allocation for Rose's net identifiable assets and goodwill (\$117,500 × 20%) . . . . .	23,500
Noncontrolling interest at 1/1/18 . . . . .	\$187,500
2018 Rose net income allocation . . . . .	21,100
Noncontrolling interest share of Rose dividends . . . . .	(10,000)
December 31, 2018, balance . . . . .	<u>\$198,600</u>

*Common Stock* = \$600,000. Only the parent company balance is reported within the consolidated statements.

*Retained Earnings, 12/31/18* = \$745,000. The retained earnings amount is found by adding the parent's (Daisy) share of consolidated net income to the beginning Retained Earnings balance and then subtracting the parent's dividends. All of these figures have been computed previously.

*Total Liabilities and Equities* = \$2,328,600. This figure is the summation of all consolidated liabilities and equities.

g.

**Consolidation Worksheet Entries  
to Adjust for Intra-Entity Transfers  
December 31, 2018**

**Inventory**

**Entry \*G**

Retained Earnings, 1/1/18—Subsidiary . . . . .	10,000	
Cost of Goods Sold . . . . .		10,000
To remove 2017 intra-entity gross profit from beginning balances of the current year. Because transfers were upstream, retained earnings of the subsidiary (as the original seller) are reduced. Balance is computed in requirement (c).		

(continued)

**Consolidation Worksheet Entries  
to Adjust for Intra-Entity Transfers  
December 31, 2018**

**Entry TI**

Sales .....	160,000	
Cost of Goods Sold .....		160,000
To eliminate current year intra-entity transfer of inventory.		

**Entry G**

Cost of Goods Sold .....	17,000	
Inventory .....		17,000
To remove 2018 intra-entity gross profit from ending accounts of the current year. Balance is computed in requirement (c).		

**Land****Entry TL**

Gain on Sale of Land .....	28,000	
Land .....		28,000
To eliminate gross profit created on first day of current year by an intra-entity transfer of land.		

**Equipment****Entry \*TA**

Equipment .....	20,000	
Investment in Rose Company .....	32,400	
Accumulated Depreciation .....		52,400
To remove remaining gain (as of January 1, 2018) created by intra-entity transfer of equipment and to adjust equipment and accumulated depreciation to historical cost figures.		

Equipment is increased from the \$80,000 transfer price to \$100,000 cost.

Accumulated depreciation of \$56,000 was eliminated at time of transfer. Excess depreciation of \$3,600 per year has been recorded for the prior year (\$3,600); thus, the accumulated depreciation is now only \$52,400 less than the cost-based figure.

The intra-entity gain on the transfer was \$36,000 (\$80,000 less \$44,000). That figure has now been reduced by one year of excess depreciation (\$3,600). Because the parent used the equity method and this transfer was downstream, the adjustment here is to the investment account rather than the parent's beginning Retained Earnings.

**Entry ED**

Accumulated Depreciation .....	3,600	
Operating Expenses (depreciation) .....		3,600
To eliminate the current year overstatement of depreciation created by inflated transfer price.		

**Questions**

1. Intra-entity transfers between the component companies of a business combination are quite common. Why do these intra-entity transactions occur so frequently?
2. Barker Company owns 80 percent of the outstanding voting stock of Walden Company. During the current year, intra-entity sales amount to \$100,000. These transactions were made with a gross profit rate of 40 percent of the transfer price. In consolidating the two companies, what amount of these sales would be eliminated?
3. Padlock Corp. owns 90 percent of Safeco, Inc. During the year, Padlock sold 3,000 locking mechanisms to Safeco for \$900,000. By the end of the year, Safeco had sold all but 500 of the locking mechanisms to outside parties. Padlock marks up the cost of its locking mechanisms by 60 percent in computing its sales price to affiliated and nonaffiliated customers. How much intra-entity profit remains in Safeco's inventory at year-end?
4. How are intra-entity inventory gross profits created, and what consolidation entries does the presence of these gross profits necessitate?

5. James, Inc., sells inventory to Matthews Company, a related party, at James's standard gross profit rate. At the current fiscal year-end, Matthews still holds some portion of this inventory. If consolidated financial statements are prepared, why are worksheet entries required in two different fiscal periods?
6. How do intra-entity profits present in any year affect the noncontrolling interest calculations?
7. A worksheet is being developed to consolidate Allegan, Incorporated, and Stark Company. These two organizations have made considerable intra-entity transactions. How would the consolidation process be affected if these transfers were downstream? How would consolidated financial statements be affected if these transfers were upstream?
8. King Company owns a 90 percent interest in the outstanding voting shares of Pawn Company. No excess fair-value amortization resulted from the acquisition. Pawn reports a net income of \$110,000 for the current year. Intra-entity sales occur at regular intervals between the two companies. Intra-entity gross profits of \$30,000 were present in the beginning inventory balances, whereas \$60,000 in similar gross profits were recorded at year-end. What is the noncontrolling interest's share of consolidated net income?
9. When a subsidiary sells inventory to a parent, the intra-entity profit is removed from the subsidiary's net income for consolidation and reduces the income allocation to the noncontrolling interest. Is the profit permanently eliminated from the noncontrolling interest, or is it merely shifted from one period to the next? Explain.
10. The consolidation process applicable when intra-entity land transfers have occurred differs somewhat from that used for intra-entity inventory sales. What differences should be noted?
11. A subsidiary sells land to the parent company at a significant gain. The parent holds the land for two years and then sells it to an outside party, also for a gain. How does the business combination account for these events?
12. Why does an intra-entity sale of a depreciable asset (such as equipment or a building) require subsequent adjustments to depreciation expense within the consolidation process?
13. If a seller makes an intra-entity sale of a depreciable asset at a price above book value, the seller's beginning Retained Earnings is reduced when preparing each subsequent consolidation. Why does the amount of the adjustment change from year to year?

## Problems

### LO 5-1

1. What is the primary reason we defer financial statement recognition of gross profits on intra-entity sales for goods that remain within the consolidated entity at year-end?
  - a. Revenues and COGS must be recognized for all intra-entity sales regardless of whether the sales are upstream or downstream.
  - b. Intra-entity sales result in gross profit overstatements regardless of amounts remaining in ending inventory.
  - c. Gross profits must be deferred indefinitely because sales among affiliates always remain in the consolidated group.
  - d. When intra-entity sales remain in ending inventory, control of the goods has not changed.

### LO 5-3

2. James Corporation owns 80 percent of Carl Corporation's common stock. During October, Carl sold merchandise to James for \$250,000. At December 31, 40 percent of this merchandise remains in James's inventory. Gross profit percentages were 20 percent for James and 30 percent for Carl. The amount of intra-entity gross profit in inventory at December 31 that should be eliminated in the consolidation process is
  - a. \$24,000
  - b. \$30,000
  - c. \$20,000
  - d. \$75,000

### LO 5-5

3. In computing the noncontrolling interest's share of consolidated net income, how should the subsidiary's net income be adjusted for intra-entity transfers?
  - a. The subsidiary's reported net income is adjusted for the impact of upstream transfers prior to computing the noncontrolling interest's allocation.
  - b. The subsidiary's reported net income is adjusted for the impact of all transfers prior to computing the noncontrolling interest's allocation.
  - c. The subsidiary's reported net income is not adjusted for the impact of transfers prior to computing the noncontrolling interest's allocation.
  - d. The subsidiary's reported net income is adjusted for the impact of downstream transfers prior to computing the noncontrolling interest's allocation.

## LO 5-2, 5-3

4. Parkette, Inc., acquired a 60 percent interest in Skybox Company several years ago. During 2017, Skybox sold inventory costing \$160,000 to Parkette for \$200,000. A total of 18 percent of this inventory was not sold to outsiders until 2018. During 2018, Skybox sold inventory costing \$297,500 to Parkette for \$350,000. A total of 30 percent of this inventory was not sold to outsiders until 2019. In 2018, Parkette reported cost of goods sold of \$607,500 while Skybox reported \$450,000. What is the consolidated cost of goods sold in 2018?
- \$698,950
  - \$720,000
  - \$1,066,050
  - \$716,050

## LO 5-2, 5-3

5. Top Company holds 90 percent of Bottom Company's common stock. In the current year, Top reports sales of \$800,000 and cost of goods sold of \$600,000. For this same period, Bottom has sales of \$300,000 and cost of goods sold of \$180,000. During the current year, Top sold merchandise to Bottom for \$100,000. The subsidiary still possesses 40 percent of this inventory at the current year-end. Top had established the transfer price based on its normal gross profit rate. What are the consolidated sales and cost of goods sold?
- \$1,000,000 and \$690,000
  - \$1,000,000 and \$705,000
  - \$1,000,000 and \$740,000
  - \$970,000 and \$696,000

## LO 5-2, 5-3, 5-5

6. Use the same information as in problem (5) except assume that the transfers were from Bottom Company to Top Company. What are the consolidated sales and cost of goods sold?
- \$1,000,000 and \$720,000
  - \$1,000,000 and \$755,000
  - \$1,000,000 and \$696,000
  - \$970,000 and \$712,000

## LO 5-3, 5-4, 5-5

7. Angela, Inc., holds a 90 percent interest in Corby Company. During 2017, Corby sold inventory costing \$77,000 to Angela for \$110,000. Of this inventory, \$40,000 worth was not sold to outsiders until 2018. During 2018, Corby sold inventory costing \$72,000 to Angela for \$120,000. A total of \$50,000 of this inventory was not sold to outsiders until 2019. In 2018, Angela reported separate net income of \$150,000 while Corby's net income was \$90,000 after excess amortizations. What is the noncontrolling interest in the 2018 income of the subsidiary?
- \$8,000
  - \$8,200
  - \$9,000
  - \$9,800

## LO 5-7

8. Dunn Corporation owns 100 percent of Grey Corporation's common stock. On January 2, 2017, Dunn sold to Grey \$40,000 of machinery with a carrying amount of \$30,000. Grey is depreciating the acquired machinery over a five-year remaining life by the straight-line method. The net adjustments to compute 2017 and 2018 consolidated net income would be an increase (decrease) of

	2017	2018
a.	\$(8,000)	\$2,000
b.	\$(8,000)	—0—
c.	\$(10,000)	\$2,000
d.	\$(10,000)	—0—

(AICPA adapted)

## LO 5-7

9. Thomson Corporation owns 70 percent of the outstanding stock of Stayer, Incorporated. On January 1, 2016, Thomson acquired a building with a 10-year life for \$460,000. Thomson depreciated the building on the straight-line basis assuming no salvage value. On January 1, 2018, Thomson sold this building to Stayer for \$430,400. At that time, the building had a remaining life of eight years but still no expected salvage value. In preparing financial statements for 2018, how does this transfer affect the computation of consolidated net income?
- Net income is reduced by \$62,400.
  - Net income is reduced by \$59,440.
  - Net income is reduced by \$70,200.
  - Net income is reduced by \$54,600.

**Use the following data for Problems 10–15:**

On January 1, Jarel acquired 80 percent of the outstanding voting stock of Suarez for \$260,000 cash consideration. The remaining 20 percent of Suarez had an acquisition-date fair value of \$65,000. On January 1, Suarez possessed equipment (five-year remaining life) that was undervalued on its books by \$25,000. Suarez also had developed several secret formulas that Jarel assessed at \$50,000. These formulas, although not recorded on Suarez's financial records, were estimated to have a 20-year future life.

As of December 31, the financial statements appeared as follows:

	Jarel	Suarez
Revenues . . . . .	\$ (300,000)	\$(200,000)
Cost of goods sold . . . . .	140,000	80,000
Expenses . . . . .	<u>20,000</u>	<u>10,000</u>
Net income . . . . .	<u>\$ (140,000)</u>	<u>\$(110,000)</u>
Retained earnings, 1/1 . . . . .	\$ (300,000)	\$(150,000)
Net income . . . . .	(140,000)	(110,000)
Dividends declared . . . . .	<u>–0–</u>	<u>–0–</u>
Retained earnings, 12/31 . . . . .	<u>\$ (440,000)</u>	<u>\$(260,000)</u>
Cash and receivables . . . . .	\$ 210,000	\$ 90,000
Inventory . . . . .	150,000	110,000
Investment in Suarez . . . . .	260,000	–0–
Equipment (net) . . . . .	<u>440,000</u>	<u>300,000</u>
Total assets . . . . .	<u>\$ 1,060,000</u>	<u>\$ 500,000</u>
Liabilities . . . . .	\$ (420,000)	\$(140,000)
Common stock . . . . .	(200,000)	(100,000)
Retained earnings, 12/31 . . . . .	<u>(440,000)</u>	<u>(260,000)</u>
Total liabilities and equities . . . . .	<u>\$ (1,060,000)</u>	<u>\$(500,000)</u>

Included in the above statements, Jarel sold inventory costing \$80,000 to Suarez for \$100,000. Of these goods, Suarez still owns 60 percent on December 31.

**LO 5-2**

10. What is the total of consolidated revenues?

- a. \$500,000
- b. \$460,000
- c. \$420,000
- d. \$400,000

**LO 5-2, 5-3**

11. What is the total of consolidated cost of goods sold?

- a. \$140,000
- b. \$152,000
- c. \$132,000
- d. \$145,000

**LO 3-1**

(Chapter 3)

12. What is the total of consolidated expenses?

- a. \$30,000
- b. \$36,000
- c. \$37,500
- d. \$39,000

**LO 5-5**

13. What is the consolidated total of noncontrolling interest appearing on the balance sheet?

- a. \$85,500
- b. \$83,100
- c. \$87,000
- d. \$70,500

**LO 5-7**

14. What is the consolidated total for equipment (net) at December 31?

- a. \$735,000.
- b. \$740,000.
- c. \$760,000.
- d. \$765,000.

LO 5-3

15. What is the consolidated total for inventory at December 31?
- \$240,000
  - \$248,000
  - \$250,000
  - \$260,000

LO 5-2, 5-3, 5-5

16. Following are several figures reported for Allister and Barone as of December 31, 2018:

	Allister	Barone
Inventory	\$ 500,000	\$300,000
Sales	1,000,000	800,000
Investment income	not given	
Cost of goods sold	500,000	400,000
Operating expenses	230,000	300,000

Allister acquired 90 percent of Barone in January 2017. In allocating the newly acquired subsidiary's fair value at the acquisition date, Allister noted that Barone had developed a customer list worth \$78,000 that was unrecorded on its accounting records and had a 4-year remaining life. Any remaining excess fair value over Barone's book value was attributed to goodwill. During 2018, Barone sells inventory costing \$130,000 to Allister for \$180,000. Of this amount, 10 percent remains unsold in Allister's warehouse at year-end.

Determine balances for the following items that would appear on Allister's consolidated financial statements for 2018:

- Inventory
- Sales
- Cost of Goods Sold
- Operating Expenses
- Net Income Attributable to Noncontrolling Interest

LO 5-3, 5-4, 5-5

17. On January 1, 2017, Corgan Company acquired 80 percent of the outstanding voting stock of Smashing, Inc., for a total of \$980,000 in cash and other consideration. At the acquisition date, Smashing had common stock of \$700,000, retained earnings of \$250,000, and a noncontrolling interest fair value of \$245,000. Corgan attributed the excess of fair value over Smashing's book value to various covenants with a 20-year remaining life. Corgan uses the equity method to account for its investment in Smashing.

During the next two years, Smashing reported the following:

	Net Income	Dividends Declared	Inventory Purchases from Corgan
2017	\$150,000	\$35,000	\$100,000
2018	130,000	45,000	120,000

Corgan sells inventory to Smashing using a 60 percent markup on cost. At the end of 2017 and 2018, 40 percent of the current year purchases remain in Smashing's inventory.

- Compute the equity method balance in Corgan's Investment in Smashing, Inc., account as of December 31, 2018.
- Prepare the worksheet adjustments for the December 31, 2018, consolidation of Corgan and Smashing.

LO 5-1, 5-3, 5-4, 5-5, 5-6, 5-7

18. Placid Lake Corporation acquired 80 percent of the outstanding voting stock of Scenic, Inc., on January 1, 2017, when Scenic had a net book value of \$400,000. Any excess fair value was assigned to intangible assets and amortized at a rate of \$5,000 per year.

Placid Lake's 2018 net income before consideration of its relationship with Scenic (and before adjustments for intra-entity sales) was \$300,000. Scenic reported net income of \$110,000. Placid Lake declared \$100,000 in dividends during this period; Scenic paid \$40,000. At the end of 2018, selected figures from the two companies' balance sheets were as follows:

	Placid Lake	Scenic
Inventory	\$140,000	\$ 90,000
Land	600,000	200,000
Equipment (net)	400,000	300,000

During 2017, intra-entity sales of \$90,000 (original cost of \$54,000) were made. Only 20 percent of this inventory was still held within the consolidated entity at the end of 2017. In 2018, \$120,000 in intra-entity sales were made with an original cost of \$66,000. Of this merchandise, 30 percent had not been resold to outside parties by the end of the year.

Each of the following questions should be considered as an independent situation for the year 2018.

- a. What is consolidated net income for Placid Lake and its subsidiary?
- b. If the intra-entity sales were upstream, how would consolidated net income be allocated to the controlling and noncontrolling interest?
- c. If the intra-entity sales were downstream, how would consolidated net income be allocated to the controlling and noncontrolling interest?
- d. What is the consolidated balance in the ending Inventory account?
- e. Assume that no intra-entity inventory sales occurred between Placid Lake and Scenic. Instead, in 2017, Scenic sold land costing \$30,000 to Placid Lake for \$50,000. On the 2018 consolidated balance sheet, what value should be reported for land?
- f. Assume that no intra-entity inventory or land sales occurred between Placid Lake and Scenic. Instead, on January 1, 2017, Scenic sold equipment (that originally cost \$100,000 but had a \$60,000 book value on that date) to Placid Lake for \$80,000. At the time of sale, the equipment had a remaining useful life of five years. What worksheet entries are made for a December 31, 2018, consolidation of these two companies to eliminate the impact of the intra-entity transfer? For 2018, what is the noncontrolling interest’s share of Scenic’s net income?

LO 5-2, 5-3, 5-4, 5-5

- 19. On January 1, 2017, Doone Corporation acquired 60 percent of the outstanding voting stock of Rockne Company for \$300,000 consideration. At the acquisition date, the fair value of the 40 percent noncontrolling interest was \$200,000 and Rockne’s assets and liabilities had a collective net fair value of \$500,000. Doone uses the equity method in its internal records to account for its investment in Rockne. Rockne reports net income of \$160,000 in 2018. Since being acquired, Rockne has regularly supplied inventory to Doone at 25 percent more than cost. Sales to Doone amounted to \$250,000 in 2017 and \$300,000 in 2018. Approximately 30 percent of the inventory purchased during any one year is not used until the following year.
  - a. What is the noncontrolling interest’s share of Rockne’s 2018 income?
  - b. Prepare Doone’s 2018 consolidation entries required by the intra-entity inventory transfers.

LO 5-3, 5-4, 5-5, 5-7

- 20. Protrade Corporation acquired 80 percent of the outstanding voting stock of Seacraft Company on January 1, 2017, for \$612,000 in cash and other consideration. At the acquisition date, Protrade assessed Seacraft’s identifiable assets and liabilities at a collective net fair value of \$765,000 and the fair value of the 20 percent noncontrolling interest was \$153,000. No excess fair value over book value amortization accompanied the acquisition.

The following selected account balances are from the individual financial records of these two companies as of December 31, 2018:

	Protrade	Seacraft
Sales .....	\$880,000	\$600,000
Cost of goods sold .....	410,000	317,000
Operating expenses .....	174,000	129,000
Retained earnings, 1/1/18 .....	980,000	420,000
Inventory .....	370,000	144,000
Buildings (net) .....	382,000	181,000
Investment income .....	Not given	—0—

**Each of the following problems is an independent situation:**

- a. Assume that Protrade sells Seacraft inventory at a markup equal to 60 percent of cost. Intra-entity transfers were \$114,000 in 2017 and \$134,000 in 2018. Of this inventory, Seacraft retained and then sold \$52,000 of the 2017 transfers in 2018 and held \$66,000 of the 2018 transfers until 2019.

Determine balances for the following items that would appear on consolidated financial statements for 2018:

- Cost of Goods Sold
- Inventory
- Net Income Attributable to Noncontrolling Interest



- b. Assume that Seacraft sells inventory to Protrade at a markup equal to 60 percent of cost. Intra-entity transfers were \$74,000 in 2017 and \$104,000 in 2018. Of this inventory, \$45,000 of the 2017 transfers were retained and then sold by Protrade in 2018, whereas \$59,000 of the 2018 transfers were held until 2019.

Determine balances for the following items that would appear on consolidated financial statements for 2018:

- Cost of Goods Sold
- Inventory
- Net Income Attributable to Noncontrolling Interest

- c. Protrade sells Seacraft a building on January 1, 2017, for \$128,000, although its book value was only \$74,000 on this date. The building had a five-year remaining life and was to be depreciated using the straight-line method with no salvage value.

Determine balances for the following items that would appear on consolidated financial statements for 2018:

- Buildings (net)
- Operating Expenses
- Net Income Attributable to Noncontrolling Interest

**LO 5-3, 5-4, 5-5**

21. Akron, Inc., owns all outstanding stock of Toledo Corporation. Amortization expense of \$15,000 per year for patented technology resulted from the original acquisition. For 2018, the companies had the following account balances:

	Akron	Toledo
Sales .....	\$1,100,000	\$600,000
Cost of goods sold .....	500,000	400,000
Operating expenses .....	400,000	220,000
Investment income .....	Not given	—0—
Dividends declared .....	80,000	30,000

Intra-entity sales of \$320,000 occurred during 2017 and again in 2018. This merchandise cost \$240,000 each year. Of the total transfers, \$70,000 was still held on December 31, 2017, with \$50,000 unsold on December 31, 2018.

- a. For consolidation purposes, does the direction of the transfers (upstream or downstream) affect the balances to be reported here?
- b. Prepare a consolidated income statement for the year ending December 31, 2018.

**LO 5-7**

22. On January 1, 2017, QuickPort Company acquired 90 percent of the outstanding voting stock of NetSpeed, Inc., for \$810,000 in cash and stock options. At the acquisition date, NetSpeed had common stock of \$800,000 and Retained Earnings of \$40,000. The acquisition-date fair value of the 10 percent noncontrolling interest was \$90,000. QuickPort attributed the \$60,000 excess of NetSpeed's fair value over book value to a database with a five-year remaining life.

During the next two years, NetSpeed reported the following:

	Net Income	Dividends Declared
2017	\$ 80,000	\$8,000
2018	115,000	8,000

On July 1, 2017, QuickPort sold communication equipment to NetSpeed for \$42,000. The equipment originally cost \$48,000 and had accumulated depreciation of \$9,000 and an estimated remaining life of three years at the date of the intra-entity transfer.

- a. Compute the equity method balance in QuickPort's Investment in NetSpeed, Inc., account as of December 31, 2018.
- b. Prepare the worksheet adjustments for the December 31, 2018, consolidation of QuickPort and NetSpeed.

**LO 5-7**

23. Padre holds 100 percent of the outstanding shares of Sonora. On January 1, 2016, Padre transferred equipment to Sonora for \$95,000. The equipment had cost \$130,000 originally but had a \$50,000 book value and five-year remaining life at the date of transfer. Depreciation expense is computed according to the straight-line method with no salvage value.

LO 5-7

Consolidated financial statements for 2018 currently are being prepared. What worksheet entries are needed in connection with the consolidation of this asset? Assume that the parent applies the partial equity method.

24. On January 1, 2018, Ackerman sold equipment to Brannigan (a wholly owned subsidiary) for \$200,000 in cash. The equipment had originally cost \$180,000 but had a book value of only \$110,000 when transferred. On that date, the equipment had a five-year remaining life. Depreciation expense is computed using the straight-line method.

Ackerman reported \$300,000 in net income in 2018 (not including any investment income) while Brannigan reported \$98,000. Ackerman attributed any excess acquisition-date fair value to Brannigan's unpatented technology, which was amortized at a rate of \$4,000 per year.

- What is consolidated net income for 2018?
- What is the parent's share of consolidated net income for 2018 if Ackerman owns only 90 percent of Brannigan?
- What is the parent's share of consolidated net income for 2018 if Ackerman owns only 90 percent of Brannigan and the equipment transfer was upstream?
- What is the consolidated net income for 2019 if Ackerman reports \$320,000 (does not include investment income) and Brannigan \$108,000 in income? Assume that Brannigan is a wholly owned subsidiary and the equipment transfer was downstream.

LO 5-2, 5-3, 5-4, 5-7

25. Allison Corporation acquired 90 percent of Bretton on January 1, 2016. Of Bretton's total acquisition-date fair value, \$60,000 was allocated to undervalued equipment (with a 10-year remaining life) and \$80,000 was attributed to franchises (to be written off over a 20-year period).

Since the takeover, Bretton has transferred inventory to its parent as follows:

Year	Cost	Transfer Price	Remaining at Year-End
2016	\$45,000	\$90,000	\$30,000 (at transfer price)
2017	48,000	80,000	35,000 (at transfer price)
2018	69,000	92,000	50,000 (at transfer price)

On January 1, 2017, Allison sold Bretton a building for \$50,000 that had originally cost \$70,000 but had only a \$30,000 book value at the date of transfer. The building is estimated to have a five-year remaining life (straight-line depreciation is used with no salvage value).

Selected figures from the December 31, 2018, trial balances of these two companies are as follows:

	Allison	Bretton
Sales .....	\$700,000	\$400,000
Cost of goods sold .....	440,000	220,000
Operating expenses .....	120,000	80,000
Investment income .....	Not given	—0—
Inventory .....	210,000	90,000
Equipment (net) .....	140,000	110,000
Buildings (net) .....	350,000	190,000

Determine consolidated totals for each of these account balances.

LO 5-3, 5-4, 5-5, 5-7

26. On January 1, 2018, Sledge had common stock of \$120,000 and retained earnings of \$260,000. During that year, Sledge reported sales of \$130,000, cost of goods sold of \$70,000, and operating expenses of \$40,000.

On January 1, 2016, Percy, Inc., acquired 80 percent of Sledge's outstanding voting stock. At that date, \$60,000 of the acquisition-date fair value was assigned to unrecorded contracts (with a 20-year life) and \$20,000 to an undervalued building (with a 10-year remaining life).

In 2017, Sledge sold inventory costing \$9,000 to Percy for \$15,000. Of this merchandise, Percy continued to hold \$5,000 at year-end. During 2018, Sledge transferred inventory costing \$11,000 to Percy for \$20,000. Percy still held half of these items at year-end.

On January 1, 2017, Percy sold equipment to Sledge for \$12,000. This asset originally cost \$16,000 but had a January 1, 2017, book value of \$9,000. At the time of transfer, the equipment's remaining life was estimated to be five years.

Percy has properly applied the equity method to the investment in Sledge.

- Prepare worksheet entries to consolidate these two companies as of December 31, 2018.
- Compute the net income attributable to the noncontrolling interest for 2018.

LO 5-1, 5-2, 5-3, 5-4, 5-5, 5-7

27. Pitino acquired 90 percent of Brey's outstanding shares on January 1, 2016, in exchange for \$342,000 in cash. The subsidiary's stockholders' equity accounts totaled \$326,000 and the noncontrolling interest had a fair value of \$38,000 on that day. However, a building (with a nine-year remaining life) in Brey's accounting records was undervalued by \$18,000. Pitino assigned the rest of the excess fair value over book value to Brey's patented technology (six-year remaining life).

Brey reported net income from its own operations of \$64,000 in 2016 and \$80,000 in 2017. Brey declared dividends of \$19,000 in 2016 and \$23,000 in 2017.

Brey sells inventory to Pitino as follows:

Year	Cost to Brey	Transfer Price to Pitino	Inventory Remaining at Year-End (at transfer price)
2016	\$69,000	\$115,000	\$25,000
2017	81,000	135,000	37,500
2018	92,800	160,000	50,000

At December 31, 2018, Pitino owes Brey \$16,000 for inventory acquired during the period.

The following separate account balances are for these two companies for December 31, 2018, and the year then ended. Credits are indicated by parentheses.

	Pitino	Brey
Sales revenues	\$ (862,000)	\$(366,000)
Cost of goods sold	515,000	209,000
Expenses	185,400	67,000
Equity in earnings of Brey	(68,400)	–0–
Net income	<u>\$ (230,000)</u>	<u>\$ (90,000)</u>
Retained earnings, 1/1/18	\$ (488,000)	\$(278,000)
Net income (above)	(230,000)	(90,000)
Dividends declared	136,000	27,000
Retained earnings, 12/31/18	<u>\$ (582,000)</u>	<u>\$(341,000)</u>
Cash and receivables	\$ 146,000	\$ 98,000
Inventory	255,000	136,000
Investment in Brey	450,000	–0–
Land, buildings, and equipment (net)	964,000	328,000
Total assets	<u>\$ 1,815,000</u>	<u>\$ 562,000</u>
Liabilities	\$ (718,000)	\$ (71,000)
Common stock	(515,000)	(150,000)
Retained earnings, 12/31/18	<u>(582,000)</u>	<u>(341,000)</u>
Total liabilities and equities	<u>\$(1,815,000)</u>	<u>\$(562,000)</u>

Answer each of the following questions:

- What was the annual amortization resulting from the acquisition-date fair-value allocations?
  - Were the intra-entity transfers upstream or downstream?
  - What intra-entity gross profit in inventory existed as of January 1, 2018?
  - What intra-entity gross profit in inventory existed as of December 31, 2018?
  - What amounts make up the \$68,400 Equity Earnings of Brey account balance for 2018?
  - What is the net income attributable to the noncontrolling interest for 2018?
  - What amounts make up the \$450,000 Investment in Brey account balance as of December 31, 2018?
  - Prepare the 2018 worksheet entry to eliminate the subsidiary's beginning owners' equity balances.
  - Without preparing a worksheet or consolidation entries, determine the consolidation balances for these two companies.
28. ProForm acquired 70 percent of ClipRite on June 30, 2017, for \$910,000 in cash. Based on ClipRite's acquisition-date fair value, an unrecorded intangible of \$400,000 was recognized and is being amortized at the rate of \$10,000 per year. No goodwill was recognized in the acquisition.

LO 5-2, 5-3, 5-4

The noncontrolling interest fair value was assessed at \$390,000 at the acquisition date. The 2018 financial statements are as follows:

	ProForm	ClipRite
Sales .....	\$ (800,000)	\$ (600,000)
Cost of goods sold .....	535,000	400,000
Operating expenses .....	100,000	100,000
Dividend income .....	(35,000)	—0—
Net income .....	<u>\$ (200,000)</u>	<u>\$ (100,000)</u>
Retained earnings, 1/1/18 .....	\$ (1,300,000)	\$ (850,000)
Net income .....	(200,000)	(100,000)
Dividends declared .....	100,000	50,000
Retained earnings, 12/31/18 .....	<u>\$ (1,400,000)</u>	<u>\$ (900,000)</u>
Cash and receivables .....	\$ 400,000	\$ 300,000
Inventory .....	290,000	700,000
Investment in ClipRite .....	910,000	—0—
Fixed assets .....	1,000,000	600,000
Accumulated depreciation .....	(300,000)	(200,000)
Totals .....	<u>\$ 2,300,000</u>	<u>\$ 1,400,000</u>
Liabilities .....	\$ (600,000)	\$ (400,000)
Common stock .....	(300,000)	(100,000)
Retained earnings, 12/31/18 .....	(1,400,000)	(900,000)
Totals .....	<u>\$ (2,300,000)</u>	<u>\$ (1,400,000)</u>

ProForm sold ClipRite inventory costing \$72,000 during the last six months of 2017 for \$120,000. At year-end, 30 percent remained. ProForm sells ClipRite inventory costing \$200,000 during 2018 for \$250,000. At year-end, 10 percent is left. With these facts, determine the consolidated balances for the following:

- Sales
- Cost of Goods Sold
- Operating Expenses
- Dividend Income
- Net Income Attributable to Noncontrolling Interest
- Inventory
- Noncontrolling Interest in Subsidiary, 12/31/18

LO 5-2, 5-3, 5-4, 5-5

29. Compute the balances in problem (28) again, assuming that all intra-entity transfers were made from ClipRite to ProForm.

LO 5-1, 5-2, 5-3, 5-4, 5-5, 5-6, 5-7

30. Following are financial statements for Moore Company and Kirby Company for 2018:

	Moore	Kirby
Sales .....	\$ (800,000)	\$ (600,000)
Cost of goods sold .....	500,000	400,000
Operating and interest expenses .....	100,000	160,000
Net income .....	<u>\$ (200,000)</u>	<u>\$ (40,000)</u>
Retained earnings, 1/1/18 .....	\$ (990,000)	\$ (550,000)
Net income .....	(200,000)	(40,000)
Dividends declared .....	130,000	—0—
Retained earnings, 12/31/18 .....	<u>\$ (1,060,000)</u>	<u>\$ (590,000)</u>

(continued)

	Moore	Kirby
Cash and receivables.....	\$ 217,000	\$ 180,000
Inventory.....	224,000	160,000
Investment in Kirby.....	657,000	–0–
Equipment (net).....	600,000	420,000
Buildings.....	1,000,000	650,000
Accumulated depreciation—buildings.....	(100,000)	(200,000)
Other assets.....	200,000	100,000
Total assets.....	<u>\$ 2,798,000</u>	<u>\$ 1,310,000</u>
Liabilities.....	\$(1,138,000)	\$ (570,000)
Common stock.....	(600,000)	(150,000)
Retained earnings, 12/31/18.....	(1,060,000)	(590,000)
Total liabilities and equity.....	<u>\$(2,798,000)</u>	<u>\$(1,310,000)</u>

- Moore purchased 90 percent of Kirby on January 1, 2017, for \$657,000 in cash. On that date, the 10 percent noncontrolling interest was assessed to have a \$73,000 fair value. Also at the acquisition date, Kirby held equipment (four-year remaining life) undervalued in its financial records by \$20,000 and interest-bearing liabilities (five-year remaining life) overvalued by \$40,000. The rest of the excess fair over book value was assigned to previously unrecognized brand names and amortized over a 10-year life.
- During 2017 Kirby reported a net income of \$80,000 and declared no dividends.
- Each year Kirby sells Moore inventory at a 20 percent gross profit rate. Intra-entity sales were \$145,000 in 2017 and \$160,000 in 2018. On January 1, 2018, 30 percent of the 2017 transfers were still on hand, and on December 31, 2018, 40 percent of the 2018 transfers remained.
- Moore sold Kirby a building on January 2, 2017. It had cost Moore \$100,000 but had \$90,000 in accumulated depreciation at the time of this transfer. The price was \$25,000 in cash. At that time, the building had a five-year remaining life.

Determine all consolidated balances either computationally or by using a worksheet.

31. On January 1, 2017, McIlroy, Inc., acquired a 60 percent interest in the common stock of Stinson, Inc., for \$372,000. Stinson's book value on that date consisted of common stock of \$100,000 and retained earnings of \$220,000. Also, the acquisition-date fair value of the 40 percent noncontrolling interest was \$248,000. The subsidiary held patents (with a 10-year remaining life) that were undervalued within the company's accounting records by \$70,000 and an unrecorded customer list (15-year remaining life) assessed at a \$45,000 fair value. Any remaining excess acquisition-date fair value was assigned to goodwill. Since acquisition, McIlroy has applied the equity method to its Investment in Stinson account and no goodwill impairment has occurred. At year end, there are no intra-entity payables or receivables.

Intra-entity inventory sales between the two companies have been made as follows:

Year	Cost to McIlroy	Transfer Price to Stinson	Ending Balance (at transfer price)
2017	\$120,000	\$150,000	\$50,000
2018	112,000	160,000	40,000

The individual financial statements for these two companies as of December 31, 2018, and the year then ended follow:

	McIlroy, Inc.	Stinson, Inc.
Sales.....	\$ (700,000)	\$(335,000)
Cost of goods sold.....	460,000	205,000
Operating expenses.....	188,000	70,000
Equity in earnings in Stinson.....	(28,000)	–0–
Net income.....	<u>\$ (80,000)</u>	<u>\$ (60,000)</u>

LO 5-2, 5-3, 5-4, 5-5

**excel**

	McIlroy, Inc.	Stinson, Inc.
Retained earnings, 1/1/18.....	\$ (695,000)	\$ (280,000)
Net income.....	(80,000)	(60,000)
Dividends declared.....	45,000	15,000
Retained earnings, 12/31/18.....	<u>\$ (730,000)</u>	<u>\$ (325,000)</u>
Cash and receivables.....	\$ 248,000	\$ 148,000
Inventory.....	233,000	129,000
Investment in Stinson.....	411,000	–0–
Buildings (net).....	308,000	202,000
Equipment (net).....	220,000	86,000
Patents (net).....	–0–	20,000
Total assets.....	<u>\$ 1,420,000</u>	<u>\$ 585,000</u>
Liabilities.....	\$ (390,000)	\$ (160,000)
Common stock.....	(300,000)	(100,000)
Retained earnings, 12/31/18.....	<u>(730,000)</u>	<u>(325,000)</u>
Total liabilities and equities.....	<u>\$(1,420,000)</u>	<u>\$(585,000)</u>

- a. Show how McIlroy determined the \$411,000 Investment in Stinson account balance. Assume that McIlroy defers 100 percent of downstream intra-entity profits against its share of Stinson’s income.
- b. Prepare a consolidated worksheet to determine appropriate balances for external financial reporting as of December 31, 2018.



32. On January 1, 2016, Plymouth Corporation acquired 80 percent of the outstanding voting stock of Sander Company in exchange for \$1,200,000 cash. At that time, although Sander’s book value was \$925,000, Plymouth assessed Sander’s total business fair value at \$1,500,000. Since that time, Sander has neither issued nor reacquired any shares of its own stock.

The book values of Sander’s individual assets and liabilities approximated their acquisition-date fair values except for the patent account, which was undervalued by \$350,000. The undervalued patents had a five-year remaining life at the acquisition date. Any remaining excess fair value was attributed to goodwill. No goodwill impairments have occurred.

Sander regularly sells inventory to Plymouth. Below are details of the intra-entity inventory sales for the past three years:

Year	Intra-Entity Sales	Intra-Entity Ending Inventory at Transfer Price	Gross Profit Rate on Intra-Entity Inventory Transfers
2016	\$125,000	\$ 80,000	25%
2017	220,000	125,000	28
2018	300,000	160,000	25

Separate financial statements for these two companies as of December 31, 2018, follow:

	Plymouth	Sander
Revenues	\$(1,740,000)	\$ (950,000)
Cost of goods sold	820,000	500,000
Depreciation expense	104,000	85,000
Amortization expense	220,000	120,000
Interest expense	20,000	15,000
Equity in earnings of Sander	<u>(124,000)</u>	<u>–0–</u>
Net income	<u>\$ (700,000)</u>	<u>\$ (230,000)</u>

(continued)

	Plymouth	Sander
Retained earnings 1/1/18	\$(2,800,000)	\$ (345,000)
Net income	(700,000)	(230,000)
Dividends declared	200,000	25,000
Retained earnings, 12/31/18	<u>\$(3,300,000)</u>	<u>\$ (550,000)</u>
Cash	\$ 535,000	\$ 115,000
Accounts receivable	575,000	215,000
Inventory	990,000	800,000
Investment in Sander	1,420,000	—0—
Buildings and equipment	1,025,000	863,000
Patents	950,000	107,000
Total assets	<u>\$ 5,495,000</u>	<u>\$ 2,100,000</u>
Accounts payable	\$ (450,000)	\$ (200,000)
Notes payable	(545,000)	(450,000)
Common stock	(900,000)	(800,000)
Additional paid-in capital	(300,000)	(100,000)
Retained earnings, 12/31/18	<u>(3,300,000)</u>	<u>(550,000)</u>
Total liabilities and stockholders' equity	<u>\$(5,495,000)</u>	<u>\$(2,100,000)</u>

- a. Prepare a schedule that calculates the Equity in Earnings of Sander account balance.
- b. Prepare a worksheet to arrive at consolidated figures for external reporting purposes. At year-end, there are no intra-entity payables or receivables.
33. On January 1, 2016, Monica Company acquired 70 percent of Young Company's outstanding common stock for \$665,000. The fair value of the noncontrolling interest at the acquisition date was \$285,000. Young reported stockholders' equity accounts on that date as follows:

Common stock—\$10 par value . . . . .	\$300,000
Additional paid-in capital . . . . .	90,000
Retained earnings . . . . .	410,000

In establishing the acquisition value, Monica appraised Young's assets and ascertained that the accounting records undervalued a building (with a five-year remaining life) by \$50,000. Any remaining excess acquisition-date fair value was allocated to a franchise agreement to be amortized over 10 years.

During the subsequent years, Young sold Monica inventory at a 30 percent gross profit rate. Monica consistently resold this merchandise in the year of acquisition or in the period immediately following. Transfers for the three years after this business combination was created amounted to the following:

Year	Transfer Price	Inventory Remaining
		at Year-End (at transfer price)
2016	\$60,000	\$10,000
2017	80,000	12,000
2018	90,000	18,000

In addition, Monica sold Young several pieces of fully depreciated equipment on January 1, 2017, for \$36,000. The equipment had originally cost Monica \$50,000. Young plans to depreciate these assets over a six-year period.

In 2018, Young earns a net income of \$160,000 and declares and pays \$50,000 in cash dividends. These figures increase the subsidiary's Retained Earnings to a \$740,000 balance at the end of 2018. During this same year, Monica reported dividend income of \$35,000 and an investment account containing the initial value balance of \$665,000. No changes in Young's common stock accounts have occurred since Monica's acquisition.

Prepare the 2018 consolidation worksheet entries for Monica and Young. In addition, compute the net income attributable to the noncontrolling interest for 2018.

LO 5-2, 5-3, 5-4, 5-5, 5-7

LO 5-1, 5-2, 5-3, 5-4, 5-5, 5-6, 5-7



34. Assume the same basic information as presented in problem (33) except that Monica employs the equity method of accounting. Hence, it reports \$102,740 investment income for 2018 with an Investment account balance of \$826,220. Under these circumstances, prepare the worksheet entries required for the consolidation of Monica Company and Young Company.
35. The individual financial statements for Gibson Company and Keller Company for the year ending December 31, 2018, follow. Gibson acquired a 60 percent interest in Keller on January 1, 2017, in exchange for various considerations totaling \$570,000. At the acquisition date, the fair value of the noncontrolling interest was \$380,000 and Keller's book value was \$850,000. Keller had developed internally a customer list that was not recorded on its books but had an acquisition-date fair value of \$100,000. This intangible asset is being amortized over 20 years.

Gibson sold Keller land with a book value of \$60,000 on January 2, 2017, for \$100,000. Keller still holds this land at the end of the current year.

Keller regularly transfers inventory to Gibson. In 2017, it shipped inventory costing \$100,000 to Gibson at a price of \$150,000. During 2018, intra-entity shipments totaled \$200,000, although the original cost to Keller was only \$140,000. In each of these years, 20 percent of the merchandise was not resold to outside parties until the period following the transfer. Gibson owes Keller \$40,000 at the end of 2018.

	Gibson Company	Keller Company
Sales .....	\$ (800,000)	\$ (500,000)
Cost of goods sold .....	500,000	300,000
Operating expenses .....	100,000	60,000
Equity in earnings of Keller .....	(84,000)	—0—
Net income .....	<u>\$ (284,000)</u>	<u>\$ (140,000)</u>
Retained earnings, 1/1/18 .....	\$(1,116,000)	\$ (620,000)
Net income (above) .....	(284,000)	(140,000)
Dividends declared .....	115,000	60,000
Retained earnings, 12/31/18 .....	<u>\$(1,285,000)</u>	<u>\$ (700,000)</u>
Cash .....	\$ 177,000	\$ 90,000
Accounts receivable .....	356,000	410,000
Inventory .....	440,000	320,000
Investment in Keller .....	726,000	—0—
Land .....	180,000	390,000
Buildings and equipment (net) .....	496,000	300,000
Total assets .....	<u>\$ 2,375,000</u>	<u>\$ 1,510,000</u>
Liabilities .....	\$ (480,000)	\$ (400,000)
Common stock .....	(610,000)	(320,000)
Additional paid-in capital .....	—0—	(90,000)
Retained earnings, 12/31/18 .....	(1,285,000)	(700,000)
Total liabilities and equities .....	<u>\$(2,375,000)</u>	<u>\$(1,510,000)</u>

- a. Prepare a worksheet to consolidate the separate 2018 financial statements for Gibson and Keller.
- b. How would the consolidation entries in requirement (a) have differed if Gibson had sold a building with a \$60,000 book value (cost of \$140,000) to Keller for \$100,000 instead of land, as the problem reports? Assume that the building had a 10-year remaining life at the date of transfer.
36. On January 1, 2017, Panther, Inc., issued securities with a total fair value of \$577,000 for 100 percent of Stark Corporation's outstanding ownership shares. Stark has long supplied inventory to Panther. The companies expect to achieve synergies with production scheduling and product development with this combination.

Although Stark's book value at the acquisition date was \$300,000, the fair value of its trademarks was assessed to be \$45,000 more than their carrying amounts. Additionally, Stark's patented technology was undervalued in its accounting records by \$232,000. The trademarks were considered to have indefinite lives, and the estimated remaining life of the patented technology was eight years.

In 2017, Stark sold Panther inventory costing \$75,000 for \$125,000. As of December 31, 2017, Panther had resold 74 percent of this inventory. In 2018, Panther bought from Stark \$140,000 of inventory that had an original cost of \$70,000. At the end of 2018, Panther held \$38,000 (transfer price) of inventory acquired from Stark, all from its 2018 purchases.

LO 5-2, 5-3, 5-4, 5-6



During 2018, Panther sold Stark a parcel of land for \$88,000 and recorded a gain of \$16,000 on the sale. Stark still owes Panther \$62,000 (current liability) related to the land sale.

At the end of 2018, Panther and Stark prepared the following statements in preparation for consolidation.

	Panther, Inc.	Stark Corporation
Revenues . . . . .	\$ (710,000)	\$ (360,000)
Cost of goods sold . . . . .	305,000	189,000
Other operating expenses . . . . .	167,000	81,000
Gain on sale of land . . . . .	(16,000)	–0–
Equity in Stark's earnings . . . . .	(39,000)	–0–
Net income . . . . .	<u>\$ (293,000)</u>	<u>\$ (90,000)</u>
Retained earnings, 1/1/18 . . . . .	\$ (367,000)	\$ (292,000)
Net income . . . . .	(293,000)	(90,000)
Dividends declared . . . . .	80,000	25,000
Retained earnings, 12/31/18 . . . . .	<u>\$ (580,000)</u>	<u>\$(357,000)</u>
Cash and receivables . . . . .	\$ 102,000	\$ 154,000
Inventory . . . . .	311,000	110,000
Investment in Stark . . . . .	691,000	–0–
Trademarks . . . . .	–0–	58,000
Land, buildings, and equip. (net) . . . . .	638,000	280,000
Patented technology . . . . .	–0–	125,000
Total assets . . . . .	<u>\$ 1,742,000</u>	<u>\$ 727,000</u>
Liabilities . . . . .	\$ (462,000)	\$ (220,000)
Common stock . . . . .	(400,000)	(100,000)
Additional paid-in capital . . . . .	(300,000)	(50,000)
Retained earnings, 12/31/18 . . . . .	<u>(580,000)</u>	<u>(357,000)</u>
Total liabilities and equity . . . . .	<u>\$(1,742,000)</u>	<u>\$ (727,000)</u>

- Show how Panther computed its \$39,000 equity in Stark's earnings balance.
- Prepare a 2018 consolidated worksheet for Panther and Stark.

## Develop Your Skills

### EXCEL CASE



On January 1, 2017, James Company purchased 100 percent of the outstanding voting stock of Nolan, Inc., for \$1,000,000 in cash and other consideration. At the purchase date, Nolan had common stock of \$500,000 and retained earnings of \$185,000. James attributed the excess of acquisition-date fair value over Nolan's book value to a trade name with an estimated 25-year remaining useful life. James uses the equity method to account for its investment in Nolan.

During the next two years, Nolan reported the following:

	Income	Dividends Declared	Inventory Transfers to James at Transfer Price
2017	\$78,000	\$25,000	\$190,000
2018	85,000	27,000	210,000

Nolan sells inventory to James after a markup based on a gross profit rate. At the end of 2017 and 2018, 30 percent of the current year purchases remain in James's inventory.

**Required**

Create an Excel spreadsheet that computes the following:

1. Equity method balance in James' Investment in Nolan, Inc., account as of December 31, 2018.
2. Worksheet adjustments for the December 31, 2018, consolidation of James and Nolan.

Formulate your solution so that Nolan's gross profit rate on sales to James is treated as a variable.

## ANALYSIS AND RESEARCH CASE: ACCOUNTING INFORMATION AND SALARY NEGOTIATIONS



Hamilton Hawks Players' Association and Mr. Sideline, the CEO and majority owner of Hamilton Hawks Soccer, Inc, ask your help in resolving a salary dispute. Mr. Sideline presents the following income statement to the players' representatives.

<b>HAMILTON HAWKS SOCCER, INC.</b>		
<b>Income Statement</b>		
Ticket revenues . . . . .		\$ 3,500,000
Stadium rent expense . . . . .	\$2,500,000	
Ticket expense . . . . .	30,000	
Promotion expense . . . . .	80,000	
Player salaries . . . . .	700,000	
Staff salaries and miscellaneous . . . . .	265,000	3,575,000
Net income (loss) . . . . .		<u>\$ (75,000)</u>

The players contend that their salaries are below market and a raise is warranted. Mr. Sideline argues that the Hamilton Hawks really lose money and, until ticket revenues increase, a salary hike is out of the question.

As a result of your inquiry, you discover that Hamilton Hawks Soccer Company owns 85 percent of the voting stock in Hawks Stadium, Inc. This venue is specifically designed for soccer and is where the Hawks play their entire home game schedule. However, Mr. Sideline does not wish to consider the profits of Hawks Stadium in the negotiations with the players. He claims that "the stadium is really a separate business entity that was purchased separately from the team and therefore does not concern the players. On top of that, we allocate all the ticket revenues to the team's income statement."

The Hawks Stadium income statement appears as follows:

<b>HAWKS STADIUM, INC.</b>		
<b>Income Statement</b>		
Stadium rent revenue . . . . .	\$2,500,000	
Concession revenue . . . . .	875,000	
Parking revenue . . . . .	95,000	\$3,470,000
Cost of goods sold . . . . .	270,000	
Depreciation expense . . . . .	90,000	
Grounds maintenance expense . . . . .	410,000	
Staff salaries and miscellaneous . . . . .	200,000	970,000
Net income (loss) . . . . .		<u>\$2,500,000</u>

**Required**

1. What advice would you provide the negotiating parties regarding the issue of considering the Hawks Stadium income statement in their discussions? What authoritative literature could you cite in supporting your advice?
2. What other pertinent information would you need to provide a specific recommendation regarding players' salaries?



# Variable Interest Entities, Intra-Entity Debt, Consolidated Cash Flows, and Other Issues

The consolidation of financial information can be a highly complex process often encompassing a number of practical challenges. This chapter examines the procedures required by several additional issues:

- Variable interest entities.
- Intra-entity debt.
- Subsidiary preferred stock.
- The consolidated statement of cash flows.
- Computation of consolidated earnings per share.
- Subsidiary stock transactions.

Variable interest entities emerged over the past two decades as a new type of business structure that provided effective control of one firm by another without overt ownership. In response to the evolving nature of control relationships among firms, the FASB expanded its definition of control beyond the long-standing criterion of a majority voting interest to include control exercised through variable interests. This topic and some of the more traditional advanced business combination subjects listed above provide for further exploration of the complexities faced by the financial reporting community in providing relevant and reliable information to users of consolidated financial reports.

## Consolidation of Variable Interest Entities

Several decades ago, many firms began establishing separate business structures to help finance their operations at favorable rates. These structures became commonly known as *special purpose entities* (SPEs), *special purpose vehicles*, or *off-balance-sheet structures*. In this text, we refer to all such entities collectively as *variable interest entities*, or VIEs. Many firms routinely included their VIEs in their consolidated financial reports. However, others sought to avoid consolidation.

VIEs can help accomplish legitimate business purposes. Nonetheless, their use was widely criticized in the aftermath of Enron Corporation's 2001 collapse. Because many firms avoided consolidation and used VIEs for off-balance sheet financing, such entities were often characterized as

## Learning Objectives

After studying this chapter, you should be able to:

- LO 6-1** Describe a variable interest entity, a primary beneficiary, and the factors used to decide when a variable interest entity is subject to consolidation.
- LO 6-2** Demonstrate the process to consolidate a primary beneficiary with a variable interest entity.
- LO 6-3** Demonstrate the consolidation procedures to eliminate all intra-entity debt accounts and recognize any associated gain or loss created whenever one company acquires an affiliate's debt instrument from an outside party.
- LO 6-4** Understand that subsidiary preferred stock not owned by the parent is a component of the noncontrolling interest and is initially measured at acquisition-date fair value.
- LO 6-5** Prepare a consolidated statement of cash flows.
- LO 6-6** Compute basic and diluted earnings per share for a business combination.
- LO 6-7** Demonstrate the accounting effects of subsidiary stock transactions on the parent's financial records and consolidated financial statements.

**LO 6-1**

Describe a variable interest entity, a primary beneficiary, and the factors used to decide when a variable interest entity is subject to consolidation.

vehicles to hide debt and mislead investors. Other critics observed that firms with variable interests recorded questionable profits on sales to their VIEs that were not arm's-length transactions.<sup>1</sup> The FASB ASC "Variable Interest Entities" sections within the "Consolidations" Topic were issued in response to such financial reporting abuses.

### What Is a VIE?

A VIE can take the form of a trust, partnership, joint venture, or corporation although sometimes it has neither independent management nor employees. Most are established for valid business purposes, and transactions involving VIEs have become widespread. Common examples of VIE activities include transfers of financial assets, leasing, hedging financial instruments, research and development, and other arrangements. An enterprise often creates a VIE to accomplish a well-defined and limited business activity and to provide low-cost financing.

Low-cost financing of asset purchases is frequently a main benefit available through VIEs. Rather than engaging in the transaction directly, a business enterprise may establish a VIE to purchase and finance an asset acquisition. The VIE then leases the asset back to the business enterprise that established the VIE. This strategy saves the business enterprise money because the VIE is often eligible for a lower interest rate. This advantage is achieved for several reasons. First, the VIE typically operates with a very limited set of assets—in many cases just one asset. By isolating an asset in a VIE, the asset's risk is isolated from the business enterprise's overall risk. Thus the VIE creditors remain protected by the specific collateral in the asset. Second, the governing documents can strictly limit the actions of a VIE. These limits further protect lenders by preventing the VIE from engaging in any activities not specified in its agreements. As a major public accounting firm noted,

The borrower/transferor gains access to a source of funds less expensive than would otherwise be available. This advantage derives from isolating the assets in an entity prohibited from undertaking any other business activity or taking on any additional debt, thereby creating a better security interest in the assets for the lender/investor.<sup>2</sup>

Because governing agreements limit activities and decision making in most VIEs, ownership of a VIE's common stock typically does not provide control of the VIE. In fact, the enterprise that created the VIE may own very little, if any, of the VIE's voting stock. Prior to current consolidation requirements for VIEs, many enterprises left such entities unconsolidated in their financial reports because technically they did not own a majority of the entity's voting stock. In utilizing the VIE as a conduit to provide financing, the related assets and debt were effectively removed from the enterprise's balance sheet.

In general, the party that primarily benefits (or risks losses) from the economic activities of the VIE and has the power to direct the VIE's activities is deemed to have a controlling financial interest in the VIE. We use the term **primary beneficiary** to designate the party with such financial control. The primary beneficiary (most often a business) typically exercises its financial control through governance documents or other contractual agreements that provide it with decision-making authority over the VIE. Once identified, the primary beneficiary must consolidate in its financial statements the VIE's assets, liabilities, revenues, expenses, and non-controlling interest.

### *Characteristics of Variable Interest Entities*

Similar to most business entities, VIEs generally have assets, liabilities, and investors with equity interests. Unlike most businesses, because a VIE's activities and decision-making can be strictly limited, the role of the equity investors can be fairly minor. The VIE may have been created specifically by the primary beneficiary to provide it with low-cost financing.

<sup>1</sup>In its 2001 fourth quarter 10-Q, Enron recorded earnings restatements of more than \$400 million related to its failure to properly consolidate several of its SPEs (e.g., Chewco and LJM2). Enron also admitted an improper omission of \$700 million of its SPE's debt. Within a month of the restatements, Enron filed for bankruptcy.

<sup>2</sup>KPMG, "Defining Issues: New Accounting for SPEs," March 1, 2002.

Thus, the equity investors may serve simply as a technical requirement to allow the VIE to function as a legal entity. Because they bear relatively low economic risk, equity investors may be provided only a small rate of return.

The small equity investments in a VIE normally are insufficient to induce lenders to provide financing for the VIE. As a result, another party (e.g., the primary beneficiary) must contribute substantial resources—often loans and/or guarantees—to enable the VIE to secure additional financing needed to accomplish its purpose. For example, the primary beneficiary may guarantee the VIE’s debt, thus assuming the risk of default. Other contractual arrangements may limit returns to equity holders while participation rights provide increased profit potential and risks to the primary beneficiary. Risks and rewards such as these cause the primary beneficiary’s economic interest to vary depending on the created entity’s success—hence the term **variable interest entity**. In contrast to a traditional entity, a VIE’s risks and rewards frequently are distributed not according to stock ownership but according to other variable interests. Exhibit 6.1 describes variable interests further and provides several examples.

Variable interests increase a firm’s risk as the resources it provides (or guarantees) to the VIE increase. With increased risks come incentives to restrict the VIE’s decision making. In fact, a firm with variable interests will regularly limit the equity investors’ power through the VIE’s governance documents. As noted by GAAP literature,

If the total equity investment at risk is not sufficient to permit the legal entity to finance its activities, the parties providing the necessary additional subordinated financial support most likely will not permit an equity investor to make decisions that may be counter to their interests. (FASB ASC 810-10-05-13)

Although the equity investors are technically the owners of the VIE, in reality they may retain little of the traditional responsibilities, risks, and benefits of ownership. In fact, the equity investors sometimes cede financial control of the VIE to those with variable interests in exchange for a guaranteed rate of return. Alternatively, equity ownership is also a variable interest and a minority equity holder may be the primary beneficiary and end up consolidating the VIE.

## Consolidation of Variable Interest Entities

Prior to current financial reporting standards, assets, liabilities, and results of operations for VIEs and other entities frequently were not consolidated with those of the firm that controlled the entity. These firms invoked a reliance on voting interests, as opposed to

### EXHIBIT 6.1 Examples of Variable Interests

Variable interests in a variable interest entity are contractual, ownership, or other pecuniary interests in an entity that change with changes in the entity’s net asset value. Variable interests absorb portions of a variable interest entity’s expected losses if they occur or receive portions of the entity’s expected residual returns if they occur.

The following are some examples of variable interests and the related potential losses or returns:

#### Variable interests

- Participation rights.
- Asset purchase options.
- Guarantees of debt.
- Subordinated debt instruments.
- Lease residual value guarantees.
- Common stock

#### Potential losses or returns

- Entitles holder to residual profits.
- Entitles holder to benefit from increases in asset fair values.
- If a VIE cannot repay liabilities, honoring a debt guarantee will produce a loss.
- If a VIE’s cash flow is insufficient to repay all senior debt, subordinated debt may be required to absorb the loss.
- If leased asset declines below the residual value, honoring the guarantee will produce a loss.
- Entitles holder to residual profits, losses, and dividends.

variable interests, to indicate a lack of a controlling financial interest. As legacy FASB standard *FIN 46R*<sup>3</sup> observed,

An enterprise's consolidated financial statements include subsidiaries in which the enterprise has a controlling financial interest. That requirement usually has been applied to subsidiaries in which an enterprise has a majority voting interest, but in many circumstances, the enterprise's consolidated financial statements do not include variable interest entities with which it has similar relationships. The voting interest approach is not effective in identifying controlling financial interests in entities that are not controllable through voting interests or in which the equity investors do not bear residual economic risk. (Summary, page 2)

Thus, a business enterprise is required to consolidate the assets and liabilities of a variable interest entity if it can exercise financial control through its role as a primary beneficiary. Variable interests often serve as the vehicle for a controlling financial interest, even in the absence of any equity investment whatsoever.

Business enterprises must first determine if they have a controlling financial interest in any affiliated entity by applying the variable interest model. Each enterprise involved with a VIE must evaluate whether it possesses a controlling financial interest and thus qualifies as the primary beneficiary of the VIE's activities. The VIE's primary beneficiary is then required to include the assets, liabilities, and results of the activities of the VIE in its consolidated financial statements. If the affiliated entity is not a VIE, then a voting interest model is utilized to assess whether financial control exists.

As noted by General Electric Company in its 2015 annual report:

Our financial statements consolidate all of our affiliates – entities in which we have a controlling financial interest, most often because we hold a majority voting interest. To determine if we hold a controlling financial interest in an entity, we first evaluate if we are required to apply the variable interest entity (VIE) model to the entity, otherwise, the entity is evaluated under the voting interest model.

Where we hold current or potential rights that give us the power to direct the activities of a VIE that most significantly impact the VIE's economic performance, combined with a variable interest that gives us the right to receive potentially significant benefits or the obligation to absorb potentially significant losses, we have a controlling financial interest in that VIE.

### ***Identification of a Variable Interest Entity***

An entity qualifies as a VIE if either of the following conditions exists:

- The total equity at risk is not sufficient to permit the entity to finance its activities without additional subordinated financial support provided by any parties, including equity holders. In most cases, if equity at risk is less than 10 percent of total assets, the risk is deemed insufficient.<sup>4</sup>
- The equity investors in the VIE, as a group, lack any one of the following three characteristics of a controlling financial interest:
  1. The power, through voting rights or similar rights, to direct the activities of an entity that most significantly impact the entity's economic performance.
  2. The obligation to absorb the expected losses of the entity (e.g., the primary beneficiary may guarantee a return to the equity investors).
  3. The right to receive the expected residual returns of the entity (e.g., the investors' return may be capped by the entity's governing documents or other arrangements with variable interest holders).

### ***Identification of the Primary Beneficiary of the VIE***

Once it is established that a firm has a relationship with a VIE, the firm must determine whether it qualifies as the VIE's primary beneficiary. An enterprise with a variable interest

<sup>3</sup>FASB *Interpretation No. 46R (FIN 46R)*, "Consolidation of Variable Interest Entities," December 2003.

<sup>4</sup>Alternatively, a 10 percent or higher equity interest may also be insufficient. According to GAAP, "Some entities may require an equity investment greater than 10 percent of their assets to finance their activities, especially if they engage in high-risk activities, hold high-risk assets, or have exposure to risks that are not reflected in the reported amounts of the entities' assets or liabilities." [FASB ASC (para. 810-10-25-46)]

that provides it with a controlling financial interest in a variable interest entity is the primary beneficiary and will have both of the following characteristics:

- The power to direct the activities of a variable interest entity that most significantly impact the entity's economic performance.
- The obligation to absorb losses of the entity that could potentially be significant to the variable interest entity or the right to receive benefits from the entity that could potentially be significant to the variable interest entity.

Note that these characteristics mirror those that the equity investors often lack in a VIE. Instead, the primary beneficiary will absorb a significant share of the VIE's losses or receive a significant share of the VIE's residual returns or both. The fact that the primary beneficiary may own no voting shares whatsoever becomes inconsequential because such shares do not effectively give the equity investors power to exercise control. Thus, a careful examination of the VIE's governing documents, contractual arrangements among parties involved, and who bears the risk is necessary to determine whether a reporting entity possesses control over a VIE.

The magnitude of the effect of consolidating an enterprise's VIEs can be large. For example, Walt Disney Company consolidates its international theme parks as variable interest entities. In its 2015 annual report, Disney states the following:

The Company enters into relationships or investments with other entities that may be a variable interest entity (VIE). A VIE is consolidated in the financial statements if the Company has the power to direct activities that most significantly impact the economic performance of the VIE and has the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE (as defined by ASC 810-10-25-38). Disneyland Paris, HKDL and Shanghai Disney Resort (collectively the International Theme Parks) are VIEs.

As a result of the 2015 consolidation of these VIEs, Disney's total assets increased by \$3.98 billion while its total debt increased by \$955 million.

### ***Example of a Primary Beneficiary and Consolidated Variable Interest Entity***

Assume that Twin Peaks Electric Company seeks to acquire a generating plant for a negotiated price of \$400 million from Ace Electric Company. Twin Peaks wishes to expand its market share and expects to be able to sell the electricity generated by the plant acquisition at a profit to its owners.

In reviewing financing alternatives, Twin Peaks observed that its general credit rating allowed for a 4 percent annual interest rate on a debt issue. Twin Peaks also explored the establishment of a separate legal entity whose sole purpose would be to own the electric generating plant and lease it back to Twin Peaks. Because the separate entity would isolate the electric generating plant from Twin Peaks's other risky assets and liabilities and provide specific collateral, an interest rate of 3 percent on the debt is available, producing before-tax savings of \$4 million per year. To obtain the lower interest rate, however, Twin Peaks must guarantee the separate entity's debt. Twin Peaks must also maintain certain of its own pre-defined financial ratios and restrict the amount of additional debt it can assume.

To take advantage of the lower interest rate, on January 1, 2017, Twin Peaks establishes Power Finance Co., an entity designed solely to own, finance, and lease the electric generating plant to Twin Peaks.<sup>5</sup> The documents governing the new entity specify the following:

- The sole purpose of Power Finance is to purchase the Ace electric generating plant, provide equity and debt financing, and lease the plant to Twin Peaks.
- An outside investor will provide \$16 million in exchange for a 100 percent nonvoting equity interest in Power Finance.
- Power Finance will issue debt in exchange for \$384 million. Because the \$16 million equity investment by itself is insufficient to attract low-interest debt financing, Twin Peaks will guarantee the debt.

<sup>5</sup> This arrangement is similar to a "synthetic lease" commonly used in utility companies. Synthetic leases also can have tax advantages because the sponsoring firm accounts for them as capital leases for tax purposes.



- Twin Peaks will lease the electric generating plant from Power Finance in exchange for payments of \$12 million per year based on a 3 percent fixed interest rate for both the debt and equity investors for an initial lease term of five years.
- At the end of the 5-year lease term (or any extension), Twin Peaks must do one of the following:
  - Renew the lease for five years subject to the approval of the equity investor.
  - Purchase the electric generating plant for \$400 million.
  - Sell the electric generating plant to an independent third party. If the proceeds of the sale are insufficient to repay the equity investor, Twin Peaks must make a payment of \$16 million to the equity investor.

Once the purchase of the electric generating plant is complete and the equity and debt are issued, Power Finance Company reports the following balance sheet:

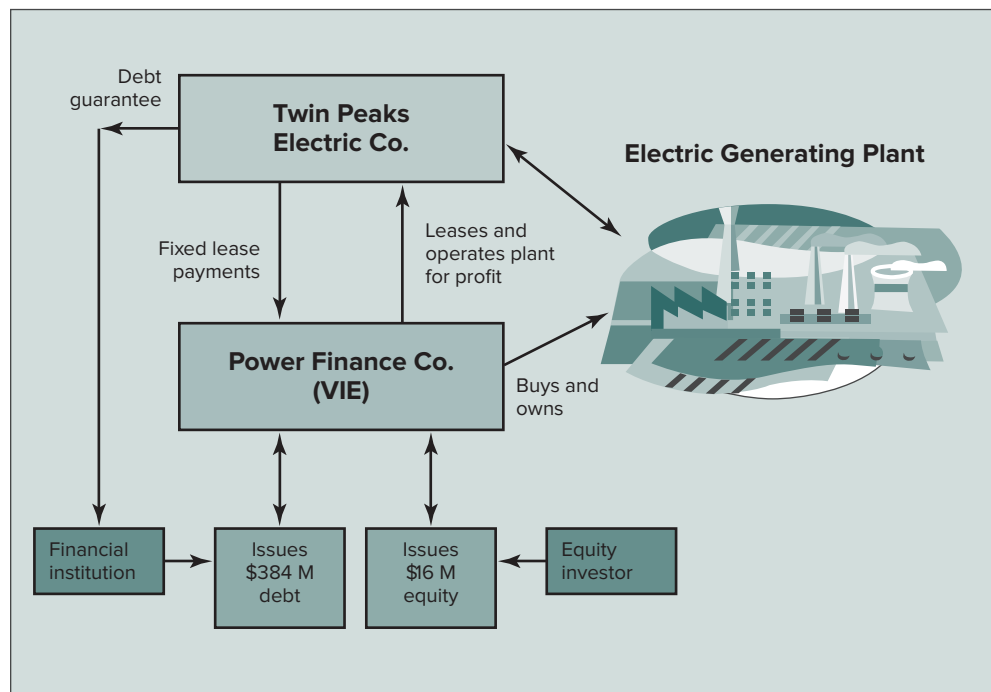
POWER FINANCE COMPANY			
Balance Sheet			
January 1, 2017			
Electric Generating Plant . . . . .	\$400M	Long-Term Debt . . . . .	\$384M
		Owners' Equity . . . . .	16M
Total Assets . . . . .	<u>\$400M</u>	Total Liabilities and OE . . . . .	<u>\$400M</u>

Exhibit 6.2 shows the relationships between Twin Peaks, Power Finance, the electric generating plant, and the parties financing the asset purchase.

In evaluating whether Twin Peaks Electric Company must consolidate Power Finance Company, two conditions must be met. First, Power Finance must qualify as a VIE by either (1) an inability to secure financing without additional subordinated support or (2) a lack of either the risk of losses or entitlement to residual returns (or both). Second, Twin Peaks must qualify as the primary beneficiary of Power Finance.

In assessing the first condition, several factors point to VIE status for Power Finance. Its owners' equity comprises only 4 percent of total assets, far short of the 10 percent benchmark. Moreover, Twin Peaks guarantees Power Finance's debt, suggesting insufficient equity to finance its operations without additional support. Finally, the equity investor appears to bear

**EXHIBIT 6.2**  
Variable Interest Entity to Facilitate Financing



almost no risk with respect to the operations of the Ace electric plant. These characteristics indicate that Power Finance qualifies as a VIE.

In evaluating the second condition for consolidation, an assessment is made to determine whether Twin Peaks qualifies as Power Finance's primary beneficiary. Clearly, Twin Peaks has the power to direct Power Finance's activities. But to qualify for consolidation, Twin Peaks must also have the obligation to absorb losses or the right to receive returns from Power Finance—either of which could potentially be significant to Power Finance. But what possible losses or returns would accrue to Twin Peaks? What are Twin Peaks's variable interests that rise and fall with the fortunes of Power Finance?

As stated in the VIE agreement, Twin Peaks will pay a fixed fee to lease the electric generating plant. It will then operate the plant and sell the electric power in its markets. If the business plan is successful, Twin Peaks will enjoy residual profits from operating while Power Finance's equity investors receive the fixed fee. On the other hand, if prices for electricity fall, Twin Peaks may generate revenues insufficient to cover its lease payments while Power Finance's equity investors are protected from this risk. Moreover, if the plant's fair value increases significantly, Twin Peaks can exercise its option to purchase the plant at a fixed price and either resell it or keep it for its own future use. Alternatively, if Twin Peaks were to sell the plant at a loss, it must pay the equity investors all of their initial investment, furthering the loss to Twin Peaks. Each of these elements points to Twin Peaks as the primary beneficiary of its VIE through variable interests. As the primary beneficiary, Twin Peaks must consolidate the assets, liabilities, and results of operations of Power Finance with its own.

### Procedures to Consolidate Variable Interest Entities

As Power Finance's balance sheet exemplifies, VIEs typically possess only a few assets and liabilities. Also, their business activities usually are strictly limited. Thus, the actual procedures to consolidate VIEs are relatively uncomplicated.

#### *Initial Measurement Issues*

Just as in business combinations accomplished through voting interests, the financial reporting principles for consolidating variable interest entities require asset, liability, and noncontrolling interest valuations. These valuations initially, and with few exceptions, are based on fair values.

Recall that the acquisition method requires an allocation of the acquired business fair value based on the underlying fair values of its assets and liabilities. The fair-value principle applies to consolidating VIEs in the same manner as business combinations accomplished through voting interests. If the total business fair value of the VIE exceeds the collective fair values of its net assets, goodwill is recognized.<sup>6</sup> Conversely, if the collective fair values of the net assets exceed the total business fair value, then the primary beneficiary recognizes a gain on bargain purchase.

In the previous example, assuming that the debt and noncontrolling interests are stated at fair values, Twin Peaks simply includes in its consolidated balance sheet the Electric Generating Plant at \$400 million, the Long-Term Debt at \$384 million, and a noncontrolling interest of \$16 million.

#### *Consolidation of VIEs Subsequent to Initial Measurement*

After the initial measurement, consolidations of VIEs with their primary beneficiaries should follow the same process as if the entity were consolidated based on voting interests. Importantly, all intra-entity transactions between the primary beneficiary and the VIE (including fees, expenses, other sources of income or loss, and intra-entity inventory purchases) must be eliminated in consolidation. Finally, the VIE's income must be allocated among the parties involved (i.e., equity holders and the primary beneficiary). For a VIE, contractual arrangements, as opposed to ownership percentages, typically specify the distribution of its income.

<sup>6</sup> The FASB ASC Glossary defines a business as an integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing a return in the form of dividends, lower costs, or other economic benefits directly to investors or other owners, members, or participants. Alternatively, if the activities of the VIE are so restricted that it does not qualify as a business, the excess fair value is recognized as an acquisition loss, as opposed to goodwill.

**LO 6-2**

Demonstrate the process to consolidate a primary beneficiary with a variable interest entity.

Therefore, a close examination of these contractual arrangements is needed to determine the appropriate allocation of VIE income to its equity owners and those holding variable interests.

### Consolidation of a Primary Beneficiary and VIE Illustrated

The next example considers (1) the issues that arise when a primary beneficiary obtains control through variable interests of an existing business, and (2) financial reporting for a VIE in periods subsequent to obtaining control.

Assume that on January 1, 2018, Prescott Corporation provides a \$2,200,000 loan to Valente, Inc., a business entity. The loan is due on January 1, 2023. Until receiving the loan from Prescott, Valente had been unable to secure from the debt market the financing needed to continue its operations.

As part of the loan agreement, Valente agrees to provide the following to Prescott during the next five years:

- 5 percent annual interest (market rate) on the loan from Prescott.
- Decision-making power over Valente's operating and financing activities.
- 100 percent participation rights to all of Valente's profits less a \$7,000 guaranteed annual dividend to Valente's common shareholders.

At the end of the five-year agreement Prescott has the option of either acquiring ownership of Valente, Inc., for \$500,000 or extending the original agreement for an additional five years.

As a result of the agreement, Valente is a variable interest entity and Prescott is its primary beneficiary. Upon consummation of the variable interest agreement, Prescott's and Valente's balance sheets appears below:

January 1, 2018	Prescott	Valente
Cash . . . . .	\$ 85,000	\$ 2,308,000
Accounts receivable . . . . .	133,000	145,000
Loan receivable from Valente . . . . .	2,200,000	–0–
Patented technology . . . . .	–0–	9,000
Equipment (net) . . . . .	2,458,000	900,000
Total assets . . . . .	\$ 4,876,000	\$ 3,362,000
Accounts payable . . . . .	\$ (408,000)	\$(1,144,000)
Long-term debt . . . . .	(954,000)	(2,200,000)
Common stock . . . . .	(2,500,000)	(10,000)
Retained earnings, 1/1/18 . . . . .	(1,014,000)	(8,000)
Total liabilities and equity . . . . .	\$(4,876,000)	\$(3,362,000)

At January 1, 2018, Prescott estimated the fair value of Valente's common stock at \$143,000. The \$125,000 difference between the fair value of the common stock and Valente's book value (\$143,000 - \$18,000) was attributed entirely to the patented technology with a five-year estimated remaining life.

Exhibit 6.3 shows the consolidation worksheet for Prescott (the primary beneficiary) and Valente (the variable interest entity) at January 1, 2018, the date Prescott obtained financial control over Valente.

Observe that in Exhibit 6.3

- Consolidation Entry **S** eliminates the VIE's owners' equity account balances and recognizes the 100 percent equity ownership as a noncontrolling interest.
- Consolidation Entry **P** eliminates the intra-entity Long-Term Debt and Loan Receivable from Valente.
- Consolidation Entry **A** allocates the excess fair over book value to Patented Technology with a corresponding increase in the noncontrolling interest.
- The noncontrolling interest appears in the consolidated balance sheet at its acquisition-date fair value of \$143,000.

**EXHIBIT 6.3 Acquisition-Date Consolidation Worksheet—Primary Beneficiary and VIE**

<b>PRESCOTT AND VALENTE COMPANY</b>						
<b>Consolidation Worksheet</b>						
<b>At January 1, 2018</b>						
<b>Balance Sheet</b>	<b>Prescott</b>	<b>Valente</b>	<b>Consolidation Entries</b>		<b>Noncontrolling Interest</b>	<b>Consolidated Balance Sheet</b>
Cash	85,000	2,308,000				2,393,000
Accounts receivable	133,000	145,000				278,000
Loan receivable from Valente	2,200,000			(P)2,200,000		—0—
Patented technology		9,000	(A) 125,000			134,000
Equipment (net)	2,458,000	900,000				3,358,000
<b>Total assets</b>	<b>4,876,000</b>	<b>3,362,000</b>				<b>6,163,000</b>
Accounts payable	(408,000)	(1,144,000)				(1,552,000)
Long-term debt	(954,000)	(2,200,000)	(P)2,200,000			(954,000)
Common stock—Prescott	(2,500,000)					(2,500,000)
Common stock—Valente		(10,000)	(S) 10,000			
Retained earnings—Prescott	(1,014,000)					(1,014,000)
Retained earnings—Valente		(8,000)	(S) 8,000			
Noncontrolling interest				(S) 18,000		
				(A) 125,000	(143,000)	(143,000)
<b>Total liabilities and equity</b>	<b>(4,876,000)</b>	<b>(3,362,000)</b>	<b>2,343,000</b>	<b>2,343,000</b>		<b>(6,163,000)</b>

***Consolidation of VIEs Subsequent to Initial Measurement***

Following the first year of operations, Exhibit 6.4 shows the consolidation worksheet for December 31, 2018, at the end of the first year in which Prescott obtained control of the variable interest entity. At the end of the year, Valente paid the guaranteed \$7,000 dividend to its equity holders.

The following worksheet entries, as seen in Exhibit 6.4, are used to consolidate the financial statements of Prescott Corporation and its VIE, Valente, as of December 31, 2018:

**Consolidation Entry S**

Retained earnings—Valente 1/1/18 .....	8,000	
Common stock—Valente .....	10,000	
Noncontrolling interest .....		18,000
To eliminate the beginning stockholders' equity of the VIE and recognize the 100 percent equity ownership of the noncontrolling interest.		

**Consolidation Entry P**

Long-term debt .....	2,200,000	
Loan receivable from Valente .....		2,200,000
To eliminate the long-term receivable and debt representing Prescott's initial investment in Valente.		

**Consolidation Entry IE**

Interest income .....	110,000	
Interest expense .....		110,000
To eliminate the intra-entity interest related to the loan from Prescott to Valente.		

<b>Consolidation Entry A</b>			
Patented technology	.....	125,000	
Noncontrolling interest	.....		125,000
To allocate the excess fair value to patented technology and credit the noncontrolling interest as part of their fair valuation as of the date Prescott obtained control.			

<b>Consolidation Entry E</b>			
Other operating expenses	.....	25,000	
Patented technology	.....		25,000
To amortize the excess fair value allocation to unpatented technology over its five-year remaining life.			

**EXHIBIT 6.4 Consolidation Worksheet for Primary Beneficiary and VIE (Post-Control)**

<b>PRESCOTT AND VALENTE COMPANY</b>							
<b>Consolidation Worksheet</b>							
<b>For the year ended, December 31, 2018</b>							
<b>Income Statement</b>	<b>Prescott</b>	<b>Valente</b>	<b>Consolidation Entries</b>		<b>Noncontrolling Interest</b>	<b>Consolidated</b>	
Sales	(623,000)	(400,000)				(1,023,000)	
Cost of goods sold	230,000	190,000				420,000	
Other operating expenses	155,000	55,000	(E)	25,000		235,000	
Interest income	(110,000)		(IE)	110,000		—0—	
Interest expense		110,000		(IE)	110,000	—0—	
Net income	<u>(348,000)</u>	<u>(45,000)</u>					
Consolidated net income to noncontrolling interest					(7,000)	(368,000)	
to controlling interest						<u>7,000</u>	
						<u>(361,000)</u>	
<b>Statement of Retained Earnings</b>							
Retained earnings, 1/1	(1,014,000)	(8,000)	(S)	8,000		(1,014,000)	
Net income	(348,000)	(45,000)				(361,000)	
Dividends declared	50,000	7,000			7,000	50,000	
Retained earnings, 12/31	<u>(1,312,000)</u>	<u>(46,000)</u>				<u>(1,325,000)</u>	
<b>Balance Sheet</b>							
Cash	214,000	131,800				345,800	
Accounts receivable	258,000	181,000				439,000	
Loan receivable from Valente	2,200,000			(P)	2,200,000	—0—	
Patented technology		7,200	(A)	125,000	(E)	25,000	107,200
Equipment (net)	<u>2,328,000</u>	<u>2,050,000</u>				<u>4,378,000</u>	
Total assets	<u>5,000,000</u>	<u>2,370,000</u>				<u>5,270,000</u>	
Accounts payable	(434,000)	(114,000)				(548,000)	
Long-term debt	(754,000)	(2,200,000)	(P)	2,200,000		(754,000)	
Common stock	(2,500,000)	(10,000)	(S)	10,000		(2,500,000)	
Retained earnings, 12/31	(1,312,000)	(46,000)				(1,325,000)	
				(A)	125,000		
				(S)	18,000	(143,000)	
Noncontrolling interest					(143,000)	(143,000)	
Total liabilities and equities	<u>(5,000,000)</u>	<u>(2,370,000)</u>	2,478,000	2,478,000		<u>(5,270,000)</u>	

In Exhibit 6.4, we observe that the noncontrolling interest (NCI) column for a VIE differs from a consolidation resulting from voting interest control. For a VIE, contractual arrangements, as opposed to ownership percentages, typically specify the distribution of its income. In Exhibit 6.4, the only income allocation to the NCI is the \$7,000 annual dividend guaranteed through the variable interest arrangement. Because of its profit participation rights, Prescott simply receives the remainder of the consolidated net income beyond the \$7,000 provided to Valente's equity holders, i.e., the NCI of the consolidated entity.

Also note that the NCI amount recognized after one year did not change from the consolidated balance sheet as of the date control was obtained. The NCI did not change because its entire fixed income share was distributed to the equity holders as a dividend.

Overall, as shown by Exhibit 6.4, consolidation of a VIE with its primary beneficiary follows a similar process as if the entity were consolidated based on voting interests. Importantly, all intra-entity transactions between the primary beneficiary and the VIE (including fees, expenses, other sources of income or loss, and intra-entity transfers) must be eliminated in consolidation. Because VIEs typically have noncontrolling interests, an appropriate allocation of the VIE's net income requires a close examination of the underlying contractual arrangements between the primary beneficiary and other holders of variable interests.

### ***Other Variable Interest Entity Disclosure Requirements***

VIE disclosure requirements are designed to provide users of financial statements with more transparent information about an enterprise's involvement in a VIE. The enhanced disclosures are required for any enterprise that holds a variable interest in a VIE.

Included among the enhanced disclosures are requirements to show:

- The VIE's nature, purpose, size, and activities.
- The significant judgments and assumptions made by an enterprise in determining whether it must consolidate a VIE and/or disclose information about its involvement in a VIE.
- The nature of restrictions on a consolidated VIE's assets and on the settlement of its liabilities reported by an enterprise in its statement of financial position, including the carrying amounts of such assets and liabilities.
- The nature of, and changes in, the risks associated with an enterprise's involvement with the VIE.
- How an enterprise's involvement with the VIE affects the enterprise's financial position, financial performance, and cash flows.

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## **Comparisons with International Accounting Standards**

Under both U.S. GAAP and IFRS, a controlling financial interest is the critical concept in assessing whether an entity should be consolidated by a reporting enterprise. Nonetheless, the FASB and IASB so far have employed different criteria to determine the existence of control. IFRS employs a single consolidation model for all entities regardless of whether control is evidenced by voting interests or variable interests. In contrast, U.S. GAAP employs separate models for assessing control for variable interest entities and voting interest entities. As a result, current reporting standards differ across jurisdictions for enterprises seeking to determine whether to consolidate another entity. While the FASB continues its deliberations on consolidation policies and procedures, the IASB has issued two updated standards in this area.

The International Accounting Standards Board *IFRS 10*, "Consolidated Financial Statements" and *IFRS 12*, "Disclosure of Interests in Other Entities" cover situations where financial control exists either through a majority voting share or other means. These standards define control to encompass all possible ways (voting power, contractual power, decision-making rights, etc.) in which one entity can exercise power over another. In particular, the criteria for assessing control are

- Power over an investee—does the reporting entity have the current ability to direct activities that significantly affect another entity's returns?

- Exposure to, or rights to, variable returns from involvement with another entity
- Linkage between power and returns—does the investor have the ability to affect its returns through its power?

These criteria recognize one entity can control another through its power to direct its operating and financing activities. For example, even with less than majority ownership, voting interests can provide an enterprise control if the nonowned shares are diffusely held and lack arrangements to act in a coordinated manner. Control can also be achieved through obtaining decision-making rights that relate to the relevant activities of an investee. Importantly, such decision-making rights can extend beyond merely voting rights. By establishing a broad concept of control as opposed to a bright line rule (e.g., consolidate if an entity has majority voting rights or the majority of risks and rewards), the IASB seeks to avoid standards that create structuring opportunities to achieve a particular accounting outcome.<sup>7</sup>

*IFRS 12* provides for enhanced disclosures about the relationship between a parent and the entities it controls. These disclosures focus on helping investors understand first why a parent controls (or does not control) another entity and the claims of the noncontrolling interest. Second, the disclosures are designed to help investors evaluate the risks assumed by the parent.<sup>8</sup>

### LO 6-3

Demonstrate the consolidation procedures to eliminate all intra-entity debt accounts and recognize any associated gain or loss created whenever one company acquires an affiliate's debt instrument from an outside party.

## Intra-Entity Debt Transactions

The previous chapter explored the consolidation procedures required by the intra-entity transfer of inventory, land, and depreciable assets. In preparing consolidated financial statements, all resulting gains were deferred until either the asset was sold to an outside party or consumed through use. Deferral was necessary because these gains, although legitimately recognized by the individual companies, were based on activities of the consolidated entity with itself. The separate financial information of each company was adjusted on the worksheet to be consistent with treating the related companies as a single economic concern.

This same objective applies in consolidating all other intra-entity activities: The financial statements must represent the business combination as one enterprise rather than as a group of independent organizations. Consequently, in designing consolidation procedures for intra-entity transactions, we first isolate the effects recorded by the individual companies. After analyzing the impact of each action, worksheet entries recast these events from the vantage point of the business combination. Although this process involves a number of nuances and complexities, the desire for reporting financial information solely from the perspective of the consolidated entity remains constant.

We introduced the intra-entity sales of inventory, land, and depreciable assets together (in Chapter 5) because these transfers result in similar consolidation procedures. In each case, one of the affiliated companies recognizes a gain prior to the time the consolidated entity is entitled to recognize it. The worksheet entries required by these transactions simply realign the separate financial information to agree with the viewpoint of the business combination. The gain is removed and the inflated asset value is reduced to historical cost.

The next section of this chapter examines the intra-entity acquisition of bonds and notes. Although accounting for the related companies as a single economic entity continues to be the central goal, the consolidation procedures applied to intra-entity debt transactions stand in marked contrast to the process utilized in Chapter 5 for asset transfers.

Before delving into this topic, note that *direct* loans used to transfer funds between affiliated companies create no unique consolidation problems. Regardless of whether bonds or notes generate such amounts, the resulting receivable/payable balances are necessarily identical. Because no money is owed to or from an outside party, these reciprocal accounts must

<sup>7</sup>Patrick Finnegan, Board Member of the IASB. "At Long-Last—A Single Model for Consolidation," IFRS Foundation, May 2011 perspectives.

<sup>8</sup>Ibid.

be eliminated in each subsequent consolidation. A worksheet entry simply offsets the two corresponding balances. Furthermore, the interest revenue/expense accounts associated with direct loans also agree and are removed in the same fashion.

### Acquisition of Affiliate's Debt from an Outside Party

*The difficulties encountered in consolidating intra-entity liabilities relate to a specific type of transaction: the purchase of an affiliate's debt instrument from an outside third party.* For example, a subsidiary may have issued bonds in the past that continue to be traded in the open market. If the parent then purchases all or a portion of these outstanding subsidiary bonds in the open market, from a consolidated view, the combined entity (parent and subsidiary) has reacquired its own bonds. Nonetheless, because the companies maintain independent accounting systems, the parent records an Investment in Bonds account as well as periodic interest income. The subsidiary shows the bonds as still outstanding and records periodic interest expense.

Although the individual companies continue to carry both the debt and the investment on their individual financial records, *from a consolidation viewpoint this liability is effectively retired as of the debt reacquisition date.* From that date forward, the debt is no longer owed to a party outside the business combination. Subsequent interest payments are simply intra-entity cash transfers. To create consolidated statements, worksheet entries must be developed to adjust the various balances to report the debt's effective retirement.

Acquiring an affiliate's bond or note from an unrelated party poses no significant consolidation problems if the purchase price equals the corresponding carrying amount of the liability. Reciprocal balances within the individual records would always be identical in value and easily offset in each subsequent consolidation.

Realistically, though, such reciprocity rarely occurs when a debt instrument is purchased from a third party. A variety of economic factors typically produce a difference between the price paid for the investment and the carrying amount of the obligation. The debt is originally sold under market conditions at a particular time. Any premium or discount associated with this issuance is then amortized over the life of the bond, creating a continuous adjustment to its carrying amount. The acquisition of this instrument at a later date is made at a price influenced by current economic conditions, prevailing interest rates, and myriad other financial and market factors.

Therefore, the cost paid to purchase the debt could be either more or less than the carrying amount of the liability currently found within the issuing company's financial records. *To the business combination, this difference is a gain or loss because the acquisition effectively retires the bond; the debt is no longer owed to an outside party.* For external reporting purposes, this gain or loss must be recognized immediately by the consolidated entity.

### Accounting for Intra-Entity Debt Transactions—Individual Financial Records

The following accounting problems emerge in consolidating intra-entity debt transactions:

1. Intra-entity investments in debt securities and related debt accounts must be eliminated in consolidation despite their differing balances.
2. Intra-entity interest revenue/expense (as well as any interest receivable/payable accounts) must be removed although these balances also fail to agree in amount.
3. The amortization process for discounts and premiums causes continual changes in each of the preceding accounts.
4. The business combination must recognize the gain or loss on the effective retirement of the debt, even though it is not recognized within the financial records of either company.

To illustrate, assume that Alpha Company possesses an 80 percent interest in the outstanding voting stock of Omega Company. On January 1, 2015, Omega issued \$1 million in 10-year bonds paying cash interest of 9 percent annually. Because of market conditions prevailing on that date, Omega sold the debt for \$938,555 to yield an effective interest rate of 10 percent per



year. Shortly thereafter, the interest rate began to fall, and by January 1, 2017, Omega made the decision to retire this debt prematurely and refinance it at a currently lower rate. To carry out this plan, Alpha purchased all of these bonds in the open market on January 1, 2017, for \$1,057,466. This price was based on an effective yield of 8 percent, which is assumed to be in line with the interest rates at the time.

Many reasons could exist for having Alpha, rather than Omega, reacquire this debt. For example, company cash levels at that date could necessitate Alpha's role as the purchasing agent. Also, contractual limitations could prohibit Omega from repurchasing its own bonds.

In accounting for this business combination, Omega Company's bonds have been effectively retired. Thus, the difference between the \$1,057,466 payment and the January 1, 2017, carrying amount of the liability must be recognized in the consolidated statements as a gain or loss. The carrying amount for the debt on that date depends on the amortization process. Exhibit 6.5 shows the bond amortization schedule for January 1, 2015, through December 31, 2018.<sup>9</sup>

As seen in Exhibit 6.5, the carrying amount of Omega Company's bonds has increased to \$946,651 as of December 31, 2016, the date immediately before the day that Alpha Company acquired the bonds.

Because Alpha paid \$110,815 in excess of the recorded liability (\$1,057,466 – \$946,651), the consolidated entity must recognize a loss of this amount. After the loss has been acknowledged, the bond is considered to be retired and no further reporting is necessary by the *business combination* after January 1, 2017.

Despite the simplicity of this approach for consolidation, neither company separately accounts for the event in this manner. Omega retains the \$1 million debt balance within its separate financial records and amortizes the remaining discount each year. Annual cash interest payments of \$90,000 (9 percent) continue to be made. At the same time, Alpha records the investment at the historical cost of \$1,057,466, an amount that also requires periodic amortization. Furthermore, as the owner of these bonds, Alpha receives the \$90,000 interest payments made by Omega.

To organize the accountant's approach to this consolidation, we analyze the subsequent financial records for each company. Omega records only two journal entries during 2017 assuming that interest is paid each December 31:

Omega Company's Financial Records		
12/31/17	Interest Expense . . . . .	90,000
	Cash . . . . .	90,000
	To record payment of annual cash interest on \$1 million, 9 percent bonds payable.	
12/31/17	Interest Expense . . . . .	4,665
	Discount on Bonds Payable . . . . .	4,665
	To adjust interest expense to effective rate based on original yield rate of 10 percent (\$946,651 carrying amount for 2017 × 10% = \$94,665). Carrying amount increases to \$951,316.	

**EXHIBIT 6.5**  
**Omega Company Bond**  
**Issue Amortization**  
**Schedule**

Date	Face Value	Unamortized Discount	Carrying Amount	Effective Interest	Cash Interest	Discount Amortized
1/1/15	\$1,000,000	\$61,445	\$938,555			
12/31/15	1,000,000	57,590	942,410	\$93,855	\$90,000	\$3,855
12/31/16	1,000,000	53,349	946,651	94,241	90,000	4,241
12/31/17	1,000,000	48,684	951,316	94,665	90,000	4,665
12/31/18	1,000,000	43,552	956,448	95,132	90,000	5,132

<sup>9</sup> The effective rate method of amortization is demonstrated here because this approach is theoretically preferable. However, the straight-line method can be applied if the resulting balances are not materially different from the figures computed using the effective rate method.

Concurrently, Alpha journalizes entries to record its ownership of this investment:

Alpha Company's Financial Records		
1/1/17	Investment in Omega Company Bonds .....	1,057,466
	Cash .....	1,057,466
	To record acquisition of \$1,000,000 in Omega Company bonds paying 9 percent cash interest, acquired to yield an effective rate of 8 percent.	
12/31/17	Cash .....	90,000
	Interest Income .....	90,000
	To record receipt of cash interest from Omega Company bonds (\$1,000,000 × 9%).	
12/31/17	Interest Income .....	5,403
	Investment in Omega Company Bonds .....	5,403
	To reduce \$90,000 interest income to effective rate based on original yield rate of 8 percent (\$1,057,466 carrying amount for 2017 × 8% = \$84,597). Carrying amount decreases to \$1,052,063.	

Even a brief review of these entries indicates that the reciprocal accounts to be eliminated within the consolidation process do not agree in amount. You can see the dollar amounts appearing in each set of financial records in Exhibit 6.6. Despite the presence of these recorded balances, none of the four intra-entity accounts (the bond liability, investment, interest expense, and interest revenue) appear in the consolidated financial statements. *The only figure that the business combination reports is the \$110,815 loss created by the effective extinguishment of this debt.*

### Effects on Consolidation Process

As previous discussions indicated, consolidation procedures convert information generated by the individual accounting systems to the perspective of a single economic entity. A worksheet entry is therefore required on December 31, 2017, to eliminate the intra-entity balances shown in Exhibit 6.6 and to recognize the loss resulting from the effective retirement. Mechanically, the differences in the liability and investment balances as well as the interest expense and interest income accounts stem from the \$110,815 difference between the purchase price of the investment and the carrying amount of the liability. Recognition of this loss, in effect, bridges the gap between the divergent figures.

Consolidation Entry B (December 31, 2017)		
Bonds Payable .....	1,000,000	
Interest Income .....	84,597	
Loss on Retirement of Bonds .....	110,815	
Discount on Bond Payable .....		48,684
Investment in Omega Company Bonds		1,052,063
Interest Expense .....		94,665
To eliminate intra-entity bonds and related interest accounts and to recognize loss on effective retirement. (Labeled "B" in reference to bonds.)		

The preceding entry successfully transforms the separate financial reporting of Alpha and Omega to that appropriate for the business combination. The objective of the consolidation process has been met: The statements present the bonds as having been retired on January 1, 2017. The debt and the corresponding investment are eliminated along with both interest accounts. Only the loss now appears on the worksheet to be reported within the consolidated financial statements.

## EXHIBIT 6.6

<b>ALPHA COMPANY AND OMEGA COMPANY</b> <b>Effects of Intra-Entity Debt Transaction 2017</b>		
	<b>Omega Company Reported Debt</b>	<b>Alpha Company Investment</b>
2017 interest expense* . . . . .	\$ 94,665	\$ –0–
2017 interest income† . . . . .	–0–	(84,597)
Bonds payable . . . . .	(1,000,000)	–0–
Discount on bonds payable* . . . . .	48,684	–0–
Investment in bonds, 12/31/17† . . . . .	–0–	1,052,063
Loss on retirement . . . . .	–0–	–0–

Note: Parentheses indicate a credit balance.

\*Company total is adjusted for 2017 amortization of \$4,665 (see journal entry).

†Adjusted for 2017 amortization of \$5,403 (see journal entry).

### Assignment of Retirement Gain or Loss

An issue in accounting for intra-entity debt repurchases concerns the assignment of any retirement gains or losses. Should the \$110,815 loss just reported be attributed to Alpha or to Omega? From a practical perspective, this assignment affects only the consolidated net income allocation to the controlling and noncontrolling interests. In the absence of FASB guidance on the assignment of retirement gain or loss, all income effects in this textbook relating to intra-entity debt transactions are assigned solely to the parent company. Such treatment is consistent with the perspective that the parent company ultimately controls the repurchase decision.

### Intra-Entity Debt Transactions—Years Subsequent to Effective Retirement

Even though the preceding Entry **B** correctly eliminates Omega's bonds in the year of retirement for consolidation purposes, the debt remains within the financial accounts of both companies until maturity. Therefore, in each succeeding time period, all balances must again be consolidated so that the liability is always reported as having been extinguished on January 1, 2017. Unfortunately, a simple repetition of Entry **B** is not possible. Developing the appropriate worksheet entry is complicated by the amortization process that produces continual change in the various account balances. Thus, as a preliminary step in each subsequent consolidation, current carrying amounts, as reported by the two parties, must be identified.

To illustrate, the 2018 journal entries for Alpha and Omega follow. Exhibit 6.7 shows the resulting account balances as of the end of that year.

## EXHIBIT 6.7

<b>ALPHA COMPANY AND OMEGA COMPANY</b> <b>Effects of Intra-Entity Debt Transactions 2018</b>		
	<b>Omega Company Reported Debt</b>	<b>Alpha Company Investment</b>
2018 interest expense* . . . . .	\$ 95,132	\$ –0–
2018 interest income† . . . . .	–0–	(84,165)
Bonds payable . . . . .	(1,000,000)	–0–
Discount on bonds payable* . . . . .	43,552	–0–
Investment in bonds, 12/31/18† . . . . .	–0–	1,046,228
Income effect within retained earnings, 1/1/18‡ . . . . .	94,665	(84,597)

Note: Parentheses indicate a credit balance.

\*Company total is adjusted for 2018 amortization of \$5,132 (see journal entry).

†Adjusted for 2018 amortization of \$5,835 (see journal entry).

‡The balance shown for the Retained Earnings account of each company represents the 2017 reported interest figures.



## Discussion Question

### WHO LOST THIS \$300,000?

Several years ago, Penston Company purchased 90 percent of the outstanding shares of Swansan Corporation. Penston made the acquisition because Swansan produced a vital component used in Penston's manufacturing process. Penston wanted to ensure an adequate supply of this item at a reasonable price. The former owner, James Swansan, retained the remaining 10 percent of Swansan's stock and agreed to continue managing this organization. He was given responsibility for the subsidiary's daily manufacturing operations but not for any financial decisions.

Swansan's takeover has proven to be a successful undertaking for Penston. The subsidiary has managed to supply all of the parent's inventory needs and distribute a variety of items to outside customers.

At a recent meeting, Penston's president and the company's chief financial officer began discussing Swansan's debt position. The subsidiary had a debt-to-equity ratio that seemed unreasonably high considering the significant amount of cash flows being generated by both companies. Payment of the interest expense, especially on the subsidiary's outstanding bonds, was a major cost, one that the corporate officials hoped to reduce. However, the bond indenture specified that Swansan could retire this debt prior to maturity only by paying 107 percent of face value.

This premium was considered prohibitive. Thus, to avoid contractual problems, Penston acquired a large portion of Swansan's liability in the open market for 101 percent of face value. Penston's purchase created an effective loss of \$300,000 on the debt, the excess of the price over the carrying amount of the debt, as reported on Swansan's books.

Company accountants currently are computing the noncontrolling interest's share of consolidated net income to be reported for the current year. They are unsure about the impact of this \$300,000 loss. The subsidiary's debt was retired, but officials of the parent company made the decision. Who lost this \$300,000?

#### Omega Company's Financial Records—December 31, 2018

Interest Expense	90,000	
Cash		90,000
To record payment of annual cash interest on \$1 million, 9 percent bonds payable.		
Interest Expense	5,132	
Discount on Bonds Payable		5,132
To adjust interest expense to effective rate based on an original yield rate of 10 percent (\$951,316 carrying amount for 2018 $\times$ 10% = \$95,132). Carrying amount increases to \$956,448.		

#### Alpha Company's Financial Records—December 31, 2018

Cash	90,000	
Interest Income		90,000
To record receipt of cash interest from Omega Company bonds.		
Interest Income	5,835	
Investment in Omega Company Bonds		5,835
To reduce \$90,000 interest income to effective rate based on an original yield rate of 8 percent (\$1,052,063 carrying amount for 2018 $\times$ 8% = \$84,165). Carrying amount decreases to \$1,046,228.		

After assembling the information in Exhibit 6.7, the necessary December 31, 2018, consolidation entry is prepared. We first assume that the parent applies either the initial value or the partial equity method to its Investment in Omega account. We then show this final consolidation entry assuming the parent applies the equity method.

### ***Parent Applies the Initial Value or Partial Equity Method***

To recognize the January 1, 2017, effective retirement on the December 31, 2018, consolidated financial statements, the individual affiliate's balances for the intra-entity bonds and interest income and expense must be removed. Because neither the initial value nor the partial equity method recognizes the retirement loss, the parent's retained earnings will fail to reflect the prior year effective retirement loss. However, retained earnings will reflect past interest income and expense to the extent of any discount or premium amortization.<sup>10</sup> A worksheet adjustment therefore reduces Alpha's January 1, 2018, retained earnings by \$110,815 to reflect the original loss net of the prior year's discount and premium amortizations.

#### **Consolidation Entry \*B, When Parent Uses the Initial Value or Partial Equity Method (December 31, 2018)**

Bonds Payable.....	1,000,000	
Interest Income.....	84,165	
Retained Earnings—Alpha.....	100,747	
Discount on Bond Payable.....		43,552
Investment in Omega Company Bonds.....		1,046,228
Interest Expense.....		95,132
To eliminate intra-entity bond and related interest accounts and to adjust Alpha's Retained Earnings from \$10,068 (currently recorded net debit balance) to \$110,815. (Labeled "B" in reference to prior year bond transaction.)		

Analysis of this latest consolidation entry should emphasize several important factors:

1. The individual account balances change during the present fiscal period so that the current consolidation entry differs from Entry **B**. These alterations are a result of the amortization process. To ensure the accuracy of the worksheet entry, the adjusted balances are isolated in Exhibit 6.7.
2. As indicated previously, all income effects arising from intra-entity debt transactions are assigned to the parent company. For this reason, the adjustment to beginning Retained Earnings in Entry **\*B** is attributed to Alpha, as is the \$10,967 increase in current income (\$95,132 interest expense elimination less the \$84,165 interest revenue elimination).<sup>11</sup> Consequently, the noncontrolling interest balances are not altered by Entry **\*B**.
3. The 2018 reduction to beginning Retained Earnings in Entry **\*B** (\$100,747) does not agree with the original \$110,815 retirement loss. The individual companies have recorded a net deficit balance of \$10,068 (the amount by which previous interest expense exceeds interest revenue) at the start of 2018. To achieve the proper consolidated total, an adjustment of only \$100,747 is required (\$110,815 – \$10,068).

Retained earnings balance—consolidation perspective		\$110,815
(loss on retirement of debt).....		
Individual retained earnings balances, 1/1/18:		
Omega Company (interest expense—2017).....	\$94,665	
Alpha Company (interest income—2017).....	(84,597)	10,068
Adjustment to consolidated retained earnings, 1/1/18....		<u>\$100,747</u>

Note: Parentheses indicate a credit balance

<sup>10</sup> If there is no discount or premium amortization, interest revenue will simply offset interest expense, leaving no net effect on retained earnings.

<sup>11</sup> Had the effects of the retirement been attributed solely to the original issuer of the bonds, the \$10,967 addition to current income would have been assigned to Omega (the subsidiary), thus creating a change in the noncontrolling interest computations.

The periodic amortization of both the bond payable discount and the premium on the investment impacts the interest expense and revenue recorded by the two companies. As this schedule shows, these two interest accounts do not offset exactly; a \$10,068 net residual amount remains in Retained Earnings after the first year. Because this balance continues to increase each year, the subsequent consolidation adjustments to record the loss decrease to \$100,747 in 2018 and constantly lesser thereafter. *Over the life of the bond, the amortization process gradually brings the totals in the individual Retained Earnings accounts into agreement with the consolidated balance.*

### Parent Applies the Equity Method

Entry \*B as shown is appropriate for consolidations in which the parent has applied either the initial value or the partial equity method. However, a deviation is required if the parent uses the equity method for internal reporting purposes. Properly applying the equity method ensures that the parent's income and, hence, its retained earnings are correctly stated prior to consolidation. Alpha would have already recognized the loss in accounting for this investment. Consequently, when the parent applies the equity method, no adjustment to Retained Earnings is needed. In this one case, the \$100,747 debit in Entry \*B is made to the Investment in Omega Company (instead of Retained Earnings) because the loss has become a component of that account.

#### Consolidation Entry \*B, When Parent Uses the Equity Method (December 31, 2018)

Bonds Payable.....	1,000,000	
Interest Income.....	84,165	
Investment in Omega.....	100,747	
Discount on Bond Payable.....		43,552
Investment in Omega Company Bonds.....		1,046,228
Interest Expense.....		95,132
To eliminate intra-entity bond and related interest accounts and to adjust the Investment in Omega from \$10,068 (currently recorded net debit balance) to \$110,815. (Labeled "*B" in reference to prior year bond transaction.)		

The Entry \*B debit to the Investment in Omega account then serves as part of the investment account elimination sequence.

#### LO 6-4

Understand that subsidiary preferred stock not owned by the parent is a component of the noncontrolling interest and is initially measured at acquisition-date fair value.

## Subsidiary Preferred Stock

Although both small and large corporations routinely issue preferred shares, their presence within a subsidiary's equity structure adds a new dimension to the consolidation process. What accounting should be made of a subsidiary's preferred stock and the parent's payments that are made to acquire these shares?

Recall that preferred shares, although typically nonvoting, possess other "preferences" over common shares such as a cumulative dividend preference or participation rights. Some preferred shares even offer limited voting rights. Regardless, preferred shares are part of the subsidiary's stockholders' equity and are treated as such in consolidated financial reports.

The existence of subsidiary preferred shares does little to complicate the consolidation process. The acquisition method measures all business acquisitions (whether 100 percent or less than 100 percent acquired) at their full fair values. In accounting for the acquisition of a subsidiary with preferred stock, the essential process of determining the acquisition-date business fair value of the subsidiary remains intact. Any preferred shares not owned by the parent simply become a component of the noncontrolling interest and are included in the subsidiary business fair-value calculation. The acquisition-date fair value for any subsidiary common and/or preferred shares owned by outsiders becomes the basis for the noncontrolling interest valuation in the parent's consolidated financial reports.

To illustrate, assume that on January 1, 2017, High Company acquires control over Low Company by purchasing 80 percent of its outstanding common stock and 60 percent of its non-voting, cumulative, preferred stock. Low owns land undervalued in its records by \$100,000, but all other assets and liabilities have fair values equal to their book values. High paid \$1 million for the common shares and \$62,400 for the preferred shares. On the acquisition date, the 20 percent noncontrolling interest in the common shares had a fair value of \$250,000 and the 40 percent preferred stock noncontrolling interest had a fair value of \$41,600.

Low's capital structure immediately prior to the acquisition is shown below:

Common stock, \$20 par value (20,000 shares outstanding) . . . . .	\$ 400,000
Preferred stock, 6% cumulative with a par value of \$100 (1,000 shares outstanding) . . . . .	100,000
Additional paid-in capital . . . . .	200,000
Retained earnings . . . . .	516,000
Total stockholders' equity (book value) . . . . .	<u>\$1,216,000</u>

Exhibit 6.8 shows High's calculation of the acquisition-date fair value of Low and the allocation of the difference between the fair and book values to land and goodwill.

As seen in Exhibit 6.8, the subsidiary's ownership structure (i.e., comprising both preferred and common shares) does not affect the fair-value principle for determining the basis for consolidating the subsidiary. Moreover, the acquisition method follows the same procedure for calculating business fair value regardless of the various preferences the preferred shares may possess. Any cumulative or participating preferences (or other rights) attributed to the preferred shares are assumed to be captured by the acquisition-date fair value of the shares and thus automatically incorporated into the subsidiary's valuation basis for consolidation.

By utilizing the information above, we next construct a basic worksheet entry as of January 1, 2017 (the acquisition date). In the presence of both common and preferred subsidiary shares, combining the customary consolidation entries S and A avoids an unnecessary allocation of the subsidiary's retained earnings across these equity shares. The combined consolidation entry also recognizes the allocations made to the undervalued land and goodwill. No other consolidation entries are needed because no time has passed since the acquisition took place.

<b>Consolidation Entries S and A (combined)</b>	
Common Stock (Low) . . . . .	400,000
Preferred Stock (Low) . . . . .	100,000
Additional Paid-In Capital (Low) . . . . .	200,000
Retained Earnings (Low) . . . . .	516,000
Land . . . . .	100,000
Goodwill . . . . .	38,000
Investment in Low's Common Stock . . . . .	1,000,000
Investment in Low's Preferred Stock . . . . .	62,400
Noncontrolling Interest . . . . .	291,600
To eliminate the subsidiary's common and preferred shares, recognize the fair values of the subsidiary's assets, and recognize the outside ownership.	

The above combined consolidation entry recognizes the noncontrolling interest as the total of acquisition-date fair values of \$250,000 for the common stock and \$41,600 for the preferred shares. Consistent with previous consolidation illustrations throughout the text, the entire subsidiary's stockholders' equity section is eliminated along with the parent's investment accounts—in this case for both the common and preferred shares.

### ***Allocation of Subsidiary Income***

The final factor influencing a consolidation that includes subsidiary preferred shares is the allocation of the company's income between the two types of stock. A division must be made for every period subsequent to the takeover (1) to compute the noncontrolling interest's share and

## EXHIBIT 6.8

<b>LOW COMPANY</b> <b>Acquisition-Date Fair Value</b> <b>January 1, 2017</b>	
Consideration transferred for 80% interest in Low's common stock .....	\$1,000,000
Consideration transferred for 60% interest in Low's preferred stock .....	62,400
Noncontrolling interest in Low's common stock (20%) .....	250,000
Noncontrolling interest in Low's preferred stock (40%) .....	41,600
Total fair value of Low on 1/1/17 .....	<u>\$1,354,000</u>

<b>HIGH'S ACQUISITION OF LOW</b> <b>Excess Fair Value Over Book Value Allocation</b> <b>January 1, 2017</b>	
Low Company business fair value .....	\$1,354,000
Low Company book value .....	<u>1,216,000</u>
Excess acquisition-date fair value over book value .....	\$ 138,000
Assigned to land .....	\$100,000
Assigned to goodwill .....	<u>38,000</u>
	<u>\$ -0-</u>

(2) for the parent's own recognition purposes. For a cumulative nonparticipating preferred stock such as the one presently being examined, only the specified annual dividend is attributed to the preferred stock with all remaining income assigned to common stock. Consequently, if we assume that Low reports earnings of \$100,000 in 2017 while declaring and paying the annual \$6,000 dividend on its preferred stock, we allocate income for consolidation purposes as follows:

	<b>Income</b>
Subsidiary total .....	<u>\$100,000</u>
Preferred stock (6% dividend × \$100,000 par value of the stock) .....	\$ 6,000
Common stock (residual amount) .....	94,000

During 2017, High Company, as the parent, is entitled to \$3,600 in dividends (\$6,000 × 60%) from Low's preferred stock because of its 60 percent ownership. In addition, High holds 80 percent of Low's common stock so that another \$75,200 of the income (\$94,000 × 80%) is attributed to the parent. The noncontrolling interest in consolidated net income can be calculated in a similar fashion:

		<b>Percentage</b> <b>Outside</b> <b>Ownership</b>	<b>Noncontrolling</b> <b>Interest</b>
Preferred stock dividend .....	\$ 6,000	40%	\$ 2,400
Income attributed to common stock .....	94,000	20	<u>18,800</u>
Noncontrolling interest in consolidated net income .....			<u>\$21,200</u>

## LO 6-5

Prepare a consolidated statement of cash flows.

## Consolidated Statement of Cash Flows

Current accounting standards require that companies include a statement of cash flows among their consolidated financial reports. The main purpose of the statement of cash flows is to provide information about the entity's cash receipts and cash payments during a period. The



statement is also designed to show why an entity's net income is different from its operating cash flows. For a consolidated entity, the cash flows relate to the entire business combination including the parent and all of its subsidiaries.

The statement of cash flows allocates the consolidated entity's overall change in cash during a period to three separate categories:

1. Cash flows from operating activities.
2. Cash flows from investing activities.
3. Cash flows from financing activities.

The cash flows from operating activities can be shown using either the indirect method or the direct method. The indirect method begins with consolidated net income and then adds and subtracts various items to adjust the accrual number to a cash flow amount. The direct method examines cash flows directly from distinct sources that typically include revenues, purchases of inventory, and cash payments of other expenses. However, firms using the direct method must also supplement the statement with the calculation of cash flows from operating activities using the indirect method.

The consolidated statement of cash flows is not prepared from the individual cash flow statements of the separate companies. Instead, the consolidated income statements and balance sheets are first brought together on the worksheet. The cash flows statement is then based on the resulting consolidated figures. Thus, this statement is not actually produced by a consolidation worksheet, but is created from numbers generated by the process. Because special accounting procedures are needed in the period when the parent acquires a subsidiary, we first discuss preparation of the consolidated statement of cash flows for periods in which an acquisition takes place, followed by statement preparation in periods subsequent to acquisition.

### Acquisition Period Statement of Cash Flows

If a business combination occurs during a particular reporting period, the consolidated cash flow statement must properly reflect several considerations. For many business combinations, the following issues frequently are present:

#### ***Business Acquisitions in Exchange for Cash***

Cash purchases of businesses are an investing activity. The *net cash outflow* (cash paid less subsidiary cash acquired) is reported as the amount paid in a business acquisition.<sup>12</sup>

#### ***Operating Cash Flow Adjustments***

Keeping in mind that the focus is on the consolidated entity's cash flows (not just the parent's), consolidated net income is the starting point for the indirect calculation of consolidated operating cash flows. Recall that consolidated net income includes only postacquisition subsidiary revenues and expenses. Therefore, the adjustment to the accrual-based income number must also reflect only postacquisition amounts for the subsidiary. One important category of adjustments to consolidated net income to arrive at cash flows from operations involves changes in current operating accounts (e.g., accounts receivable, accounts payable, etc.).

For example, an increase in an accounts receivable balance typically indicates that a firm's accrual-based sales exceed the actual cash collections for sales during a period. Therefore, in computing operating cash flows, the increase in accounts receivable are deducted from the sales amount (direct method) or the net income (indirect method). However, when an acquisition takes place, the change in accounts receivable will often include amounts from the newly acquired subsidiary. Because the consolidated entity recognizes only postacquisition subsidiary revenues, such acquired receivables do not reflect sales that have been made by the consolidated entity. Therefore any subsidiary acquisition-date current operating account balances must be removed before calculating the change in accounts receivable.

<sup>12</sup> For acquisitions that do not involve cash, or only partially involve cash, the details of the acquisitions should be provided in a supplemental disclosure to the statement of cash flows for "significant noncash investing and financing activities."

In fact, any changes in operating balance sheet accounts (accounts receivable, inventory, accounts payable, etc.) must be computed net of the amounts acquired in the combination. Use of the direct method of presenting operating cash flows also reports the separate computations of cash collected from customers and cash paid for inventory net of acquisition-date balances of newly acquired businesses.

### ***Excess Fair-Value Amortizations***

Any adjustments arising from the subsidiary's revenues or expenses (e.g., depreciation, amortization) must reflect only postacquisition amounts. Closing the subsidiary's books at the date of acquisition facilitates the determination of the appropriate current year postacquisition subsidiary effects on the consolidated entity's cash flows.

### ***Subsidiary Dividends Paid***

The cash outflow from subsidiary dividends only leaves the consolidated entity when paid to the noncontrolling interest. Thus dividends paid by a subsidiary to its parent do not appear as financing outflows. However, subsidiary dividends paid to the noncontrolling interest are a component of cash outflows from financing activities.

### ***Intra-Entity Transfers***

A significant volume of transfers between affiliated companies comprising a business combination often occurs. The resulting effects of intra-entity activities are eliminated in the preparation of consolidated statements. Likewise, the consolidated statement of cash flows does not include the impact of these transfers. Intra-entity sales and purchases do not change the amount of cash held by the business combination when viewed as a whole. Because the statement of cash flows is derived from the consolidated balance sheet and income statement, the impact of all transfers is already removed. Therefore, the proper presentation of cash flows requires no special adjustments for intra-entity transfers. The worksheet entries produce correct balances for the consolidated statement of cash flows.

### ***Consolidated Statement of Cash Flows Illustration***

Assume that on July 1, 2017, Pinto Company acquires 90 percent of Salida Company's outstanding stock for \$774,000 in cash. At the acquisition date, the 10 percent noncontrolling interest has a fair value of \$86,000. Exhibit 6.9 shows book and fair values of Salida's assets and liabilities and Pinto's acquisition-date fair-value allocation schedule.

At the end of 2017, the following comparative balance sheets and consolidated income statement are available:

<b>PINTO COMPANY AND SUBSIDIARY SALIDA COMPANY</b>		
<b>Comparative Balance Sheets</b>		
	<b>Pinto Co. January 1, 2017</b>	<b>Consolidated December 31, 2017</b>
Cash	\$ 170,000	\$ 431,000
Accounts receivable (net)	118,000	319,000
Inventory	310,000	395,000
Land	250,000	370,000
Buildings (net)	350,000	426,000
Equipment (net)	1,145,000	1,380,000
Database	—0—	49,000
Total assets	<u>\$2,343,000</u>	<u>\$3,370,000</u>
Accounts payable	\$50,000	\$ 45,000
Long-term liabilities	18,000	522,000
Common stock	1,500,000	1,500,000
Noncontrolling interest	—0—	98,250
Retained earnings	<u>775,000</u>	<u>1,204,750</u>
Total liabilities and equities	<u>\$2,343,000</u>	<u>\$3,370,000</u>

## EXHIBIT 6.9

<b>SALIDA COMPANY</b> <b>Book and Fair Values</b> <b>July 1, 2017</b>		
<b>Account</b>	<b>Book Value</b>	<b>Fair Value</b>
Cash .....	\$ 35,000	\$ 35,000
Accounts receivable .....	145,000	145,000
Inventory .....	90,000	90,000
Land .....	100,000	120,000
Buildings .....	136,000	136,000
Equipment .....	259,000	299,000
Database .....	–0–	50,000
Accounts payable .....	(15,000)	(15,000)
Net book value .....	<u>\$750,000</u>	<u>\$860,000</u>
<b>PINTO'S ACQUISITION OF SALIDA</b> <b>Excess Fair Value over Book Value Allocation</b> <b>July 1, 2017</b>		
Consideration transferred by Pinto .....		\$774,000
Noncontrolling interest fair value .....		<u>86,000</u>
Salida's total fair value .....		\$860,000
Salida's book value .....		<u>750,000</u>
Excess fair over book value .....		\$110,000
To land .....	\$ 20,000	
To equipment (5-year remaining life) .....	40,000	
To database (25-year remaining life) .....	<u>50,000</u>	<u>110,000</u>
		<u>\$ –0–</u>
<b>PINTO COMPANY AND SUBSIDIARY SALIDA COMPANY</b> <b>Consolidated Income Statement (partial presentation)</b> <b>For the Year Ended December 31, 2017</b>		
Revenues .....		\$1,255,000
Cost of goods sold .....	\$600,000	
Depreciation .....	124,000	
Database amortization .....	1,000	
Interest and other expenses .....	<u>35,500</u>	<u>760,500</u>
Consolidated net income .....		<u>\$ 494,500</u>

***Additional Information for 2017***

- The consolidated income statement totals include Salida's postacquisition revenues and expenses.
- During the year, Pinto paid \$50,000 in dividends. On August 1, Salida paid a \$25,000 dividend.
- During the year, Pinto issued \$504,000 in long-term debt at par value.
- No asset purchases or dispositions occurred during the year other than Pinto's acquisition of Salida.

In preparing the consolidated statement of cash flows, note that each adjustment derives from the consolidated income statement or changes from Pinto's January 1, 2017, balance sheet to the consolidated balance sheet at December 31, 2017.

***Depreciation and Amortization***

These expenses do not represent current operating cash outflows and thus are added back to convert accrual basis income to cash provided by operating activities.

***Increases in Accounts Receivable, Inventory, and Accounts Payable (net of acquisition)***

Changes in balance sheet accounts affecting operating cash flows must take into account amounts acquired in business acquisitions. In this case, note that the changes in Accounts Receivable, Inventory, and Accounts Payable are computed as follows:

	<b>Accounts Receivable</b>	<b>Inventory</b>	<b>Accounts Payable</b>
Pinto's balance, 1/1/17 . . . . .	\$118,000	\$310,000	\$50,000
Increase from Salida acquisition . . . . .	145,000	90,000	15,000
Adjusted beginning balance . . . . .	263,000	400,000	65,000
Consolidated balance, 12/31/17 . . . . .	319,000	395,000	45,000
Operating cash flow adjustment . . . . .	<u>\$ 56,000</u>	<u>\$ 5,000</u>	<u>\$20,000</u>

***Acquisition of Salida Company***

The Investing Activities section of the cash flow statement shows increases and decreases in assets purchased or sold involving cash. The cash outflow from the acquisition of Salida Company is determined as follows:

Cash paid for 90% interest in Salida . . . . .	\$774,000
Cash acquired . . . . .	<u>(35,000)</u>
Net cash paid for Salida investment . . . . .	<u>\$739,000</u>

Note here that although Pinto acquires only 90 percent of Salida, 100 percent of Salida's cash is offset against the cash consideration paid in the acquisition in determining the investing cash outflow. Ownership divisions between the noncontrolling and controlling interests do not affect reporting for the entity's investing cash flows.

***Issue of Long-Term Debt***

Pinto Company's issuance of long-term debt represents a cash inflow from financing activities.

***Dividends***

The dividends paid to Pinto Company owners (\$50,000) combined with the dividends paid to the noncontrolling interest (\$2,500) represent cash outflows from financing activities.

Based on the consolidated totals from the comparative balance sheets and the consolidated income statement, the following consolidated statement of cash flows is then prepared. Pinto chooses to use the indirect method of reporting cash flows from operating activities.

<b>PINTO COMPANY AND SUBSIDIARY SALIDA COMPANY</b>		
<b>Consolidated Statement of Cash Flows (partial presentation)</b>		
<b>For the Year Ended December 31, 2017</b>		
Consolidated net income . . . . .		\$ 494,500
Depreciation expense . . . . .	\$ 124,000	
Amortization expense . . . . .	1,000	
Increase in accounts receivable (net of acquisition effects) . . . . .	(56,000)	
Decrease in inventory (net of acquisition effects) . . . . .	5,000	
Decrease in accounts payable (net of acquisition effects) . . . . .	<u>(20,000)</u>	<u>54,000</u>
<i>Net cash provided by operating activities</i> . . . . .		\$ 548,500
Purchase of Salida Company (net of cash acquired) . . . . .		(739,000)
<i>Net cash used in investing activities</i> . . . . .	<u>\$(739,000)</u>	<u>(739,000)</u>
Issue long-term debt . . . . .	\$ 504,000	
Dividends . . . . .	<u>(52,500)</u>	
<i>Net cash provided by financing activities</i> . . . . .		<u>451,500</u>
<b>Increase in Cash, 1/1/17 to 12/31/17</b> . . . . .		<b><u>\$261,000</u></b>

## Statement of Cash Flows in Periods Subsequent to Acquisition

Preparing a consolidated statement of cash flows during periods of no acquisition is relatively uncomplicated. As before, consolidated net income is the starting point for the indirect calculation of consolidated operating cash flows. If the operating accounts (e.g., accounts receivable, accounts payable, etc.) do not include amounts acquired in a business combination, then no further special adjustments are required. Because the consolidation process eliminates intra-entity balances, preparation of the operating activity section of the statement of cash flows typically proceeds in a straightforward manner using the already available consolidated income statement and balance sheet amounts. Finally, subsidiary dividends paid to the noncontrolling interest are shown as a component of cash outflows from financing activities.

### LO 6-6

Compute basic and diluted earnings per share for a business combination.

## Consolidated Earnings per Share

The consolidation process affects one other intermediate accounting topic, the computation of earnings per share (EPS). Publicly held companies must disclose EPS each period.

The following steps calculate such figures:

- Determine basic EPS by dividing the parent's share of consolidated net income (after reduction for preferred stock dividends) by the weighted-average number of common stock shares outstanding for the period. If the reporting entity has no dilutive options, warrants, or other convertible items, only basic EPS is presented on the face of the income statement. However, diluted EPS also must be presented if any dilutive convertibles are present.
- Compute diluted EPS by combining the effects of *any dilutive securities* with basic earnings per share. Stock options, stock warrants, convertible debt, and convertible preferred stock often qualify as dilutive securities.<sup>13</sup>

In most instances, the computation of EPS for a business combination follows the same general pattern. Consolidated net income attributable to the parent company owners along with the number of outstanding parent shares provides the basis for calculating basic EPS. Any convertibles, warrants, or options for the parent's stock that can possibly dilute the reported figure must be included as described earlier in determining diluted EPS.

However, a problem arises if warrants, options, or convertibles that can dilute the subsidiary's earnings are outstanding. Although the parent company is not directly affected, the potential impact of these items on its share of consolidated net income must be given weight in computing diluted EPS for the consolidated income statement. Because of possible conversion, the subsidiary earnings figure included in consolidated net income is not necessarily applicable to the diluted EPS computation. *Thus, the accountant must separately determine the parent's share of subsidiary income that should be used in deriving diluted EPS.*

Finally, the focus is on earnings per share for the parent company stockholders, even in the presence of a noncontrolling interest. As stated in FASB ASC (para. 260-10-45-11A):

For purposes of computing EPS in consolidated financial statements (both basic and diluted), if one or more less-than-wholly-owned subsidiaries are included in the consolidated group, income from continuing operations and net income shall exclude the income attributable to the noncontrolling interest in subsidiaries.

Thus, consolidated income attributable to the parent's interest forms the basis for the numerator in all EPS calculations for consolidated financial reporting.

<sup>13</sup> Complete coverage of the EPS computation can be found in virtually any intermediate accounting textbook. To adequately understand this process, a number of complex procedures must be mastered, including these:

- Calculation of the weighted-average number of common shares outstanding.
- Understanding the method of including stock rights, convertible debt, and convertible preferred stock within the computation of diluted EPS.

### Earnings per Share Illustration

Assume Big Corporation has 100,000 shares of its common stock outstanding during the current year. The company also has issued 20,000 shares of nonvoting preferred stock, paying an annual cumulative preferred dividend of \$5 per share (\$100,000 total). Each of these preferred shares is convertible into two shares of Big's common stock.

Assume also that Big owns 90 percent of Little's common stock and 60 percent of its preferred stock (which pays \$12,000 in preferred dividends per year). Annual amortization is \$26,000, attributable to various intangibles. Big is preparing its EPS computations for 2017. During the year, Big reported separate income of \$600,000 and Little earned \$100,000. A simplified consolidation of the figures for the year indicates consolidated net income attributable to Big of \$663,000:

Big's separate income for 2017		\$600,000
Little's separate income for 2017	\$100,000	
Amortization expense resulting from original fair-value allocation	(26,000)	
Little's income after excess fair-value amortization		74,000
Consolidated net income		\$674,000
Noncontrolling interest in Little—common stock (10% × \$62,000 [\$74,000 income less \$12,000 preferred stock dividends])	\$ (6,200)	
Noncontrolling interest in Little—preferred stock (40% of dividends)	(4,800)	
Net income attributable to the noncontrolling interest		(11,000)
Net income attributable to Big (parent)		<u>\$663,000</u>

Little has 20,000 shares of common stock and 4,000 shares of preferred stock outstanding. The preferred shares pay a \$3 per year dividend, and each can be converted into two shares of common stock (or 8,000 shares in total). Because Big owns only 60 percent of Little's preferred stock, a \$4,800 dividend is distributed each year to the outside owners (40 percent of the \$12,000 total payment).

Assume finally that the subsidiary also has \$200,000 in convertible bonds outstanding that were originally issued at face value. This debt has both a cash and an effective interest rate of 10 percent (\$20,000 per year) and can be converted by the owners into 9,000 shares of Little's common stock. Big owns none of these bonds. Little's tax rate is 30 percent.

To better visualize these factors, the convertible items are scheduled as follows:

Company	Item	Interest or Dividend	Conversion	Big Owns
Big	Preferred stock	\$100,000/year	40,000 shares	Not applicable
Little	Preferred stock	12,000/year	8,000 shares	60%
Little	Bonds	14,000/year*	9,000 shares	—0—

\*Interest on the bonds is shown net of the 30 percent tax effect (\$20,000 interest less \$6,000 tax savings). No tax is computed for the preferred shares because distributed dividends do not create a tax impact.

Because the subsidiary has convertible items that can affect the company's outstanding shares and net income, Little's diluted earnings per share must be derived *before* Big's diluted EPS can be determined. As shown in Exhibit 6.10, Little's diluted EPS are \$2.38. Two aspects of this schedule should be noted:

- The individual impact of the convertibles (\$1.50 for the preferred stock and \$1.56 for the bonds) did not raise the EPS figures above the \$3.10 basic EPS. Thus, neither the preferred stock nor the bonds are antidilutive, and both are properly included in these computations.
- Absent the presence of the subsidiary's convertible bonds and preferred stock, the parent's share of consolidated net income would form the basis for computing EPS.

**EXHIBIT 6.10**  
**Subsidiary's Diluted**  
**Earnings per Share**

<b>LITTLE COMPANY</b>				
<b>Basic and Diluted Earnings per Common Share</b>				
<b>For Year Ending December 31, 2017</b>				
	<b>Earnings</b>	<b>Shares</b>		
Little's income after amortization . . .	\$74,000	20,000		
Preferred stock dividends . . . . .	<u>(12,000)</u>			
Basic EPS . . . . .	\$62,000	20,000	\$3.10	
			(\$62,000/20,000)	
Effect of possible preferred stock conversion:				
Dividends saved . . . . .	\$12,000	New shares	8,000	\$1.50 impact
				(12,000/8,000)
Effect of possible bond conversion:				
Interest saved (net of taxes) . . . .	<u>\$14,000</u>		<u>9,000</u>	\$ 1.56 impact
				(14,000/9,000)
Diluted EPS . . . . .	<u>\$88,000</u>	<u>37,000</u>	\$ 2.38 (rounded)	

As shown in Exhibit 6.10, Little's income is \$88,000 for diluted EPS. The issue then becomes how much of this amount should be included in computing the parent's diluted EPS. This allocation is based on the percentage of shares controlled by the parent. Note that if the subsidiary's preferred stock and bonds are converted into common shares, Big's ownership falls from 90 to 62 percent. For diluted EPS, 37,000 shares are appropriate. Big's 62 percent ownership (22,800/37,000) is the basis for allocating the subsidiary's \$88,000 income to the parent.

***Supporting Calculations for Diluted Earnings per Share***

	<b>Little Company</b>	<b>Big's</b>	<b>Big's</b>
	<b>Shares</b>	<b>Percentage</b>	<b>Ownership</b>
Common stock	20,000	90%	18,000
Possible new shares—preferred stock	8,000	60	4,800
Possible new shares—bonds	<u>9,000</u>	—0—	<u>—0—</u>
Total	<u>37,000</u>		<u>22,800</u>
Big's ownership (diluted): 22,800/37,000 = 62% (rounded)			
Income assigned to Big (diluted earnings per share computation):			\$88,000 × 62% = \$54,560

We can now determine Big Company's EPS. Only \$54,560 of subsidiary income is appropriate for computing diluted EPS. Because separate income figures are utilized, Exhibit 6.11 (page 289) shows separate basic and diluted EPS calculations. Consequently, Big Company reports basic EPS of \$5.63 and diluted earnings per share of \$4.68.

**LO 6-7**

Demonstrate the accounting effects of subsidiary stock transactions on the parent's financial records and consolidated financial statements.

## Subsidiary Stock Transactions

A note to the financial statements of Gerber Products Company disclosed a transaction carried out by one of the organization's subsidiaries: "The Company's wholly owned Mexican subsidiary sold previously unissued shares of common stock to Grupo Coral, S.A., a Mexican food company, at a price in excess of the shares' net book value." The note added that Gerber had increased consolidated Additional Paid-In Capital by \$432,000 as a result of this stock sale.

As this illustration shows, subsidiary stock transactions can alter the level of parent ownership. A subsidiary, for example, can decide to sell previously unissued stock to raise needed capital. Although the parent company can acquire a portion or even all of these new shares,

## EXHIBIT 6.11

<b>BIG COMPANY AND CONSOLIDATED SUBSIDIARY</b>				
<b>Basic Earnings per Common Share</b>				
<b>For Year Ending December 31, 2017</b>				
	<b>Earnings</b>		<b>Shares</b>	
Consolidated net income (to Big) . . .	\$663,000			
Big's shares outstanding . . . . .			100,000	
Preferred stock dividends (Big) . . . .	<u>(100,000)</u>			
Basic EPS . . . . .	<u>\$563,000</u>		<u>100,000</u> <u>\$5.63</u>	
<b>Diluted Earnings per Common Share</b>				
<b>For Year Ending December 31, 2017</b>				
	<b>Earnings</b>		<b>Shares</b>	
Computed below . . . . .	\$654,560*			
Big's shares outstanding . . . . .			100,000	
Preferred stock dividends (Big) . . . .	(100,000)			
Effect of possible preferred stock (Big) conversion:				
Dividends saved . . . . .	<u>100,000</u>	New shares	<u>40,000</u>	\$2.50 impact (100,000/40,000)
Diluted EPS . . . . .	<u>\$654,560</u>		<u>140,000</u> <u>\$4.68</u> (rounded)	

*Net income computation:	
Big's separate income . . . . .	\$600,000
Portion of Little's income assigned to diluted earnings per share calculation . . . . .	<u>54,560</u> (computed in supporting calculations)
Earnings of the business combination applicable to diluted earnings per share . . . . .	<u>\$654,560</u>

such issues frequently are marketed entirely to outsiders. A subsidiary could also be legally forced to sell additional shares of its stock. As an example, companies holding control over foreign subsidiaries occasionally encounter this problem because of laws in the individual localities. Regulations requiring a certain percentage of local ownership as a prerequisite for operating within a country can mandate issuance of new shares. Of course, changes in the level of parent ownership do not result solely from stock sales: A subsidiary also can repurchase its own stock. The acquisition, as well as the possible retirement, of such treasury shares serves as a means of reducing the percentage of outside ownership.

### Changes in Subsidiary Value—Stock Transactions

When a subsidiary subsequently buys or sells its own stock, a nonoperational increase or decrease occurs in the company's fair and book value. Because the transaction need not involve the parent, the parent's investment account does not automatically reflect the effect of this change. However, the parent's percentage ownership of the subsidiary may change. *Thus, a separate adjustment must be recorded to maintain reciprocity between the subsidiary's stockholders' equity accounts and the parent's investment balance.* The accountant measures the impact the stock transaction has on the parent to ensure that this effect is appropriately recorded in the parent's investment account and then reflected in the consolidation process.

An overall perspective of accounting for subsidiary stock transactions follows from the fundamental notion that the parent establishes the subsidiary's valuation basis at fair value as of the acquisition date. Over time, the parent adjusts this initial fair value for subsidiary income less excess amortization and subsidiary dividends. If the subsidiary issues (or buys) any of its own stock subsequent to acquisition, the effect on the parent will depend on whether the price received (or paid) is greater or less than the per share subsidiary adjusted fair value at that point in time.



An example demonstrates the mechanics of this issue. Assume that on January 1, 2017, Giant Company acquires in the open market 60,000 of Small Company's outstanding 80,000 shares and prepares the following fair-value allocation schedule:

Consideration transferred by Giant . . . . .	\$480,000	
Noncontrolling interest fair value . . . . .	<u>160,000</u>	
Small Company acquisition-date fair value . . . . .		\$640,000
Small Company acquisition-date book value . . . . .		
Common stock (80,000 shares outstanding) . . . . .	\$ 80,000	
Additional paid-in capital . . . . .	200,000	
Retained earnings, 1/1/17 . . . . .	<u>260,000</u>	<u>540,000</u>
Excess fair value assigned to trademark (10-year remaining life) . . . . .		<u>\$100,000</u>

Assuming Small reports earnings of \$50,000 in 2017 and pays no dividends, Giant prepares the following routine consolidation entries for the December 31, 2017, worksheet. Giant uses the equity method to account for its 75 percent interest in Small.

### *December 31, 2017, Consolidation Worksheet Entries*

<b>Consolidation Entry S</b>		
Common Stock (Small Company) . . . . .	80,000	
Additional Paid-In Capital (Small Company) . . . . .	200,000	
Retained Earnings, 1/1/17 (Small Company) . . . . .	260,000	
Investment in Small Company (75%) . . . . .		405,000
Noncontrolling Interest in Small Company (25%) . . . . .		135,000
To eliminate subsidiary's stockholders' equity accounts and recognize noncontrolling interest beginning balance in Small's book value.		
<b>Consolidation Entry A</b>		
Trademark . . . . .	100,000	
Investment in Small Company (75%) . . . . .		75,000
Noncontrolling Interest in Small Company (25%) . . . . .		25,000
To recognize the excess acquisition-date fair value assigned to Small's trademark with allocations to the controlling and noncontrolling interest.		
<b>Consolidation Entry I</b>		
Equity in Small's Earnings . . . . .	30,000	
Investment in Small Company . . . . .		30,000
To eliminate Giant's equity in Small's earnings (75% × [\$50,000 less \$10,000 trademark excess amortization]).		
<b>Consolidation Entry E</b>		
Amortization Expense . . . . .	10,000	
Trademark . . . . .		10,000
To recognize the excess trademark amortization (\$100,000 ÷ 10 years).		

We now introduce a subsidiary stock transaction to demonstrate the effect created on the consolidation process. Assume that on January 1, 2018, Giant announces plans for expansion of Small's operations. To help finance the expansion, Small sells 20,000 previously unissued shares of its common stock to outside parties for \$10 per share. After the stock issue, Small's book value is as follows:

Common stock (\$1.00 par value with 100,000 shares issued and outstanding) . . . .	\$100,000
Additional paid-in capital . . . . .	380,000
Retained earnings, 1/1/18 . . . . .	310,000
Total stockholders' equity, 1/1/18 . . . . .	<u>\$790,000</u>

Note that the common stock and additional paid-in capital balances reflect increases from the new stock issue. Retained earnings have also increased from Small's \$50,000 income in 2017 (no dividends). Although Small's book value is now \$790,000, its valuation for the consolidated entity is derived from its acquisition-date fair value as adjusted through time as follows:

Consideration transferred . . . . .	\$480,000
Noncontrolling interest acquisition-date fair value . . . . .	160,000
2017 Small income less excess amortization . . . . .	40,000
Adjusted subsidiary value, 1/1/18 . . . . .	<u>\$680,000</u>
Stock issue proceeds (\$10 × 20,000 shares) . . . . .	200,000
Subsidiary valuation basis, 1/1/18 . . . . .	<u>\$880,000</u>

Because of Small's stock issue, Giant no longer possesses a 75 percent interest. Instead, the parent now holds 60 percent (60,000 shares of a total of 100,000 shares) of Small Company. The effect on the parent's ownership can be computed as follows:

Small's valuation basis, 1/1/18 (above) . . . . .	\$880,000
Giant's post-issue ownership (60,000 shares ÷ 100,000 shares) . . . . .	60%
Giant's post, stock issue ownership balance . . . . .	\$528,000
Giant's equity-adjusted investment account (\$480,000 + [75% × \$40,000]) . . . . .	<u>510,000</u>
Required adjustment—increase in Giant's additional paid-in capital . . . . .	<u>\$ 18,000</u>

*Independent of any action by the parent company, the assigned fair-value equivalency of this investment has risen from \$510,000 to \$528,000.* Small's ability to sell shares of stock at more than the per share consolidated subsidiary value ( $\$680,000 \div 80,000 \text{ shares} = \$8.50$  per share) created an increased value for the parent. Therefore, Giant records the \$18,000 increment as an adjustment to both its investment account (because the underlying value of the subsidiary has increased) and additional paid-in capital:

**Giant Company's Financial Records—January 1, 2018**

Investment in Small Company . . . . .	18,000	
Additional Paid-In Capital (Giant Company) . . . . .		18,000
To recognize change in equity of business combination created by Small Company issuing 20,000 additional shares of common stock at above the previously assigned fair value.		

Note that the parent reports a change in stockholders' equity (i.e., Additional Paid-In Capital) for effects from subsidiary stock transactions. GAAP literature states that

[c]hanges in a parent's ownership interest while the parent retains its controlling financial interest in its subsidiary shall be accounted for as equity transactions (investments by owners and distributions to owners acting in their capacity as owners). Therefore, no gain or loss shall be recognized in consolidated net income or comprehensive income. The carrying amount of the noncontrolling interest shall be adjusted to reflect the change in its ownership interest in the subsidiary. Any difference between the fair value of the consideration received or paid and the amount by which the noncontrolling interest is adjusted shall be recognized in equity attributable to the parent. [FASB ASC (para. 810-10-45-23)]

Consistent with this view, this textbook treats the effects from subsidiary stock transactions on the consolidated entity as adjustments to Additional Paid-In Capital.

After the change in the parent's records has been made, the consolidation process can proceed in a normal fashion. Assuming Small reports earnings of \$85,000 in 2018 and pays no dividends, Giant prepares the following routine consolidation entries for the December 31, 2018, worksheet. *Although the investment and subsidiary equity accounts are removed here, the change recorded earlier in Giant's Additional Paid-In Capital remains within the consolidated figures.*

### December 31, 2018, Consolidation Worksheet Entries

<b>Consolidation Entry S</b>		
Common Stock (Small Company) . . . . .	100,000	
Additional Paid-In Capital (Small Company) . . . . .	380,000	
Retained Earnings (Small Company) . . . . .	310,000	
Investment in Small Company (60%) . . . . .		474,000
Noncontrolling Interest in Small Company (40%) . . . . .		316,000
To eliminate subsidiary's stockholders' equity accounts and recognize noncontrolling interest book value beginning balance. Small's capital accounts have been updated to reflect the issuance of 20,000 shares of \$1 par value common stock at \$10 per share.		
<b>Consolidation Entry A</b>		
Trademark . . . . .	90,000	
Investment in Small Company (60%) . . . . .		54,000
Noncontrolling Interest in Small Company (40%) . . . . .		36,000
To recognize the unamortized excess acquisition-date fair value assigned to Small's trademark as of the beginning of the period with allocations to the controlling and noncontrolling interests' adjusted ownership percentages.		
<b>Consolidation Entry I</b>		
Equity in Small's Earnings . . . . .	45,000	
Investment in Small Company . . . . .		45,000
To eliminate Giant's equity in Small's earnings (60% × [\$85,000 – \$10,000 trademark excess amortization]).		
<b>Consolidation Entry E</b>		
Amortization Expense . . . . .	10,000	
Trademark . . . . .		10,000
To recognize the excess trademark amortization (\$100,000 ÷ 10 years).		

The noncontrolling interest now stands at 40 percent ownership. Because these 40 percent owners will share in the profits generated by the subsidiary's trademark, they are allocated a 40 percent share to their overall equity balance in the consolidated financial statements. The noncontrolling interest is also assigned 40 percent of the excess fair-value trademark amortization.

### Subsidiary Stock Transactions—Illustrated

No single example can demonstrate the many possible variations that different types of subsidiary stock transactions could create. To provide a working knowledge of this process, we analyze four additional cases briefly, each based on the following scenario:

Assume that Antioch Company acquires 90 percent of the common stock of Westminster Company on January 1, 2017, in exchange for \$1,350,000 cash. The acquisition-date fair

value of the 10 percent noncontrolling interest is \$150,000. At that date, Westminster has the following stockholders' equity accounts:

Common stock—100,000 shares outstanding	\$ 200,000
Additional paid-in capital	450,000
Retained earnings, 1/1/17	750,000
Total stockholders' equity	<u>\$1,400,000</u>

The \$100,000 excess acquisition-date fair over book value was allocated to a customer list with a five-year remaining life. In 2017, Westminster reports \$190,000 in earnings and declares a \$30,000 dividend. Antioch accrues its share of Westminster's income (less excess fair-value amortization related to the customer list) through application of the equity method. Antioch's equity method balance for its investment in Westminster is computed as follows:

Consideration transferred for 90% of Westminster	\$1,350,000
Equity earnings of Westminster (90% × [\$190,000 – \$20,000 excess amortization])	153,000
Dividends from Westminster (90% × \$30,000)	(27,000)
Equity method balance, 12/31/17	<u>\$1,476,000</u>

View each of the following cases as an independent situation.

### Case 1

Assume that on January 1, 2018, Westminster Company sells 25,000 shares of previously unissued common stock to outside parties for \$14.40 per share. This stock issue changes both the parent's percentage interest in the subsidiary and the subsidiary's consolidated valuation basis. The parent's percentage ownership declines to 72 percent (90,000 shares ÷ 125,000 total shares). The subsidiary's valuation basis for consolidation becomes:

Consideration transferred	\$1,350,000
Noncontrolling interest acquisition-date fair value	150,000
2017 Westminster income less excess amortization	170,000
Westminster dividends	(30,000)
Stock issue proceeds (\$14.40 × 25,000 shares)	360,000
Subsidiary valuation basis, 1/1/18	<u>\$2,000,000</u>

Next, the effect on the parent's ownership can be computed as follows:

Westminster's valuation basis, 1/1/18 (above)	\$2,000,000
Antioch's post, stock issue ownership (90,000 shares ÷ 125,000 shares)	72%
Antioch's post, stock issue ownership balance	\$1,440,000
Antioch's pre, stock issue equity-adjusted investment account (above)	1,476,000
Required adjustment—decrease in Antioch's additional paid-in capital	<u>\$ 36,000</u>

To reflect this effect of the stock issue change on its valuation of the subsidiary, the parent makes the following journal entry on its financial records.

#### Antioch Company's Financial Records

Additional Paid-In Capital (Antioch Company)	36,000	
Investment in Westminster Company		36,000
To recognize change in equity of business combination created by issuance of 25,000 additional shares of Westminster's common stock.		

**Case 2**

Assume that on January 1, 2018, Westminster issues 20,000 new shares of common stock for \$16 per share. Of this total, Antioch acquires 18,000 shares to maintain its 90 percent level of ownership. Antioch pays a total of \$288,000 (18,000 shares × \$16) for this additional stock. Outside parties buy the remaining shares.

Under these circumstances, the stock transaction alters the consolidated valuation basis of the subsidiary but not the percentage owned by the parent. Thus, only the subsidiary value must be updated prior to determining the necessity of an equity revaluation:

Consideration transferred	\$1,350,000
Noncontrolling interest acquisition-date fair value	150,000
2017 Westminster income less excess amortization	170,000
Westminster dividends	(30,000)
Stock issue proceeds (\$16 × 20,000 shares)	<u>320,000</u>
Subsidiary valuation basis 1/1/18	<u><u>\$1,960,000</u></u>

The effect on the parent's ownership is computed as follows:

Westminster's valuation basis 1/1/18 (above)	\$1,960,000	
Antioch's post, stock issue ownership (108,000 shares ÷ 120,000 shares)		<u>90%</u>
Antioch's post, stock issue ownership balance		\$1,764,000
Antioch's equity-adjusted investment account before stock purchase	\$1,476,000	
Additional payment for 18,000 shares of Westminster	<u>288,000</u>	<u>1,764,000</u>
Required adjustment		<u><u>\$ -0-</u></u>

This case requires no adjustment because Antioch's underlying interest remains aligned with the subsidiary's consolidated valuation basis. Any purchase of new stock by the parent in the same ratio as previous ownership does not affect consolidated Additional Paid-In Capital. The transaction creates no proportionate increase or decrease.

**Case 3**

Assume that instead of issuing new stock, on January 1, 2018, Westminster reacquires all 10,000 shares owned by the noncontrolling interest. It pays \$16 per share for this treasury stock.

This illustration presents another type of subsidiary stock transaction: the acquisition of treasury stock. In this case the effect on the parent can be computed by reference to the amount of noncontrolling interest that must be reduced to zero in the consolidated financial statements.

Noncontrolling interest (NCI) acquisition-date fair value	\$150,000
NCI share of 2017 Westminster income less excess amortization (\$170,000 × 10%)	17,000
NCI share of Westminster dividends (\$30,000 × 10%)	<u>(3,000)</u>
Noncontrolling interest valuation basis at 1/1/18	\$164,000
Treasury stock purchase (\$16 × 10,000 shares)	<u>(160,000)</u>
Required adjustment—increase in Antioch's additional paid-in capital	<u><u>\$ 4,000</u></u>

The consolidated entity paid \$160,000 to reduce a \$164,000 owners' equity interest (the noncontrolling interest) to zero, thus increasing its own equity by \$4,000. As usual, the increase in equity is attributed to additional paid-in capital and is recorded on the parent's records.

**Antioch Company's Financial Records**

Investment in Westminster Company .....	4,000	
Additional Paid-In Capital (Antioch Company) .....		4,000
To recognize change in equity of business combination created by acquisition of 10,000 treasury shares by Westminster.		

This third illustration represents a newly introduced subsidiary stock transaction, the purchase of treasury stock. Therefore, display of consolidation Entries **S** and **A** are also presented. These entries demonstrate the worksheet eliminations required when the subsidiary holds treasury shares:

**Consolidation Entry S**

Common Stock (Westminster Company) .....	200,000	
Additional Paid-In Capital (Westminster Company) .....	450,000	
Retained Earnings, 1/1/18 (Westminster Company) .....	910,000	
Treasury Stock .....		160,000
Investment in Westminster Company .....		1,400,000
To eliminate equity accounts of Westminster Company.		

**Consolidation Entry A**

Customer List .....	80,000	
Investment in Westminster Company .....		80,000
To recognize the beginning-of-year unamortized excess acquisition-date fair value allocated to the customer list.		

Note first the absence of a noncontrolling interest entry. Also note that the sum of the credits to the Investment in Westminster account is \$1,480,000, which is the pretreasury stock purchase equity method balance of \$1,476,000 plus the \$4,000 addition from the acquisition of the noncontrolling interest.

**Case 4**

Assume that on January 1, 2018, Westminster issues a 10 percent stock dividend (10,000 new shares) to its owners when the stock's fair value is \$15 per share.

This final case illustrates another example of a subsidiary stock transaction producing no effect on the parent's records. Stock dividends, whether large or small, capitalize a portion of the issuing company's retained earnings without altering total book value. Shareholders recognize the receipt of a stock dividend as a change in the per share value rather than as an adjustment to the investment balance. Because neither party perceives a net effect, the consolidation process proceeds in a routine fashion. Therefore, a subsidiary stock dividend requires no special treatment prior to development of a worksheet.

Consideration transferred .....	\$1,350,000
Noncontrolling interest acquisition-date fair value .....	150,000
2017 Westminster income less excess amortization .....	170,000
Westminster dividends .....	<u>(30,000)</u>
Subsidiary valuation basis, 1/1/18 .....	\$1,640,000
Antioch's ownership (adjusted for 10% stock dividend 99,000 ÷ 110,000 shares) .....	<u>90%</u>
Antioch's post, stock dividend ownership interest .....	\$1,476,000
Antioch's equity-adjusted investment account .....	<u>1,476,000</u>
Adjustment required by stock dividend .....	<u>\$ -0-</u>

The consolidation Entries **S** and **A** made just after the stock dividend follow. The \$1,404,000 component of the investment account is offset against the stockholders' equity of the subsidiary. Although the stock dividend did not affect the parent's investment, the equity accounts of the subsidiary have been realigned in recognition of the \$150,000 stock dividend (10,000 shares of \$2 par value stock valued at \$15 per share):

<b>Consolidation Entry S</b>		
Common Stock (Westminster Company)	220,000	
Additional Paid-In Capital (Westminster Company)	580,000	
Retained Earnings, 1/1/18 (Westminster Company)	760,000	
Investment in Westminster Company (90%)		1,404,000
Noncontrolling Interest (10%)		156,000

<b>Consolidation Entry A</b>		
Customer List	80,000	
Investment in Westminster Company		72,000
Noncontrolling Interest		8,000
To recognize the beginning-of-year unamortized excess fair value attributable to the customer list.		

Note here that the sum of the credits to the Investment in Westminster account is \$1,476,000, which equals the pre-stock dividend equity method balance.

## Summary

1. Variable interest entities (VIEs) typically take the form of a trust, partnership, joint venture, or corporation. In most cases, a sponsoring firm creates these entities to engage in a limited and well-defined set of business activities. Control of VIEs, by design, often does not rest with their equity holders. Instead, control is exercised through contractual arrangements with the sponsoring firm that becomes the entity's "primary beneficiary." These contracts can take the form of leases, participation rights, guarantees, or other residual interests. Through contracting, the primary beneficiary bears a significant portion of the risks and receives a significant portion of the rewards of the entity, often without owning any voting shares. Current accounting standards require a business that has a controlling financial interest in a VIE to consolidate the financial statements of the VIE with its own.
2. In periods after the primary beneficiary gains control over a VIE, consolidation procedures follow a similar process as if the entity were controlled by voting interests. All intra-entity transactions between the primary beneficiary and the VIE must be eliminated in consolidation. The consolidated net income distribution to the noncontrolling interest, however, must be based on the contractual agreement with the primary beneficiary, rather than voting interests.
3. If one member of a business combination acquires an affiliate's debt instrument (e.g., a bond or note) from an outside party, the purchase price usually differs from the carrying amount of the liability. Thus, a gain or loss has been incurred from the perspective of the business combination. However, both the debt and investment remain in the individual financial accounts of the two companies, but the gain or loss goes unrecorded. The consolidation process must adjust all balances to reflect the effective retirement of the debt.
4. Following a related party's acquisition of a company's debt, Interest Income and Expense are recognized. Because these accounts result from intra-entity transactions, they also must be removed in every subsequent consolidation along with the debt and investment figures. Retained Earnings also requires adjustment in each year after the purchase to record the impact of the gain or loss.
5. Amortization of intra-entity debt/investment balances often is necessary because of discounts and/or premiums. Consequently, the Interest Income and Interest Expense figures reported by the two parties will not agree. The closing of these two accounts into Retained Earnings each year gradually reduces the consolidation adjustment that must be made to this equity account.
6. When acquired, many subsidiaries have preferred stock outstanding as well as common stock. The existence of subsidiary preferred shares does little to complicate the consolidation process. The acquisition method values all business acquisitions at their full fair values. If a subsidiary has preferred stock, the essential process of determining its acquisition-date business fair value remains

intact. Any preferred shares not owned by the parent simply become a component of the noncontrolling interest and are included in the acquisition-date measure of subsidiary fair value.

7. Every business combination must prepare a statement of cash flows. This statement is not created by consolidating the individual cash flows of the separate companies. Instead, both a consolidated income statement and balance sheet are produced, and the cash flows statement is developed from these figures. Dividends paid to the noncontrolling interest are listed as a financing activity.
8. For most business combinations, the determination of earnings per share (EPS) follows the normal pattern presented in intermediate accounting textbooks. However, if the subsidiary has potentially dilutive items outstanding (stock warrants, convertible preferred stock, convertible bonds, etc.), a different process must be followed. The subsidiary's own diluted EPS is computed as a preliminary procedure. The parent and the outside owners then allocate the earnings used in each of these calculations based on the ownership levels of the subsidiary's shares and the dilutive items. The determination of the EPS figures to be reported for the business combination is based on the portion of consolidated net income assigned to the parent.
9. After the combination is created, a subsidiary may enter into stock transactions such as issuing additional shares or acquiring treasury stock. Such actions normally create a proportional increase or decrease in the subsidiary's equity when compared with the parent's investment. The change is measured and then reflected in the consolidated statements through the Additional Paid-In Capital account. To achieve the appropriate accounting, the parent adjusts the Investment in Subsidiary account as well as its own Additional Paid-In Capital. Because the worksheet does not eliminate this equity balance, the required increase or decrease carries over to the consolidated figures.

## Comprehensive Illustration

### Problem: Consolidated Statement of Cash Flows and Earnings per Share

(Estimated Time: 35 to 45 Minutes) Pop, Inc., acquires 90 percent of the 20,000 shares of Son Company's outstanding common stock on December 31, 2016. Of the acquisition-date fair value, it allocates \$80,000 to trademarks, a figure amortized at the rate of \$2,000 per year. Comparative consolidated balance sheets for 2018 and 2017 are as follows:

	2018	2017
Cash .....	\$ 210,000	\$ 130,000
Accounts receivable.....	350,000	220,000
Inventory.....	320,000	278,000
Land, buildings, and equipment (net) .....	1,090,000	1,120,000
Trademarks .....	78,000	80,000
Total assets .....	<u>\$2,048,000</u>	<u>\$1,828,000</u>
Accounts payable .....	\$ 290,000	\$ 296,000
Long-term liabilities.....	650,000	550,000
Noncontrolling interest.....	37,800	34,000
Preferred stock (10% cumulative).....	100,000	100,000
Common stock (26,000 shares outstanding).....	520,000	520,000
Retained earnings, 12/31 .....	450,200	328,000
Total liabilities and stockholders' equity.....	<u>\$2,048,000</u>	<u>\$1,828,000</u>

#### Additional Information for 2018

- Consolidated net income (after adjustments for all intra-entity items) was \$178,000.
- Consolidated depreciation and amortization equaled \$52,000.



- On April 10, Son sold a building with a \$40,000 book value, receiving cash of \$50,000. Later that month, Pop borrowed \$100,000 from a local bank and purchased equipment for \$60,000. These transactions were all with outside parties.
- During the year, Pop declared and paid \$40,000 dividends on its common stock and \$10,000 on its preferred stock, and Son declared and paid a \$20,000 dividend on its common stock.
- Son has long-term convertible debt of \$180,000 outstanding included in consolidated liabilities. It recognized interest expense of \$16,000 (net of taxes) on this debt during the year. This debt can be exchanged for 10,000 shares of the subsidiary's common stock. Pop owns none of this debt.
- Son recorded \$60,000 net income from its own operations. Noncontrolling interest in consolidated net income was \$5,800.
- Pop recorded \$4,000 in profits on sales of goods to Son. These goods remain in Son's warehouse at December 31.
- Pop applies the equity method to account for its investment in Son. On its own books, Pop recognized \$48,200 equity in earnings from Son [ $90\% \times (\$60,000 \text{ less } \$2,000 \text{ amortization})$ ] and \$4,000 intra-entity gross profit in inventory from its sales to Son].

### Required

- Prepare a consolidated statement of cash flows for Pop, Inc., and Son Company for the year ending December 31, 2018. Use the indirect method for determining the amount of cash provided from operations.<sup>14</sup>
- Compute basic earnings per share and diluted earnings per share for Pop, Inc.

### Solution

#### a. Consolidated Statement of Cash Flows

The problem specifies that the indirect method should be used in preparing the consolidated statement of cash flows. Therefore, all items that do not represent cash flows from operations must be removed from the \$178,000 consolidated net income. For example, both the depreciation and amortization are eliminated (noncash items) as well as the gain on the sale of the building (a nonoperational item). In addition, each of the changes in consolidated Accounts Receivable, Inventory, and Accounts Payable produces a noncash impact on net income. The increase in Accounts Receivable, for example, indicates that the sales figure for the period was larger than the amount of cash collected so that adjustment is required in producing this statement.

From the information given, several nonoperational changes in cash can be determined: the bank loan, the acquisition of equipment, the sale of a building, the dividend paid by Son to the noncontrolling interest, and the dividend paid by the parent. Each of these transactions is included in the consolidated statement of cash flows shown in Exhibit 6.12, which explains the \$80,000 increase in cash experienced by the entity during 2018.

#### b. Earnings per Share

The subsidiary's convertible debt has a potentially dilutive effect on earnings per share. Therefore, diluted EPS cannot be determined for the business combination directly from consolidated net income. First, the diluted EPS figure must be calculated for the subsidiary. This information then is used in the computations made by the consolidated entity.

Diluted EPS of \$2.47 for the subsidiary is determined as follows:

#### Son Company—Diluted Earnings per Share

	Earnings		Shares	
As reported less excess amortization . . .	\$58,000		20,000	\$2.90
Effect of possible debt conversion:				
Interest saved (net of taxes) . . . . .	<u>16,000</u>	New shares	<u>10,000</u>	\$1.60 impact (16,000/10,000)
Diluted EPS . . . . .	<u>\$74,000</u>		<u>30,000</u>	<u>\$2.47</u> (rounded)

The parent owns none of the convertible debt included in computing diluted EPS. Pop holds only 18,000 (90 percent of the outstanding common stock) of the 30,000 shares used in this EPS calculation.

<sup>14</sup> Prior to attempting this problem, a review of an intermediate accounting textbook might be useful to obtain a complete overview of the production of a statement of cash flows.

## EXHIBIT 6.12

<b>POP, INC., AND SON COMPANY</b>		
<b>Consolidated Statement of Cash Flows</b>		
<b>Year Ending December 31, 2018</b>		
Cash flows from operating activities		
Consolidated net income		\$178,000
Adjustments to reconcile consolidated net income to net cash provided by operating activities:		
Depreciation and amortization	\$ 52,000	
Gain on sale of building	(10,000)	
Increase in accounts receivable	(130,000)	
Increase in inventory	(42,000)	
Decrease in accounts payable	(6,000)	(136,000)
Net cash provided from operations		\$ 42,000
Cash flows from investing activities		
Purchase of equipment	\$ (60,000)	
Sale of building	50,000	
Net cash used in investing activities		(10,000)
Cash flows from financing activities		
Payment of cash dividends—Pop	\$ (50,000)	
Payment of cash dividend to noncontrolling owners of Son	(2,000)	
Borrowed from bank	100,000	
Net cash provided by financing activities		48,000
Net increase in cash		\$ 80,000
Cash, January 1, 2018		130,000
Cash, December 31, 2018		<u>\$210,000</u>

Consequently, in determining diluted EPS for the parent company, only \$44,400 of the subsidiary's income is applicable:

$$\$74,000 \times 18,000/30,000 = \$44,400$$

Exhibit 6.13 reveals basic EPS of \$6.24 and diluted EPS of \$5.94. Because the subsidiary's earnings figure is included separately in the computation of diluted EPS, the parent's individual income must be identified in the same manner. Thus, the effect of the equity income and intra-entity (downstream) transactions are taken into account in arriving at the parent's separate earnings.

## EXHIBIT 6.13

<b>POP, INC., AND SON COMPANY</b>			
<b>Earnings per Share</b>			
<b>Year Ending December 31, 2018</b>			
	<b>Earnings</b>	<b>Shares</b>	
<b>Basic Earnings per Share</b>			
Pop's share of consolidated net income	\$172,200		
Preferred dividend declared by Pop	(10,000)		
Basic EPS	162,200	26,000	<u>\$6.24</u> (rounded)
<b>Diluted Earnings per Share</b>			
Pop's share of consolidated net income	\$172,200		
Remove equity income	(48,200)		
Remove intra-entity gross profit	(4,000)		
Preferred stock dividend	(10,000)		
Common shares outstanding (Pop, Inc.)		26,000	
Common stock income—Pop (for EPS computations)	\$110,000		
Income of Son (for diluted EPS)	44,400		
Diluted EPS	<u>\$154,400</u>	<u>26,000</u>	<u>\$5.94</u> (rounded)

## Questions

1. What is a variable interest entity (VIE)?
2. What are variable interests in an entity and how might they provide financial control over an entity?
3. When is a firm required to consolidate the financial statements of a VIE with its own financial statements?
4. A parent company acquires from a third party bonds that had been issued originally by one of its subsidiaries. What accounting problems are created by this purchase?
5. In question (4), why is the consolidation process simpler if the bonds had been acquired directly from the subsidiary than from a third party?
6. When a company acquires an affiliated company's debt instruments from a third party, how is the gain or loss on extinguishment of the debt calculated? When should this balance be recognized?
7. Several years ago, Bennett, Inc., bought a portion of the outstanding bonds of Smith Corporation, a subsidiary organization. The acquisition was made from an outside party. In the current year, how should these intra-entity bonds be accounted for within the consolidation process?
8. One company purchases the outstanding debt instruments of an affiliated company on the open market. This transaction creates a gain that is appropriately recognized in the consolidated financial statements of that year. Thereafter, a worksheet adjustment is required to correct the beginning balance of consolidated Retained Earnings (or the parent's Investment in Subsidiary account when the equity method is employed). Why is the amount of this adjustment reduced from year to year?
9. A parent acquires the outstanding bonds of a subsidiary company directly from an outside third party. For consolidation purposes, this transaction creates a gain of \$45,000. Should this gain be allocated to the parent or the subsidiary? Why?
10. Perkins Company acquires 90 percent of the outstanding common stock of the Butterfly Corporation as well as 55 percent of its preferred stock. How should these preferred shares be accounted for within the consolidation process?
11. The income statement and the balance sheet are produced using a worksheet, but a consolidated statement of cash flows is not. What process is followed in preparing a consolidated statement of cash flows?
12. How do noncontrolling interest balances affect the consolidated statement of cash flows?
13. In many cases, EPS is computed based on the parent's portion of consolidated net income and parent company shares and convertibles. However, a different process must be used for some business combinations. When is this alternative approach required?
14. A subsidiary has (1) a convertible preferred stock and (2) a convertible bond. How are these items factored into the computation of earnings per share for the parent company?
15. Why might a subsidiary decide to issue new shares of common stock to parties outside the business combination?
16. Washburn Company owns 75 percent of Metcalf Company's outstanding common stock. During the current year, Metcalf issues additional shares to outside parties at a price more than its per share consolidated value. How does this transaction affect the business combination? How is this impact recorded within the consolidated statements?
17. Assume the same information as in question (16) except that Metcalf issues a 10 percent stock dividend instead of selling new shares of stock. How does this transaction affect the business combination?

## Problems

### LO 6-1

1. An enterprise that holds a variable interest in a variable interest entity (VIE) is required to consolidate the assets, liabilities, revenues, expenses, and noncontrolling interest of that entity if:
  - a. The VIE has issued no voting stock.
  - b. The variable interest held by the enterprise involves a lease.
  - c. The enterprise has a controlling financial interest in the VIE.
  - d. Other equity interests in the VIE have the obligation to absorb the expected losses of the VIE.

### LO 6-2

2. Prairie Corporation is a primary beneficiary for Vintage Company, a variable interest entity. When Prairie obtained financial control over Vintage, any excess fair value over Prairie's book value was attributed solely to goodwill. Prairie owns 15 percent of Vintage Company's common stock and participation rights that entitle it to an additional 40 percent of Vintage's net income. In the current year Prairie reports \$400,000 of net income before consideration of its investment in Vintage.

Vintage Company reports net income of \$100,000. What amount of consolidated net income is attributable to the noncontrolling interest?

- a. \$15,000
- b. \$45,000
- c. \$60,000
- d. \$85,000

LO 6-3

3. A parent company buys bonds on the open market that had been previously issued by its subsidiary. The price paid by the parent is less than the carrying amount of the bonds on the subsidiary's records. How should the parent report the difference between the price paid and the carrying amount of the bonds on its consolidated financial statements?

- a. As a loss on retirement of the bonds.
- b. As a gain on retirement of the bonds.
- c. As an increase to interest expense over the remaining life of the bonds.
- d. Because the bonds now represent intra-entity debt, the difference is not reported.

LO 6-3

4. A subsidiary has a debt outstanding that was originally issued at a discount. At the beginning of the current year, the parent company acquired the debt at a slight premium from outside parties. Which of the following statements is true?

- a. Whether the balances agree or not, both the subsequent interest income and interest expense should be reported in a consolidated income statement.
- b. The interest income and interest expense will agree in amount and should be offset for consolidation purposes.
- c. In computing any noncontrolling interest allocation, the interest income should be included but not the interest expense.
- d. Although subsequent interest income and interest expense will not agree in amount, both balances should be eliminated for consolidation purposes.

LO 6-4

5. The parent company acquires all of a subsidiary's common stock but only 70 percent of its preferred shares. This preferred stock pays a 7 percent annual cumulative dividend. No dividends are in arrears at the current time. How is the noncontrolling interest's share of the subsidiary's income computed?

- a. As 30 percent of the subsidiary's preferred dividend.
- b. No allocation is made because the dividends have been paid.
- c. As 30 percent of the subsidiary's income after all dividends have been subtracted.
- d. Income is assigned to the preferred stock based on total par value and 30 percent of that amount is allocated to the noncontrolling interest.

LO 6-5

6. Aceton Corporation owns 80 percent of the outstanding stock of Voctax, Inc. During the current year, Voctax made \$140,000 in sales to Aceton. How does this transfer affect the consolidated statement of cash flows?

- a. The transaction should be included if payment has been made.
- b. Only 80 percent of the transfers should be included because the subsidiary made the sales.
- c. Because the transfers were from a subsidiary organization, the cash flows are reported as investing activities.
- d. Because of the intra-entity nature of the transfers, the amount is not reported in the consolidated cash flow statement.

**Problems 7 and 8 are based on the following information.**

Comparative consolidated balance sheet data for Iverson, Inc., and its 80 percent-owned subsidiary Oakley Co. follow:

	2018	2017
Cash .....	\$ 7,000	\$ 20,000
Accounts receivable (net) .....	55,000	38,000
Merchandise inventory .....	85,000	45,000
Buildings and equipment (net) .....	95,000	105,000
Trademark .....	85,000	100,000
Totals .....	<u>\$327,000</u>	<u>\$308,000</u>

(continued)

(continued)

	2018	2017
Accounts payable . . . . .	\$ 75,000	\$ 63,000
Notes payable, long-term . . . . .	—0—	25,000
Noncontrolling interest . . . . .	39,000	35,000
Common stock, \$10 par . . . . .	200,000	200,000
Retained earnings (deficit) . . . . .	13,000	(15,000)
Totals . . . . .	<u>\$327,000</u>	<u>\$308,000</u>

**Additional Information for Fiscal Year 2018**

- Iverson and Oakley's consolidated net income was \$45,000.
- Oakley paid \$5,000 in dividends during the year. Iverson paid \$12,000 in dividends.
- Oakley sold \$11,000 worth of merchandise to Iverson during the year.
- There were no purchases or sales of long-term assets during the year.

In the 2018 consolidated statement of cash flows for Iverson Company:

LO 6-5

7. Net cash flows from operating activities were

- a. \$12,000
- b. \$20,000
- c. \$24,000
- d. \$25,000

LO 6-5

8. Net cash flows from financing activities were

- a. \$(25,000)
- b. \$(37,000)
- c. \$(38,000)
- d. \$(42,000)

LO 6-6

9. Bensman Corporation is computing EPS. One of its subsidiaries has stock warrants outstanding. How do these convertible items affect Bensman's EPS computation?

- a. No effect is created because the stock warrants were for the subsidiary company's shares.
- b. The stock warrants are not included in the computation unless they are antidilutive.
- c. The effect of the stock warrants must be computed in deriving the amount of subsidiary income to be included in making the diluted EPS calculation.
- d. The stock warrants are included only in basic EPS but never in diluted EPS.

LO 6-7

10. Arcola, Inc., acquires all 40,000 shares of Tuscola Company for \$725,000. A year later, when Arcola's equity adjusted balance in its investment in Tuscola equals \$800,000, Tuscola issues an additional 10,000 shares to outside investors for \$25 per share. Which of the following best describes the effect of Tuscola's stock issue on Arcola's investment account?

- a. No effect because the shares were all sold to outside parties.
- b. The investment account is reduced because Arcola now owns a smaller percentage of Tuscola.
- c. The investment account is increased because Arcola's share of Tuscola's value has increased.
- d. No effect because Arcola maintains control over Tuscola despite the new stock issue.

LO 6-3

11. Dane, Inc., owns Carlton Corporation. For the current year, Dane reports net income (without consideration of its investment in Carlton) of \$185,000 and the subsidiary reports \$105,000. The parent had a bond payable outstanding on January 1, with a carrying amount of \$209,000. The subsidiary acquired the bond on that date for \$196,000. During the current year, Dane reported interest expense of \$18,000 while Carlton reported interest income of \$19,000, both related to the intra-entity bond payable. What is consolidated net income?

- a. \$289,000
- b. \$291,000
- c. \$302,000
- d. \$304,000

LO 6-6

12. Mattoon, Inc., owns 80 percent of Effingham Company. For the current year, this combined entity reported consolidated net income of \$500,000. Of this amount \$465,000 was attributable to Mattoon's controlling interest while the remaining \$35,000 was attributable to the noncontrolling interest. Mattoon has 100,000 shares of common stock outstanding and Effingham has 25,000 shares outstanding.

Neither company has issued preferred shares or has any convertible securities outstanding. On the face of the consolidated income statement, how much should be reported as Mattoon's earnings per share?

- a. \$5.00
- b. \$4.65
- c. \$4.00
- d. \$3.88

## LO 6-3

13. Aaron Company's books show current earnings of \$430,000 and \$46,000 in cash dividends. Zeese Company earns \$164,000 in net income and declares \$11,500 in dividends. Aaron has held a 70 percent interest in Zeese for several years, an investment with an acquisition-date excess fair over book value attributable solely to goodwill. Aaron uses the initial value method to account for these shares and includes dividend income in its internal earnings reports.

On January 1 of the current year, Zeese acquired in the open market \$64,400 of Aaron's 8 percent bonds. The bonds had originally been issued several years ago at 92, reflecting a 10 percent effective interest rate. On the date of purchase, the carrying amount of the bonds payable was \$60,200. Zeese paid \$56,000 based on a 12 percent effective interest rate over the remaining life of the bonds.

What is consolidated net income for this year?

- a. \$598,900
- b. \$589,450
- c. \$438,050
- d. \$590,850

## LO 6-3

14. Redfield Company reports current earnings of \$420,000 while declaring \$52,000 in cash dividends. Snedeker Company earns \$147,000 in net income and declares \$13,000 in dividends. Redfield has held a 70 percent interest in Snedeker for several years, an investment with an acquisition-date excess fair over book value attributable solely to goodwill. Redfield uses the initial value method to account for these shares.

On January 1 of the current year, Snedeker acquired in the open market \$51,600 of Redfield's 8 percent bonds. The bonds had originally been issued several years ago at 92, reflecting a 10 percent effective interest rate. On the date of purchase, the carrying amount of the bonds payable was \$50,400. Snedeker paid \$49,200 based on a 12 percent effective interest rate over the remaining life of the bonds.

What is the noncontrolling interest's share of consolidated net income?

- a. \$40,200
- b. \$44,100
- c. \$40,560
- d. \$44,460

## LO 6-3

15. Pesto Company possesses 80 percent of Salerno Company's outstanding voting stock. Pesto uses the initial value method to account for this investment. On January 1, 2014, Pesto sold 9 percent bonds payable with a \$10 million face value (maturing in 20 years) on the open market at a premium of \$600,000. On January 1, 2017, Salerno acquired 40 percent of these same bonds from an outside party at 96.6 percent of face value. Both companies use the straight-line method of amortization. For a 2018 consolidation, what adjustment should be made to Pesto's beginning Retained Earnings as a result of this bond acquisition?

- a. \$320,000 increase
- b. \$326,000 increase
- c. \$331,000 increase
- d. \$340,000 increase

## LO 6-4

16. On January 1, Tesco Company spent a total of \$4,384,000 to acquire control over Blondel Company. This price was based on paying \$424,000 for 20 percent of Blondel's preferred stock and \$3,960,000 for 90 percent of its outstanding common stock. At the acquisition date, the fair value of the 10 percent noncontrolling interest in Blondel's common stock was \$440,000. The fair value of the 80 percent of Blondel's preferred shares not owned by Tesco was \$1,696,000. Blondel's stockholders' equity accounts at January 1 were as follows:

Preferred stock—9%, \$100 par value, cumulative and participating; 10,000 shares outstanding . . . . .	\$ 1,000,000
Common stock—\$50 par value; 40,000 shares outstanding . . . . .	2,000,000
Retained earnings . . . . .	<u>3,000,000</u>
Total stockholders' equity . . . . .	<u>\$ 6,000,000</u>

Tesco believes that all of Blondel’s accounts approximate their fair values within the company’s financial statements. What amount of consolidated goodwill should be recognized?

- a. \$ 300,000
- b. \$ 316,000
- c. \$ 364,000
- d. \$ 520,000

**LO 6-4**

17. On January 1, Coldwater Company has a net book value of \$2,174,000 as follows:

2,000 shares of preferred stock; par value \$100 per share; cumulative, nonparticipating, nonvoting; call value \$108 per share . . . . .	\$ 200,000
34,500 shares of common stock; par value \$40 per share. . .	1,380,000
Retained earnings . . . . .	594,000
Total . . . . .	<u>\$2,174,000</u>

Westmont Company acquires all outstanding preferred shares for \$214,000 and 60 percent of the common stock for \$1,253,280. The acquisition-date fair value of the noncontrolling interest in Coldwater’s common stock was \$835,520. Westmont believed that one of Coldwater’s buildings, with a 12-year remaining life, was undervalued by \$63,600 on the company’s financial records.

What amount of consolidated goodwill would be recognized from this acquisition?

- a. \$61,600
- b. \$65,200
- c. \$60,400
- d. \$59,200

**LO 6-5**

18. Premier Company owns 90 percent of the voting shares of Stanton, Inc. Premier reports sales of \$480,000 during the current year and Stanton reports \$264,000. Stanton sold inventory costing \$28,800 to Premier (upstream) during the year for \$57,600. Of this amount, 25 percent is still in ending inventory at year-end. Total receivables on the consolidated balance sheet were \$81,800 at the first of the year and \$119,100 at year-end. No intra-entity debt existed at the beginning or ending of the year. Using the direct method, what is the consolidated amount of cash collected by the business combination from its customers?

- a. \$706,700
- b. \$649,100
- c. \$686,400
- d. \$744,000

**LO 6-7**

19. Aaron owns 100 percent of the 12,000 shares of Veritable, Inc. The Investment in Veritable account has a balance of \$588,000, corresponding to the subsidiary’s unamortized acquisition-date fair value of \$49 per share. Veritable issues 3,000 new shares to the public for \$50 per share. How does this transaction affect the Investment in Veritable account?

- a. It is not affected because the shares were sold to outside parties.
- b. It should be increased by \$2,400.
- c. It should be increased by \$3,000.
- d. It should be decreased by \$117,600.

**Problems 20 through 22 are based on the following information.**

Neill Company purchases 80 percent of the common stock of Stamford Company on January 1, 2017, when Stamford has the following stockholders’ equity accounts:

Common stock—40,000 shares outstanding . . . . .	\$100,000
Additional paid-in capital . . . . .	75,000
Retained earnings, 1/1/17. . . . .	540,000
Total stockholders’ equity . . . . .	<u>\$715,000</u>

To acquire this interest in Stamford, Neill pays a total of \$592,000. The acquisition-date fair value of the 20 percent noncontrolling interest was \$148,000. Any excess fair value was allocated to goodwill, which has not experienced any impairment.

On January 1, 2018, Stamford reports retained earnings of \$620,000. Neill has accrued the increase in Stamford's retained earnings through application of the equity method.

View the following problems as independent situations:

LO 6-7

20. On January 1, 2018, Stamford issues 10,000 additional shares of common stock for \$25 per share. Neill acquires 8,000 of these shares. How will this transaction affect the parent company's Additional Paid-In Capital account?
- Has no effect on it.
  - Increases it by \$20,500.
  - Increases it by \$36,400.
  - Increases it by \$82,300.

LO 6-7

21. On January 1, 2018, Stamford issues 10,000 additional shares of common stock for \$15 per share. Neill does not acquire any of this newly issued stock. How does this transaction affect the parent company's Additional Paid-In Capital account?
- Has no effect on it.
  - Increases it by \$44,000.
  - Decreases it by \$35,200.
  - Decreases it by \$55,000.

LO 6-7

22. On January 1, 2018, Stamford reacquires 8,000 of the outstanding shares of its own common stock for \$24 per share. None of these shares belonged to Neill. How does this transaction affect the parent company's Additional Paid-In Capital account?
- Has no effect on it.
  - Decreases it by \$55,000.
  - Decreases it by \$35,000.
  - Decreases it by \$28,000.

LO 6-2

23. Hillsborough Country Outfitters, Inc., entered into an agreement for HCO Media LLC to exclusively conduct Hillsborough's e-commerce initiatives through a jointly owned (50 percent each) Internet site known as HCO.com. HCO Media receives 2 percent of all sales revenue generated through the site up to a maximum of \$500,000 per year. Both Hillsborough and HCO Media pay 50 percent of the costs to maintain the Internet site. However, if HCO Media's fees are insufficient to cover its 50 percent share of the costs, Hillsborough absorbs the loss.

Assuming that HCO Media qualifies as a VIE, should Hillsborough consolidate HCO Media LLC?

LO 6-2

24. The following describes a set of arrangements between TecPC Company and a variable interest entity (VIE) as of December 31, 2017. TecPC agrees to design and construct a new research and development (R&D) facility. The VIE's sole purpose is to finance and own the R&D facility and lease it to TecPC Company after construction is completed. Payments under the operating lease are expected to begin in the first quarter of 2019.

The VIE has financing commitments sufficient for the construction project from equity and debt participants (investors) of \$4 million and \$42 million, respectively. TecPC, in its role as the VIE's construction agent, is responsible for completing construction by December 31, 2018. TecPC has guaranteed a portion of the VIE's obligations during the construction and post-construction periods.

TecPC agrees to lease the R&D facility for five years with multiple extension options. The lease is a variable rate obligation indexed to a three-month market rate. As market interest rates increase or decrease, the payments under this operating lease also increase or decrease, sufficient to provide a return to the investors. If all extension options are exercised, the total lease term is 35 years.

At the end of the first five-year lease term or any extension, TecPC may choose one of the following:

- Renew the lease at fair value subject to investor approval.
  - Purchase the facility at its original construction cost.
  - Sell the facility on the VIE's behalf to an independent third party. If TecPC sells the project and the proceeds from the sale are insufficient to repay the investors their original cost, TecPC may be required to pay the VIE up to 85 percent of the project's cost.
- What is the purpose of reporting consolidated statements for a company and the entities that it controls?
  - When should a VIE's financial statements be consolidated with those of another company?



- c. Identify the risks of ownership of the R&D facility that (1) TecPC has effectively shifted to the VIE’s owners and (2) remain with TecPC.
  - d. What characteristics of a primary beneficiary does TecPC possess?
25. On December 31, 2017, PanTech Company invests \$20,000 in SoftPlus, a variable interest entity. In contractual agreements completed on that date, PanTech established itself as the primary beneficiary of SoftPlus. Previously, PanTech had no equity interest in SoftPlus. Immediately after PanTech’s investment, SoftPlus presents the following balance sheet:

**LO 6-2**

Cash	\$ 20,000	Long-term debt	\$120,000
Marketing software	140,000	Noncontrolling interest	60,000
Computer equipment	40,000	PanTech equity interest	20,000
Total assets	<u>\$200,000</u>	Total liabilities and equity	<u>\$200,000</u>

Each of the above amounts represents an assessed fair value at December 31, 2017, except for the marketing software. Accordingly the December 31 fair value of SoftPlus is assessed at \$80,000.

- a. If the marketing software was undervalued by \$20,000, what amounts for SoftPlus would appear in PanTech’s December 31, 2017, consolidated financial statements?
  - b. If the marketing software was overvalued by \$20,000, what amounts for SoftPlus would appear in PanTech’s December 31, 2017, consolidated financial statements?
26. On January 1, 2018, Access IT Company exchanged \$1,000,000 for 40 percent of the outstanding voting stock of Net Connect. Especially attractive to Access IT was a research project underway at Net Connect that would enhance both the speed and quantity of client-accessible data. Although not recorded in Net Connect’s financial records, the fair value of the research project was considered to be \$1,960,000.

**LO 6-2**



In contractual agreements with the sole owner of the remaining 60 percent of Net Connect, Access IT was granted (1) various decision-making rights over Net Connect’s operating decisions and (2) special service purchase provisions at below-market rates. As a result of these contractual agreements, Access IT established itself as the primary beneficiary of Net Connect. Immediately after the purchase, Access IT and Net Connect presented the following balance sheets:

	<b>Access IT</b>	<b>Net Connect</b>
Cash	\$ 61,000	\$ 41,000
Investment in Net Connect	1,000,000	
Capitalized software	981,000	156,000
Computer equipment	1,066,000	56,000
Communications equipment	916,000	336,000
Patent		191,000
Total assets	<u>\$ 4,024,000</u>	<u>\$ 780,000</u>
Long-term debt	(941,000)	(616,000)
Common stock—Access IT	(2,660,000)	
Common stock—Net Connect		(41,000)
Retained earnings	<u>(423,000)</u>	<u>(123,000)</u>
Total liabilities and equity	<u>\$(4,024,000)</u>	<u>\$(780,000)</u>

Each of the above amounts represents a fair value at January 1, 2018. The fair value of the 60 percent of Net Connect shares not owned by Access IT was \$1,500,000.

Prepare an acquisition-date consolidation worksheet for Access IT and its variable interest entity.

27. On January 1, 2018, Primair Corporation loaned Vista Company \$300,000 and agreed to guarantee all of Vista’s long-term debt in exchange for (1) decision-making authority over all of Vista’s activities and (2) an annual cash payment of 25 percent of Vista’s revenues. As a result of the agreement, Primair is the primary beneficiary of Vista (a variable interest entity). Primair’s loan to Vista stipulated a 7 percent (market) rate of interest to be paid annually.

On January 1, 2018, Primair estimated that the fair value of Vista’s equity shares equaled \$150,000 while Vista’s book value was \$55,000. Any excess fair over book value at that date was attributed to Vista’s trademark with an indefinite life. Because Primair owns no equity in Vista, all of the acquisition-date excess fair over book value is allocated to the non-controlling interest.

**LO 6-2**

Vista paid Primair 25 percent of its 2018 revenues at the end of the year. On December 31, 2018, Primair and Vista submitted the following statements for consolidation. Parentheses indicate credit balances.

	Primair	Vista
Revenues .....	(839,500)	(188,000)
Cost of good sold .....	612,000	75,000
Other operating expenses .....	78,000	25,000
Interest income .....	(21,000)	–0–
Interest expense .....	–0–	21,000
Net income.....	<u>(170,500)</u>	<u>(67,000)</u>
Retained earnings, 1/1.....	(1,555,000)	(40,000)
Net income.....	(170,500)	(67,000)
Dividends declared.....	250,000	–0–
Retained earnings, 12/31 .....	<u>(1,475,500)</u>	<u>(107,000)</u>
Current assets .....	460,500	50,000
Loan receivable from Vista .....	300,000	
Equipment (net) .....	794,000	525,000
Trademark .....	–0–	45,000
Total assets .....	<u>1,554,500</u>	<u>620,000</u>
Current liabilities .....	(29,000)	(18,000)
Long-term debt .....	–0–	(180,000)
Loan payable to Primair.....		(300,000)
Common stock .....	(50,000)	(15,000)
Retained earnings, 12/31 .....	<u>(1,475,500)</u>	<u>(107,000)</u>
Total liabilities and equity .....	<u>(1,554,500)</u>	<u>(620,000)</u>

In computing the amount of Vista's net income attributable to the non-controlling interest,

- Vista's net income should be reduced by the 25% revenue allocation to Primair.
- Interest expense paid to Primair is not excluded from Vista's net income because it is a contractual distribution of Vista's net income to Primair.

Prepare the December 31, 2018, consolidation worksheet for Primair and Vista.

**LO 6-3**

28. Cairns owns 75 percent of the voting stock of Hamilton, Inc. The parent's interest was acquired several years ago on the date that the subsidiary was formed. Consequently, no goodwill or other allocation was recorded in connection with the acquisition. Cairns uses the equity method in its internal records to account for its investment in Hamilton.

On January 1, 2014, Hamilton sold \$1,000,000 in 10-year bonds to the public at 105. The bonds had a cash interest rate of 9 percent payable every December 31. Cairns acquired 40 percent of these bonds at 96 percent of face value on January 1, 2016. Both companies utilize the straight-line method of amortization. Prepare the consolidation worksheet entries to recognize the effects of the intra-entity bonds at each of the following dates.

- December 31, 2016
- December 31, 2017
- December 31, 2018

**LO 6-3**

29. Highlight, Inc., owns all outstanding stock of Kiort Corporation. The two companies report the following balances for the year ending December 31, 2017:

	Highlight	Kiort
Revenues and interest income.....	\$(670,000)	\$(390,000)
Operating and interest expense .....	540,000	221,000
Other gains and losses .....	(120,000)	(32,000)
Net income.....	<u>\$(250,000)</u>	<u>\$(201,000)</u>

On January 1, 2017, Highlight acquired on the open market bonds for \$108,000 originally issued by Kiort. This investment had an effective rate of 8 percent. The bonds had a face value of \$100,000 and a cash interest rate of 9 percent. At the date of acquisition, these bonds were shown as liabilities by Kiort with a carrying amount of \$84,000 (based on an effective rate of 11 percent). Determine the balances that should appear on a consolidated income statement for 2017.

**LO 6-3**

30. Several years ago Brant, Inc., sold \$900,000 in bonds to the public. Annual cash interest of 9 percent (\$81,000) was to be paid on this debt. The bonds were issued at a discount to yield 12 percent. At the beginning of 2016, Zack Corporation (a wholly owned subsidiary of Brant) purchased \$180,000 of these bonds on the open market for \$201,000, a price based on an effective interest rate of 7 percent. The bond liability had a carrying amount on that date of \$760,000. Assume Brant uses the equity method to account internally for its investment in Zack.
- What consolidation entry would be required for these bonds on December 31, 2016?
  - What consolidation entry would be required for these bonds on December 31, 2018?

**LO 6-3**

31. Opus, Incorporated, owns 90 percent of Bloom Company. On December 31, 2017, Opus acquires half of Bloom’s \$500,000 outstanding bonds. These bonds had been sold on the open market on January 1, 2015, at a 12 percent effective rate. The bonds pay a cash interest rate of 10 percent every December 31 and are scheduled to come due on December 31, 2025. Bloom issued this debt originally for \$435,763. Opus paid \$283,550 for this investment, indicating an 8 percent effective yield.
- Assuming that both parties use the effective rate method, what gain or loss from the retirement of this debt should be reported on the consolidated income statement for 2017?
  - Assuming that both parties use the effective rate method, what balances should appear in the Investment in Bloom Bonds account on Opus’s records and the Bonds Payable account of Bloom as of December 31, 2018?
  - Assuming that both parties use the straight-line method, what consolidation entry would be required on December 31, 2018, because of these bonds? Assume that the parent is not applying the equity method.

**LO 6-4**

32. Hepner Corporation has the following stockholders’ equity accounts:

Preferred stock (6% cumulative dividend) . . . . .	\$500,000
Common stock . . . . .	750,000
Additional paid-in capital . . . . .	300,000
Retained earnings . . . . .	950,000

The preferred stock is participating. Wasatch Corporation buys 80 percent of this common stock for \$1,600,000 and 70 percent of the preferred stock for \$630,000. The acquisition-date fair value of the noncontrolling interest in the common shares was \$400,000 and was \$270,000 for the preferred shares. All of the subsidiary’s assets and liabilities are viewed as having fair values equal to their book values. What amount is attributed to goodwill on the date of acquisition?

**LO 6-4**

33. Smith, Inc., has the following stockholders’ equity accounts as of January 1, 2018:

Preferred stock—\$100 par, nonvoting and nonparticipating, 8% cumulative dividend . . . . .	\$2,000,000
Common stock—\$20 par value . . . . .	4,000,000
Retained earnings . . . . .	10,000,000

Haried Company purchases all of Smith’s common stock on January 1, 2018, for \$14,040,000. The preferred stock remains in the hands of outside parties. Any excess acquisition-date fair value will be assigned to franchise contracts with a 40-year remaining life.

During 2018, Smith reports earning \$450,000 in net income and declares \$360,000 in cash dividends. Haried applies the equity method to this investment.

- What is the noncontrolling interest’s share of consolidated net income for this period?
  - What is the balance in the Investment in Smith account as of December 31, 2018?
  - What consolidation entries are needed for 2018?
34. Through the payment of \$10,468,000 in cash, Drexel Company acquires voting control over Young Company. This price is paid for 60 percent of the subsidiary’s 100,000 outstanding common shares (\$40 par value) as well as all 10,000 shares of 8 percent, cumulative, \$100 par value preferred stock. Of the total payment, \$3.1 million is attributed to the fully participating preferred stock with the remainder paid for the common. This acquisition is carried out on January 1, 2018, when

**LO 6-4**

Young reports retained earnings of \$10 million and a total book value of \$15 million. The acquisition-date fair value of the noncontrolling interest in Young's common stock was \$4,912,000. On this same date, a building owned by Young (with a 5-year remaining life) is undervalued in the financial records by \$200,000, while equipment with a 10-year remaining life is overvalued by \$100,000. Any further excess acquisition-date fair value is assigned to a brand name with a 20-year remaining life.

During 2018, Young reports net income of \$900,000 while declaring \$400,000 in cash dividends. Drexel uses the initial value method to account for both of these investments.

Prepare appropriate consolidation entries for 2018.

## LO 6-5

35. The following information has been taken from the consolidation worksheet of Peak and its 90 percent-owned subsidiary, Valley:

- Peak reports a \$12,000 gain on the sale of a building. The building had a book value of \$32,000 but was sold for \$44,000 cash.
- Intra-entity inventory transfers of \$129,000 occurred during the current period.
- Valley declared and paid a \$30,000 dividend during the year with \$27,000 of this amount going to Peak.
- Amortization of an intangible asset recognized by Peak's worksheet was \$16,000 for the current period.
- Consolidated accounts payable decreased by \$11,000 during the year.

Indicate how to reflect each of these events on a consolidated statement of cash flows.

## LO 6-6

36. Alford Company and its 80 percent-owned subsidiary, Knight, have the following income statements for 2018:

	Alford	Knight
Revenues .....	\$(500,000)	\$(230,000)
Cost of goods sold .....	300,000	140,000
Depreciation and amortization .....	40,000	10,000
Other expenses .....	20,000	20,000
Gain on sale of equipment .....	(30,000)	-0-
Equity in earnings of Knight .....	<u>(36,200)</u>	<u>-0-</u>
Net income .....	<u><u>\$(206,200)</u></u>	<u><u>\$( 60,000)</u></u>

## Additional Information for 2018

- Intra-entity inventory transfers during the year amounted to \$90,000. All intra-entity transfers were downstream from Alford to Knight.
- Intra-entity gross profits in inventory at January 1 were \$6,000, but at December 31 they are \$9,000.
- Annual excess amortization expense resulting from the acquisition is \$11,000.
- Knight paid dividends totaling \$20,000.
- The noncontrolling interest's share of the subsidiary's income is \$9,800.
- During the year, consolidated inventory rose by \$11,000 while accounts receivable and accounts payable declined by \$8,000 and \$6,000, respectively.

Using either the direct or indirect method, compute net cash flows from operating activities during the period for the business combination.

## LO 6-6

37. Porter Corporation owns all 30,000 shares of the common stock of Street, Inc. Porter has 60,000 shares of its own common stock outstanding. During the current year, Porter earns net income (without any consideration of its investment in Street) of \$150,000 while Street reports \$130,000. Annual amortization of \$10,000 is recognized each year on the consolidation worksheet based on acquisition-date fair-value allocations. Both companies have convertible bonds outstanding. During the current year, bond-related interest expense (net of taxes) is \$32,000 for Porter and \$24,000 for Street. Porter's bonds can be converted into 8,000 shares of common stock; Street's bonds can be converted into 10,000 shares. Porter owns none of these bonds. What are the earnings per share amounts that Porter should report in its current year consolidated income statement?

## LO 6-6

38. Primus, Inc., owns all outstanding stock of Sonston, Inc. For the current year, Primus reports net income (exclusive of any investment income) of \$600,000. Primus has 100,000 shares of common

stock outstanding. Sonston reports net income of \$200,000 for the period with 40,000 shares of common stock outstanding. Sonston also has 10,000 stock warrants outstanding that allow the holder to acquire shares at \$10 per share. The value of this stock was \$20 per share throughout the year. Primus owns 2,000 of these warrants. What amount should Primus report for diluted earnings per share?

## LO 6-6

39. Garfun, Inc., owns all of the stock of Simon, Inc. For 2018, Garfun reports income (exclusive of any investment income) of \$480,000. Garfun has 80,000 shares of common stock outstanding. It also has 5,000 shares of preferred stock outstanding that pay a dividend of \$15,000 per year. Simon reports net income of \$290,000 for the period with 80,000 shares of common stock outstanding. Simon also has a liability for 10,000 of \$100 bonds that pay annual interest of \$8 per bond. Each of these bonds can be converted into three shares of common stock. Garfun owns none of these bonds. Assume a tax rate of 30 percent. What amount should Garfun report as diluted earnings per share?

## LO 6-6

40. The following separate income statements are for Burks Company and its 80 percent–owned subsidiary, Foreman Company:

	Burks	Foreman
Revenues . . . . .	\$(430,000)	\$(330,000)
Expenses . . . . .	280,000	240,000
Gain on sale of equipment . . . . .	–0–	(30,000)
Equity earnings of subsidiary . . . . .	(64,000)	–0–
Net income. . . . .	<u>\$(214,000)</u>	<u>\$(120,000)</u>
Outstanding common shares . . . . .	<u>65,000</u>	<u>40,000</u>

## Additional Information

- Amortization expense resulting from Foreman’s excess acquisition-date fair value is \$40,000 per year.
- Burks has convertible preferred stock outstanding. Each of these 8,000 shares is paid a dividend of \$4 per year. Each share can be converted into four shares of common stock.
- Stock warrants to buy 20,000 shares of Foreman are also outstanding. For \$15, each warrant can be converted into a share of Foreman’s common stock. The fair value of this stock is \$20 throughout the year. Burks owns none of these warrants.
- Foreman has convertible bonds payable that paid interest of \$45,000 (after taxes) during the year. These bonds can be exchanged for 10,000 shares of common stock. Burks holds 10 percent of these bonds, which it bought at book value directly from Foreman.

Compute basic and diluted EPS for Burks Company.

## LO 6-7

41. DeMilo, Inc., owns 100 percent of the 40,000 outstanding shares of Ricardo, Inc. DeMilo currently carries the Investment in Ricardo account at \$490,000 using the equity method.

Ricardo issues 10,000 new shares to the public for \$15.75 per share. How does this transaction affect the Investment in Ricardo account that appears on DeMilo’s financial records?

## LO 6-7

42. Albuquerque, Inc., acquired 16,000 shares of Marmon Company several years ago for \$600,000. At the acquisition date, Marmon reported a book value of \$710,000, and Albuquerque assessed the fair value of the noncontrolling interest at \$150,000. Any excess of acquisition-date fair value over book value was assigned to broadcast licenses with indefinite lives. Since the acquisition date and until this point, Marmon has issued no additional shares. No impairment has been recognized for the broadcast licenses.

At the present time, Marmon reports \$800,000 as total stockholders’ equity, which is broken down as follows:

Common stock (\$10 par value) . . . . .	\$200,000
Additional paid-in capital . . . . .	230,000
Retained earnings . . . . .	<u>370,000</u>
Total . . . . .	<u>\$800,000</u>

View the following as independent situations:

- a. Marmon sells 5,000 shares of previously unissued common stock to the public for \$47 per share. Albuquerque purchased none of this stock. What journal entry should Albuquerque make to recognize the impact of this stock transaction?

LO 6-7

b. Marmon sells 4,000 shares of previously unissued common stock to the public for \$33 per share. Albuquerque purchased none of this stock. What journal entry should Albuquerque make to recognize the impact of this stock transaction?

43. On January 1, 2016, Aronsen Company acquired 90 percent of Siedel Company’s outstanding shares. Siedel had a net book value on that date of \$480,000: common stock (\$10 par value) of \$200,000 and retained earnings of \$280,000.

Aronsen paid \$584,100 for this investment. The acquisition-date fair value of the 10 percent noncontrolling interest was \$64,900. The excess fair value over book value associated with the acquisition was used to increase land by \$89,000 and to recognize copyrights (16-year remaining life) at \$80,000. Subsequent to the acquisition, Aronsen applied the initial value method to its investment account.

In the 2016–2017 period, the subsidiary’s retained earnings increased by \$100,000. During 2018, Siedel earned income of \$80,000 while declaring \$20,000 in dividends. Also, at the beginning of 2018, Siedel issued 4,000 new shares of common stock for \$38 per share to finance the expansion of its corporate facilities. Aronsen purchased none of these additional shares and therefore recorded no entry. Prepare the appropriate 2018 consolidation entries for these two companies.

LO 6-3

44. Pavin acquires all of Stabler’s outstanding shares on January 1, 2015, for \$460,000 in cash. Of this amount, \$30,000 was attributed to equipment with a 10-year remaining life and \$40,000 was assigned to trademarks expensed over a 20-year period. Pavin applies the partial equity method so that income is accrued each period based solely on the earnings reported by the subsidiary.

On January 1, 2018, Pavin reports \$300,000 in bonds outstanding with a carrying amount of \$282,000. Stabler purchases half of these bonds on the open market for \$145,500.

During 2018, Pavin begins to sell merchandise to Stabler. During that year, inventory costing \$80,000 was transferred at a price of \$100,000. All but \$10,000 (at sales price) of these goods were resold to outside parties by year-end. Stabler still owes \$33,000 for inventory shipped from Pavin during December.

The following financial figures are for the two companies for the year ending December 31, 2018. Dividends were both declared and paid during the current year. Prepare a worksheet to produce consolidated balances. (Credits are indicated by parentheses.)

	Pavin	Stabler
Revenues . . . . .	\$ (740,000)	\$(505,000)
Cost of goods sold . . . . .	455,000	240,000
Expenses . . . . .	125,000	158,500
Interest expense—bonds . . . . .	36,000	–0–
Interest income—bond investment . . . . .	–0–	(16,500)
Loss on extinguishment of bonds . . . . .	–0–	–0–
Equity in Stabler’s income . . . . .	(123,000)	–0–
Net income . . . . .	<u>\$ (247,000)</u>	<u>\$(123,000)</u>
Retained earnings, 1/1/18 . . . . .	\$ (345,000)	\$(361,000)
Net income (above) . . . . .	(247,000)	(123,000)
Dividends declared . . . . .	155,000	61,000
Retained earnings, 12/31/18 . . . . .	<u>\$ (437,000)</u>	<u>\$(423,000)</u>
Cash and receivables . . . . .	\$ 217,000	\$ 35,000
Inventory . . . . .	175,000	87,000
Investment in Stabler . . . . .	613,000	–0–
Investment in Pavin bonds . . . . .	–0–	147,000
Land, buildings, and equipment (net) . . . . .	245,000	541,000
Trademarks . . . . .	–0–	–0–
Total assets . . . . .	<u>\$ 1,250,000</u>	<u>\$ 810,000</u>
Accounts payable . . . . .	\$ (225,000)	\$(167,000)
Bonds payable . . . . .	(300,000)	(100,000)
Discount on bonds . . . . .	12,000	–0–
Common stock . . . . .	(300,000)	(120,000)
Retained earnings (above) . . . . .	<u>(437,000)</u>	<u>(423,000)</u>
Total liabilities and stockholders’ equity . . . . .	<u>\$(1,250,000)</u>	<u>\$(810,000)</u>

## LO 6-3



45. Fred, Inc., and Herman Corporation formed a business combination on January 1, 2016, when Fred acquired a 60 percent interest in Herman's common stock for \$312,000 in cash. The book value of Herman's assets and liabilities on that day totaled \$300,000 and the fair value of the noncontrolling interest was \$208,000. Patents being held by Herman (with a 12-year remaining life) were undervalued by \$90,000 within the company's financial records and a customer list (10-year life) worth \$130,000 was also recognized as part of the acquisition-date fair value.

Intra-entity inventory transfers occur regularly between the two companies. Merchandise carried over from one year to the next is always sold in the subsequent period.

Year	Original Cost to Herman	Transfer Price to Fred	Ending Balance at Transfer Price
2016	\$80,000	\$100,000	\$20,000
2017	100,000	125,000	40,000
2018	90,000	120,000	30,000

Fred had not paid for half of the 2018 inventory transfers by year-end.

On January 1, 2017, Fred sold \$15,000 in land to Herman for \$22,000. Herman is still holding this land.

On January 1, 2018, Herman acquired \$20,000 (face value) of Fred's bonds in the open market. These bonds had an 8 percent cash interest rate. On the date of repurchase, the liability was shown within Fred's records at \$21,386, indicating an effective yield of 6 percent. Herman's acquisition price was \$18,732 based on an effective interest rate of 10 percent.

Herman indicated earning a net income of \$25,000 within its 2018 financial statements. The subsidiary also reported a beginning Retained Earnings balance of \$300,000, dividends of \$4,000, and common stock of \$100,000. Herman has not issued any additional common stock since its takeover. The parent company has applied the equity method to record its investment in Herman.

- Prepare consolidation worksheet adjustments for 2018.
  - Calculate the amount of consolidated net income attributable to the noncontrolling interest for 2018. In addition, determine the ending 2018 balance for noncontrolling interest in the consolidated balance sheet.
  - Determine the consolidation worksheet adjustments needed in 2019 in connection with the intra-entity bonds.
46. On January 1, 2017, Mona, Inc., acquired 80 percent of Lisa Company's common stock as well as 60 percent of its preferred shares. Mona paid \$65,000 in cash for the preferred stock, with a call value of 110 percent of the \$50 per share par value. The remaining 40 percent of the preferred shares traded at a \$34,000 fair value. Mona paid \$552,800 for the common stock. At the acquisition date, the noncontrolling interest in the common stock had a fair value of \$138,200. The excess fair value over Lisa's book value was attributed to franchise contracts of \$40,000. This intangible asset is being amortized over a 40-year period. Lisa pays all preferred stock dividends (a total of \$8,000 per year) on an annual basis. During 2017, Lisa's book value increased by \$50,000.
- On January 2, 2017, Mona acquired one-half of Lisa's outstanding bonds payable to reduce the business combination's debt position. Lisa's bonds had a face value of \$100,000 and paid cash interest of 10 percent per year. These bonds had been issued to the public to yield 14 percent. Interest is paid each December 31. On January 2, 2017, these bonds had a total \$88,350 carrying amount. Mona paid \$53,310, indicating an effective interest rate of 8 percent.
- On January 3, 2017, Mona sold Lisa fixed assets that had originally cost \$100,000 but had accumulated depreciation of \$60,000 when transferred. The transfer was made at a price of \$120,000. These assets were estimated to have a remaining useful life of 10 years.
- The individual financial statements for these two companies for the year ending December 31, 2018, are as follows:

## LO 6-3, 6-4

	Mona, Inc.	Lisa Company
Sales and other revenues . . . . .	\$ (500,000)	\$ (200,000)
Expenses . . . . .	220,000	120,000
Dividend income—Lisa common stock . . . . .	(8,000)	—0—
Dividend income—Lisa preferred stock . . . . .	(4,800)	—0—
Net income. . . . .	<u>\$ (292,800)</u>	<u>\$ (80,000)</u>
Retained earnings, 1/1/18. . . . .	\$ (700,000)	\$ (500,000)
Net income (above) . . . . .	(292,800)	(80,000)
Dividends declared—common stock . . . . .	92,800	10,000
Dividends declared—preferred stock . . . . .	—0—	8,000
Retained earnings, 12/31/18 . . . . .	<u>\$ (900,000)</u>	<u>\$ (562,000)</u>
Current assets . . . . .	\$ 130,419	\$ 500,000
Investment in Lisa—common stock . . . . .	552,800	—0—
Investment in Lisa—preferred stock . . . . .	65,000	—0—
Investment in Lisa—bonds. . . . .	51,781	—0—
Fixed assets . . . . .	1,100,000	800,000
Accumulated depreciation . . . . .	(300,000)	(200,000)
Total assets . . . . .	<u>\$ 1,600,000</u>	<u>\$ 1,100,000</u>
Accounts payable . . . . .	\$ (400,000)	\$ (144,580)
Bonds payable. . . . .	—0—	(100,000)
Discount on bonds payable . . . . .	—0—	6,580
Common stock . . . . .	(300,000)	(200,000)
Preferred stock . . . . .	—0—	(100,000)
Retained earnings, 12/31/18 . . . . .	(900,000)	(562,000)
Total liabilities and equities. . . . .	<u>\$ (1,600,000)</u>	<u>\$ (1,100,000)</u>

- a. What consolidation worksheet adjustments would have been required as of January 1, 2017, to eliminate the subsidiary’s common and preferred stocks?
- b. What consolidation worksheet adjustments would have been required as of December 31, 2017, to account for Mona’s purchase of Lisa’s bonds?
- c. What consolidation worksheet adjustments would have been required as of December 31, 2017, to account for the intra-entity sale of fixed assets?
- d. Assume that consolidated financial statements are being prepared for the year ending December 31, 2018. Calculate the consolidated balance for each of the following accounts:
  - Franchises
  - Fixed Assets
  - Accumulated Depreciation
  - Expenses

**LO 6-5**

47. Bolero Company holds 80 percent of the common stock of Rivera, Inc., and 40 percent of this subsidiary’s convertible bonds. The following consolidated financial statements are for 2017 and 2018:

<b>Bolero Company and Consolidated Subsidiary Rivera</b>		
	<b>2017</b>	<b>2018</b>
Revenues . . . . .	\$ (900,000)	\$(1,030,000)
Cost of goods sold . . . . .	610,000	650,000
Depreciation and amortization . . . . .	100,000	120,000
Gain on sale of building . . . . .	—0—	(30,000)
Interest expense . . . . .	40,000	40,000
Consolidated net income . . . . .	(150,000)	(250,000)
to noncontrolling interest . . . . .	19,000	21,000
to parent company . . . . .	<u>\$ (131,000)</u>	<u>\$ (229,000)</u>

*(continued)*



(continued)

<b>Bolero Company and Consolidated Subsidiary Rivera</b>		
	<b>2017</b>	<b>2018</b>
Retained earnings, 1/1.....	\$ (310,000)	\$ (381,000)
Net income.....	(131,000)	(229,000)
Dividends declared.....	60,000	110,000
Retained earnings, 12/31.....	<u>\$ (381,000)</u>	<u>\$ (500,000)</u>
Cash.....	\$ 90,000	\$ 180,000
Accounts receivable.....	170,000	150,000
Inventory.....	210,000	360,000
Buildings and equipment (net).....	650,000	710,000
Databases.....	170,000	155,000
Total assets.....	<u>\$ 1,290,000</u>	<u>\$ 1,555,000</u>
Accounts payable.....	\$ (160,000)	\$ (110,000)
Bonds payable.....	(410,000)	(520,000)
Noncontrolling interest in Rivera.....	(42,000)	(61,000)
Common stock.....	(110,000)	(140,000)
Additional paid-in capital.....	(187,000)	(224,000)
Retained earnings.....	<u>(381,000)</u>	<u>(500,000)</u>
Total liabilities and equities.....	<u>\$ (1,290,000)</u>	<u>\$ (1,555,000)</u>

**Additional Information for 2018**

- The parent issued bonds during the year for cash.
- Amortization of databases amounts to \$15,000 per year.
- The parent sold a building with a cost of \$80,000 but a \$40,000 book value for cash on May 11.
- The subsidiary purchased equipment on July 23 for \$205,000 in cash.
- Late in November, the parent issued stock for cash.
- During the year, the subsidiary paid dividends of \$10,000. Both parent and subsidiary pay dividends in the same year as declared.

Prepare a consolidated statement of cash flows for this business combination for the year ending December 31, 2018. (Use indirect method.)

48. Following are separate income statements for Austin, Inc., and its 80 percent–owned subsidiary, Rio Grande Corporation as well as a consolidated statement for the business combination as a whole.

	<b>Austin</b>	<b>Rio Grande</b>	<b>Consolidated</b>
Revenues.....	\$(700,000)	\$(500,000)	\$(1,200,000)
Cost of goods sold.....	400,000	300,000	700,000
Operating expenses.....	100,000	70,000	195,000
Equity in earnings of Rio Grande.....	<u>(84,000)</u>		
Individual company net income.....	<u>\$(284,000)</u>	<u>\$(130,000)</u>	
Consolidated net income.....			<u>\$ (305,000)</u>
Noncontrolling interest in consolidated net income.....			<u>(21,000)</u>
Consolidated net income attributable to Austin.....			<u>\$ (284,000)</u>

**Additional Information**

- Annual excess fair over book value amortization of \$25,000 resulted from the acquisition.
- The parent applies the equity method to this investment.

LO 6-6

**excel**

- Austin has 50,000 shares of common stock and 10,000 shares of preferred stock outstanding. Owners of the preferred stock are paid an annual dividend of \$40,000, and each share can be exchanged for two shares of common stock.
- Rio Grande has 30,000 shares of common stock outstanding. The company also has 5,000 stock warrants outstanding. For \$10, each warrant can be converted into a share of Rio Grande's common stock. Austin holds half of these warrants. The price of Rio Grande's common stock was \$20 per share throughout the year.
- Rio Grande also has convertible bonds, none of which Austin owned. During the current year, total interest expense (net of taxes) was \$22,000. These bonds can be exchanged for 10,000 shares of the subsidiary's common stock.

Determine Austin's basic and diluted EPS.

49. On January 1, Paisley, Inc., paid \$560,000 for all of Skyler Corporation's outstanding stock. This cash payment was based on a price of \$180 per share for Skyler's \$100 par value preferred stock and \$38 per share for its \$20 par value common stock. The preferred shares are voting, cumulative, and fully participating. At the acquisition date, the book values of Skyler's accounts equaled their fair values. Any excess fair value is assigned to an intangible asset and will be amortized over a 10-year period.

During the year, Skyler sold inventory costing \$60,000 to Paisley for \$90,000. All but \$18,000 (measured at transfer price) of this merchandise has been resold to outsiders by the end of the year. At the end of the year, Paisley continues to owe Skyler for the last shipment of inventory priced at \$28,000.

Also, on January 2 Paisley sold Skyler equipment for \$20,000 although it had a carrying amount of only \$12,000 (original cost of \$30,000). Both companies depreciate such property according to the straight-line method with no salvage value. The remaining life at this date was four years.

The following financial statements are for each company for the year ending December 31. Determine consolidated financial totals for this business combination.

	Paisley, Inc.	Skyler Corporation
Sales .....	\$ (800,000)	\$(400,000)
Cost of goods sold .....	528,000	260,000
Expenses .....	180,000	130,000
Gain on sale of equipment .....	(8,000)	-0-
Net income .....	<u>\$ (100,000)</u>	<u>\$ (10,000)</u>
Retained earnings, 1/1 .....	\$ (400,000)	\$(150,000)
Net income .....	(100,000)	(10,000)
Dividends declared .....	60,000	-0-
Retained earnings, 12/31 .....	<u>\$ (440,000)</u>	<u>\$(160,000)</u>
Cash .....	\$ 30,000	\$ 40,000
Accounts receivable .....	300,000	100,000
Inventory .....	260,000	180,000
Investment in Skyler Corporation .....	560,000	-0-
Land, buildings, and equipment .....	680,000	500,000
Accumulated depreciation .....	(180,000)	(90,000)
Total assets .....	<u>\$ 1,650,000</u>	<u>\$ 730,000</u>
Accounts payable .....	\$ (140,000)	\$ (90,000)
Long-term liabilities .....	(240,000)	(180,000)
Preferred stock .....	-0-	(100,000)
Common stock .....	(620,000)	(200,000)
Additional paid-in capital .....	(210,000)	-0-
Retained earnings, 12/31 .....	<u>(440,000)</u>	<u>(160,000)</u>
Total liabilities and equity .....	<u>\$ (1,650,000)</u>	<u>\$(730,000)</u>

LO 6-6

**excel**

## LO 6-5

50. On June 30, 2018, Plaster, Inc., paid \$916,000 for 80 percent of Stucco Company's outstanding stock. Plaster assessed the acquisition-date fair value of the 20 percent noncontrolling interest at \$229,000. At acquisition date, Stucco reported the following book values for its assets and liabilities:

Cash .....	\$ 60,000
Accounts receivable.....	127,000
Inventory.....	203,000
Land.....	65,000
Buildings.....	175,000
Equipment .....	300,000
Accounts payable.....	(35,000)

On June 30, Plaster allocated the excess acquisition-date fair value over book value to Stucco's assets as follows:

Equipment (3-year remaining life) .....	\$ 75,000
Database (10-year remaining life) .....	175,000

At the end of 2018, the following comparative (2017 and 2018) balance sheets and consolidated income statement were available:

	<b>Plaster, Inc. December 31, 2017</b>	<b>Consolidated December 31, 2018</b>
Cash .....	\$ 43,000	\$ 242,850
Accounts receivable (net).....	362,000	485,400
Inventory .....	415,000	720,000
Land .....	300,000	365,000
Buildings (net).....	245,000	370,000
Equipment (net) .....	1,800,000	2,037,500
Database.....	—0—	166,250
Total assets.....	<u>\$3,165,000</u>	<u>\$4,387,000</u>
Accounts payable .....	\$ 80,000	\$ 107,000
Long-term liabilities .....	400,000	1,200,000
Common stock.....	1,800,000	1,800,000
Noncontrolling interest .....	—0—	255,500
Retained earnings .....	<u>885,000</u>	<u>1,024,500</u>
Total liabilities and equities .....	<u>\$3,165,000</u>	<u>\$4,387,000</u>

**PLASTER, INC., AND SUBSIDIARY STUCCO COMPANY**  
**Consolidated Income Statement**  
**For the Year Ended December 31, 2018**

Revenues .....		\$1,217,500
Cost of goods sold .....	\$737,500	
Depreciation .....	187,500	
Database amortization.....	8,750	
Interest and other expenses.....	<u>9,750</u>	<u>943,500</u>
Consolidated net income .....		<u>\$ 274,000</u>

**Additional Information for 2018**

- On December 1, Stucco paid a \$40,000 dividend. During the year, Plaster paid \$100,000 in dividends.
- During the year, Plaster issued \$800,000 in long-term debt at par.
- Plaster reported no asset purchases or dispositions other than the acquisition of Stucco.

Prepare a 2018 consolidated statement of cash flows for Plaster and Stucco. Use the indirect method of reporting cash flows from operating activities.

## Develop Your Skills

### EXCEL CASE: INTRA-ENTITY BONDS



Place Company owns a majority voting interest in Sassano, Inc. On January 1, 2016, Place issued \$1,000,000 of 11 percent 10-year bonds at \$943,497.77 to yield 12 percent. On January 1, 2018, Sassano purchased all of these bonds in the open market at a price of \$904,024.59 with an effective yield of 13 percent.

#### Required

Using an Excel spreadsheet, do the following:

1. Prepare amortization schedules for the Place Company bonds payable and the Investment in Place Bonds for Sassano, Inc.
2. Using the values from the amortization schedules, compute the worksheet adjustment for a December 31, 2018, consolidation of Place and Sassano to reflect the effective retirement of the Place bonds. Formulate your solution to be able to accommodate various yield rates (and therefore prices) on the repurchase of the bonds.

#### Hints

Present value of 1 =  $1/(1 + r)^n$

Present value of an annuity of 1 =  $(1 - 1/[1 + r]^n)/r$

Where  $r$  = effective yield and  $n$  = years remaining to maturity

### RESEARCH CASE: STATEMENT OF CASH FLOWS



Download Pfizer's 2015 annual report (search Pfizer Investor Relations). Locate the firm's consolidated statement of cash flows and answer the following:

- Does the firm employ the direct or indirect method of accounting for operating cash flows?
- Why does the firm account for the changes in balances in operating accounts (e.g., accounts receivable, inventory, accounts payable) in determining operating cash flows as net of acquisitions and divestitures?
- Describe the accounting for cash paid for business acquisitions in the statement of cash flows.
- Describe the accounting for any noncontrolling subsidiary interest and any other business combination-related items in the consolidated statement of cash flows.

### FINANCIAL REPORTING RESEARCH AND ANALYSIS CASE



The FASB ASC Subtopic "Variable Interest Entities" affects thousands of business enterprises that now, as primary beneficiaries, consolidate entities that qualify as controlled VIEs. Retrieve the annual reports of one or more of the following companies (or any others you may find) that consolidate VIEs:

- The Walt Disney Company.
- General Electric.
- Allegheny Energy.

#### Required

Write a brief report that describes

1. The reasons for consolidation of the company's VIE(s).
2. The effect of the consolidation of the VIE(s) on the company's financial statements.



# Consolidated Financial Statements—Ownership Patterns and Income Taxes

Chapter 7 concludes coverage of the accounting for business combinations by analyzing two additional aspects of consolidated financial statements. First, we present the various ownership patterns that can exist within a combination. We examine indirect control of a subsidiary, connecting affiliations, and mutual ownership as well as the consolidation procedures applicable to each organizational structure. The chapter then provides an overview of the income tax considerations relevant to the members of a business combination. We discuss income tax accounting for both consolidated and separate corporate returns in light of current laws.

## Indirect Subsidiary Control

Chapters 2 through 5 focus primarily on one particular type of financial control structure for a consolidated entity. Specifically, a parent holds a direct majority voting interest in a single subsidiary. This ownership pattern expedites the explanation of consolidation theories and techniques. In practice, though, more elaborate corporate ownership structures commonly exist. Alphabet, Inc., for example, controls several subsidiaries. However, Alphabet does not directly own voting stock in many of these companies. It maintains control through indirect ownership because Alphabet's subsidiaries are majority stockholders of many of the companies within the consolidated entity. For example, Alphabet, the parent company, owns Google, which in turn has controlling financial interests in other companies such as Android and YouTube. This type of corporate configuration is referred to as a *father-son-grandson relationship* because of the pattern the descending tiers create. Other examples of such ownership structures can be found at Ford, Berkshire Hathaway, General Electric, and many more corporations.

The formation of a business combination (the acquisition of a controlling financial interest) through indirect ownership is not an unusual practice. Many businesses organize their operations in this manner to group individual companies along product lines, geographic districts, or other logical criteria. The philosophy behind this structuring is that placing direct control in proximity to each subsidiary can develop clearer lines of communication and responsibility reporting. However, other indirect ownership

## Learning Objectives

After studying this chapter, you should be able to:

- LO 7-1** Demonstrate the consolidation process when indirect control is present in a grandfather-father-son ownership configuration.
- LO 7-2** Demonstrate the consolidation process when a corporate ownership structure is characterized by a connecting affiliation.
- LO 7-3** Demonstrate the consolidation process when a corporate ownership structure is characterized by mutual ownership.
- LO 7-4** List the criteria for being a member of an affiliated group for income tax filing purposes.
- LO 7-5** Compute taxable income and deferred tax amounts for an affiliated group based on information presented in a consolidated set of financial statements.
- LO 7-6** Compute taxable income and deferred tax amounts to be recognized when separate tax returns are filed by any of the affiliates of a business combination.
- LO 7-7** Determine the deferred tax consequences for temporary differences generated when a business combination is created.
- LO 7-8** Explain the impact that a net operating loss of an acquired affiliate has on consolidated figures.

**LO 7-1**

Demonstrate the consolidation process when indirect control is present in a grandfather-father-son ownership configuration.

patterns are simply the result of years of acquisition and growth. As an example, when Procter & Gamble acquired the Gillette Company, it gained control over Gillette's subsidiaries including Oral-B Laboratories, Braun AG, and others. Procter & Gamble did not achieve this control directly, but indirectly through the acquisition of the parent company.

### The Consolidation Process When Indirect Control Is Present

Regardless of a company's reason for establishing indirect control over a subsidiary, a new accounting challenge emerges: The parent must consolidate financial information from each of the connecting corporations into a single set of financial statements. Fortunately, indirect ownership does not introduce any new conceptual issues but affects only the mechanical elements of this process. For example, in preparing consolidated statements, the parent company must allocate acquisition-date fair values and recognize any related excess amortizations for each affiliate regardless of whether control is direct or indirect. In addition, all worksheet entries previously demonstrated continue to apply. For consolidated entities involving indirect control, the entire consolidation process is basically repeated for each separate affiliate.

#### *Calculation of Subsidiary Income*

Although the presence of an indirect ownership does not change most consolidation procedures, a calculation of each subsidiary's accrual-based income does pose some difficulty. Appropriate income determination is essential for calculating (1) equity income accruals and (2) the net income attributable to the noncontrolling interest.

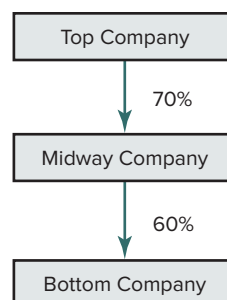
In consolidated entities with indirect control, at least one company (and possibly many) holds both a parent and a subsidiary position. A company in that position must first recognize the equity income accruing from its subsidiaries before computing its own net income total. The process begins with the grandson, then moves to the son, and finishes with the father. Only by following this systematic approach is the correct amount of accrual-based net income determined for each individual company.

In computing consolidated net income, we adjust the subsidiary's reported earnings for excess fair-value amortizations and any upstream intra-entity transfers. In consolidated entities with indirect control, these same adjustments are made for each company's separate income, beginning at the lowest level. The respective accrual-based income figures for each affiliate in the consolidated entity therefore must take into account

- Excess acquisition-date fair over book value amortizations.
- Deferrals and subsequent income recognition from intra-entity transfers. The income effects can include gains from long-term asset transfers or gross profits from inventory transfers. In subsequent illustrations, we refer to both types as "gains."

#### *Income Computation Illustrated*

For example, assume that three companies form a business combination: Top Company owns 70 percent of Midway Company which, in turn, possesses 60 percent of Bottom Company. As the following display indicates, Top controls both subsidiaries, although the parent's relationship with Bottom is only of an indirect nature.



Assume next that the following information comes from the 2018 individual financial records of the three companies making up this combination:

	Top Company	Midway Company	Bottom Company
Separate company net income (before investment income) . . . . .	\$600,000	\$300,000	\$100,000
Dividend income from investment in subsidiary (based on initial value method) . . . . .	<u>80,000</u>	<u>50,000</u>	
Internally calculated net income . . . . .	<u>\$680,000</u>	<u>\$350,000</u>	<u>\$100,000</u>
Additional information:			
Amortization expense from acquisition-date excess fair over book value . . . . .		\$ 30,000	\$ 25,000
Net deferred intra-entity gains within current year income . . . . .	\$110,000	80,000	20,000

As specified, we begin with the grandson of the organization and calculate each company's 2018 accrual-based income. From the perspective of the consolidated entity, Bottom's income for the period is only \$55,000 after deferring the \$20,000 in net intra-entity gains and recognizing the \$25,000 excess amortization associated with the acquisition by Midway. Thus, \$55,000 is the basis for the equity accrual by its parent and noncontrolling interest recognition. Once the grandson's income has been derived, this figure then is used to compute the accrual-based earnings of the son, Midway:

Separate company net income—Midway Company . . . . .		\$300,000
Equity income accruing from Bottom Company—		
Bottom's income from internal records . . . . .	\$100,000	
Excess amortization related to Midway acquisition . . . . .	(25,000)	
Net intra-entity gain deferral . . . . .	<u>(20,000)</u>	
Bottom's accrual-based net income . . . . .	\$ 55,000	
Midway's percentage ownership . . . . .	<u>60%</u>	
Midway's share of Bottom's net income . . . . .		33,000
Excess amortization from Top's acquisition of Midway . . . . .		(30,000)
Deferral of Midway's intra-entity gain (above) . . . . .		<u>(80,000)</u>
Accrual-based net income of Midway Company . . . . .		<u>\$223,000</u>

Midway's \$223,000 accrual-based income differs from its separate internally calculated profit of \$350,000. The difference reflects a consolidated perspective for the entire ownership structure including excess amortization and intra-entity transfers. Continuing with the successive derivation of each company's net income, we now can determine Top Company's net income. After computing the son's net income, the father's net income is derived as follows:

Separate company income—Top Company . . . . .	\$600,000
Equity income accruing from Midway Company—70% of \$223,000 (above) . . . . .	156,100
Deferral of Top's net intra-entity gain (above) . . . . .	<u>(110,000)</u>
Accrual-based net income of Top Company . . . . .	<u>\$646,100</u>

We should note several aspects of the accrual-based income data:

1. The 2018 income statement for Top Company and its consolidated subsidiaries discloses an \$88,900 balance as the "net income attributable to the noncontrolling interest." The



total accrual-based income figures of the two subsidiaries provide the basis for the calculation as follows:

	Accrual-Based Income	Outside Ownership	Noncontrolling Interest in Net Income
Bottom Company . . . . .	\$ 55,000	40%	\$22,000
Midway Company . . . . .	223,000	30	66,900
Total . . . . .			<u>\$88,900</u>

- Although this illustration applies the initial value method to both investments, the parent's individual accounting does not affect accrual-based income totals. The initial value figures are simply replaced with equity accruals in preparation for consolidation. The selection of a particular method is relevant only for internal reporting purposes; earnings, as shown here, are based entirely on the equity income accruing from each subsidiary.
- As demonstrated previously, if appropriate equity accruals are recognized, the sum of the parent's accrual-based net income and the noncontrolling interest net income share serves as a "proof figure" for the consolidated total. Thus, if the consolidation process is performed correctly, the earnings this entire organization reports should equal \$735,000 (\$646,100 + \$88,900). Observe that consolidated net income can also be computed as follows:

Sum of Top, Midway, and Bottom separate company incomes . . . . .	\$1,000,000
Less: Combined excess fair-value amortizations . . . . .	(55,000)
Less: Combined net intra-entity gain deferrals . . . . .	<u>(210,000)</u>
Consolidated net income . . . . .	<u>\$ 735,000</u>

- Although Midway possesses 60 percent of Bottom's voting stock, only 42 percent of Bottom's income is attributed to Top's controlling interest (70% direct ownership of Midway  $\times$  60% indirect ownership of Bottom). The subsidiary's remaining income is assigned to the noncontrolling interest.

To demonstrate the accuracy of this percentage, we construct a brief example. Assume that neither Top nor Midway reports any earnings during the year but that Bottom has \$100 in accrual-based income. If Bottom declares a \$100 cash dividend, \$60 goes to Midway and the remaining \$40 goes to Bottom's noncontrolling interest. Assuming then that Midway uses this \$60 to pay its own dividend, \$42 (70 percent) is transferred to Top and \$18 goes to Midway's outside owners.

Thus, 58 percent of Bottom's income is attributed to parties outside the consolidated entity. An initial 40 percent belongs to Bottom's own noncontrolling interest and an additional 18 percent accrues to Midway's other shareholders. Only 42 percent of Bottom's original income is considered attributable to the consolidated entity. Consolidated financial statements reflect this allocation by including 100 percent of the subsidiary's revenues and expenses and allocating 58 percent of the subsidiary's net income to the noncontrolling interest.

### Consolidation Process—Indirect Control

After analyzing the income calculations within a father-son-grandson configuration, a full-scale consolidation can be produced. As demonstrated, this type of ownership pattern does not alter significantly the worksheet process. Most worksheet entries are simply made twice: first for the son's investment in the grandson and then for the father's ownership of the son.

Although this sudden doubling of entries may seem overwhelming, close examination reveals that the individual procedures remain unaffected.

To illustrate, assume that on January 1, 2016, Big acquires 80 percent of Middle's outstanding common stock for \$640,000. On that date, Middle has a book value (total stockholders' equity) of \$700,000 and the 20 percent noncontrolling interest has a fair value of \$160,000. The resulting excess of subsidiary fair value over book value is assigned to franchises and amortized at the rate of \$10,000 per year.

Following the acquisition, Middle's book value rises to \$1,080,000 by the end of 2018, denoting a \$380,000 increment during this three-year period (\$1,080,000 – \$700,000). Big applies the partial equity method; therefore, the parent accrues a \$304,000 (\$380,000 × 80%) increase in the investment account (to \$944,000) over this same time span.

On January 1, 2017, Middle acquires 70 percent of Little for \$462,000. Little's stockholders' equity accounts total \$630,000 and the fair value of the 30 percent noncontrolling interest is \$198,000. Middle allocates this entire \$30,000 excess fair value to franchises so that, over a six-year assumed remaining life, the consolidated entity recognizes amortization expense of \$5,000 each year. During 2017–2018, Little's book value increases by \$150,000, to a \$780,000 total. Because Middle also applies the partial equity method, it adds \$105,000 (\$150,000 × 70%) to the investment account to arrive at a \$567,000 balance (\$462,000 + \$105,000).

To complete the introductory information for this illustration, assume that a number of intra-entity upstream transfers occurred over the past two years. The following table shows the dollar volume of these transactions and the intra-entity gross profit in each year's ending inventory:

Year	Little Company Transfers to Middle Company		Middle Company Transfers to Big Company	
	Transfer Price	Year-End Deferred Gross Profit	Transfer Price	Year-End Deferred Gross Profit
2017	\$ 75,000	\$17,500	\$200,000	\$30,000
2018	120,000	25,000	250,000	40,000

Exhibit 7.1 presents the worksheet to consolidate these three companies for the year ending December 31, 2018. The first three columns represent the individual statements for each entity. The entries required to consolidate the various balances follow this information. To identify the separate procedures, entries concerning the relationship between Big (father) and Middle (son) are marked with a "B," whereas an "L" denotes Middle's ownership of Little (grandson). Duplicating entries in this exhibit are designed to facilitate a clearer understanding of this consolidation. A number of these dual entries can be combined later.

To arrive at consolidated figures, Exhibit 7.1 incorporates the worksheet entries described next. Analyzing each of these adjustments and eliminations can identify the consolidation procedures necessitated by a father-son-grandson ownership pattern. Despite the presence of indirect control over Little, financial statements are created for the consolidated entity as a whole utilizing the process described in previous chapters.

### **Consolidation Entry \*G**

Entry \*G defers the intra-entity gross profits contained in the beginning financial figures. Within their separate accounting systems, two of the companies prematurely recorded income (\$17,500 by Little and \$30,000 by Middle) in 2017 at the transfer. For consolidation purposes, a 2017 worksheet entry eliminates these gross profits from both beginning Retained Earnings as well as Cost of Goods Sold (the present location of the beginning inventory). Consequently, the consolidated income statement recognizes the appropriate gross profit for the current period.

**EXHIBIT 71**

**BIG COMPANY AND CONSOLIDATED SUBSIDIARIES**  
**Consolidation Worksheet**  
**For Year Ending December 31, 2018**

*Indirect Control: Father-Son-Grandson Investment: Partial Equity Method*

Accounts	Big Company	Middle Company	Little Company	Consolidation Entries		Noncontrolling Interest	Consolidated Totals
				Debit	Credit		
<b>Income Statement</b>							
Sales	(800,000)	(500,000)	(300,000)	(LTl) 120,000 (BTl) 250,000			(1,230,000)
Cost of goods sold	300,000	220,000	140,000	(LG) 25,000	(L*G) 17,500 (LTl) 120,000		307,500
Expenses	200,000	80,000	60,000	(BG) 40,000	(B*G) 30,000 (BTl) 250,000		355,000
Income of Little Company	-0-	(70,000)	-0-	(LE) 5,000 (BE) 10,000			-0-
Income of Middle Company	(216,000)	-0-	-0-	(LI) 70,000 (BI) 216,000			-0-
Separate company net income	(516,000)	(270,000)	100,000				(567,500)
Consolidated net income							
Net income attributable to noncontrolling interest (Little)						(26,250)	26,250
Net income attributable to noncontrolling interest (Middle)						(48,250)	48,250
Net income attributable to Big Company							(493,000)
<b>Statement of Retained Earnings</b>							
Retained earnings, 1/1/18:							
Big Company	(900,000)	-0-	-0-	(B*C) 52,600 (B*G) 30,000			(847,400)
Middle Company	-0-	(800,000)	-0-	(L*C) 15,750 (BS) 754,250			-0-
Little Company	-0-	-0-	(600,000)	(L*G) 17,500 (LS) 582,500		-0-	(493,000)
Net income (from above)	(516,000)	(270,000)	(100,000)				
Dividends declared:							
Big Company	120,000	-0-	-0-				120,000
Middle Company	-0-	90,000	-0-		(BD) 72,000	18,000	-0-
Little Company	-0-	-0-	50,000		(LD) 35,000	15,000	-0-
Retained earnings, 12/31/18	(1,296,000)	(980,000)	(650,000)				(1,220,400)

(continued)

**EXHIBIT 71 (Continued)**

Accounts	Big Company	Middle Company	Little Company	Consolidation Entries		Noncontrolling Interest	Consolidated Totals
				Debit	Credit		
<b>Balance Sheet</b>							
Cash and receivables	600,000	300,000	280,000		(LG) 25,000		1,180,000
Inventory	300,000	260,000	290,000		(BG) 40,000		785,000
Investment in Middle Company	944,000	-0-	-0-	(BD) 72,000	(B*C) 52,600 (BS) 683,400 (BI) 216,000 (BA) 64,000		-0-
Investment in Little Company	-0-	567,000	-0-	(LD) 35,000	(L*C) 15,750 (LS) 498,750 (LI) 70,000 (LA) 17,500		-0-
Land, buildings, equipment Franchises	192,000 -0-	153,000 -0-	510,000 -0-	(LA) 25,000 (BA) 80,000	(LE) 5,000 (BE) 10,000		855,000 90,000
Total assets	2,036,000	1,280,000	1,080,000				2,910,000
Liabilities	(340,000)	(200,000)	(300,000)				(840,000)
Noncontrolling interest in Little Company, 1/1/18	-0-	-0-	-0-		(LS) 213,750 (LA) 7,500	(221,250)	
Noncontrolling interest in Middle Company, 1/1/18	-0-	-0-	-0-		(BS) 170,850 (BA) 16,000	(186,850)	
Total noncontrolling interest, 12/31/18	-0-	-0-	-0-			(449,600)	(449,600)
Common stock:							
Big Company	(400,000)	-0-	-0-				(400,000)
Middle Company	-0-	(100,000)	-0-	(BS) 100,000			-0-
Little Company	-0-	-0-	(130,000)	(LS) 130,000			-0-
Retained earnings (above)	(1,296,000)	(980,000)	(650,000)				(1,220,400)
Total liabilities and equities	(2,036,000)	(1,280,000)	(1,080,000)	2,630,600	2,630,600		(2,910,000)

Note: Parentheses indicate a credit balance.  
 Consolidation entries: Entries labeled with a "B" refer to the investment relationship between Big and Middle. Entries with an "L" refer to Middle's ownership of Little.  
 (\*C) Removal of intra-entity gross profit from beginning inventory figures so that it can be recognized in current period.  
 (S) Conversion of partial equity method to equity method. Amortization for prior years is recognized along with effects of beginning intra-entity upstream gross profits.  
 (A) Elimination of subsidiaries' stockholders' equity accounts along with recognition of January 1, noncontrolling interests.  
 (A) Allocation to franchises, unamortized balance being recognized as of January 1.  
 (I) Elimination of intra-entity income accrued during the period.  
 (D) Elimination of intra-entity dividends.  
 (E) Recognition of amortization expense for the current period.  
 (TI) Elimination of intra-entity sales/purchases balances created by the transfer of inventory.  
 (G) Deferral of intra-entity inventory gross profit from ending figures to be recognized in subsequent periods.

**Consolidation Entry \*C**

Neither Big nor Middle applies the full equity method to its investments; therefore, the figures recognized during the years prior to the current period (2018) must now be updated on the worksheet. This process begins with the son's ownership of the grandson. Hence, Middle must reduce its 2017 income (now closed into Retained Earnings) by \$3,500 to reflect the amortization applicable to that year. Middle did not record this expense in applying the partial equity method.

In addition, because \$17,500 of Little's previously reported earnings have just been deferred (in preceding Entry \*G), the effect of this reduction on Middle's ownership must also be recognized. The parent's original equity accrual for 2017 is based on reported rather than accrual-based profit, thus recording too much income. Little's deferral necessitates Middle's parallel \$12,250 decrease ( $\$17,500 \times 70\%$ ). Consequently, the worksheet reduces Middle's Retained Earnings balance as of January 1, 2018, and the Investment in Little account by a total of \$15,750:

**Reduction in Middle's Beginning Retained Earnings**

2017 amortization expense ( $\$5,000 \times 70\%$ ) . . . . .	\$ 3,500
Income effect created by Little's deferral of 2017 intra-entity gross profit (reduction of previous accrual) ( $\$17,500 \times 70\%$ ) . . . . .	12,250
Required reduction to Middle's beginning retained earnings (Entry <b>L*C</b> ) . . . . .	<u>\$15,750</u>

A similar equity adjustment is required in connection with Big's ownership of Middle. The calculation of the specific amount to be recorded follows the same procedure identified earlier for Middle's investment in Little. Again, amortization expense for all prior years (2016 and 2017, in this case) is brought into the consolidation as well as the income reduction created by the deferral of Middle's \$30,000 intra-entity gross profit (Entry \*G). *However, recognition also must be given to the effects associated with the \$15,750 decrease in Middle's pre-2018 earnings described in the previous paragraph.* Although entered only on the worksheet, this adjustment is a change in Middle's originally reported income. To reflect Big's ownership of Middle, the effect of this reduction must be included in determining the income balances actually accruing to the parent company. Thus, a \$52,600 decrease is needed in Big's beginning Retained Earnings to establish the proper accounting for its subsidiaries:

**Reduction in Big's Beginning Retained Earnings**

Amortization expense relating to Middle Company acquisition— 2016–2017 ( $\$10,000$ per year $\times 80\%$ ) . . . . .	\$16,000
Income effect created by Middle Company's deferral of intra-entity gross profit ( $\$30,000 \times 80\%$ ) . . . . .	24,000
Income effect created by Middle Company's adjustment to its prior year's investment income ( $\$15,750 \times 80\%$ ) (above) . . . . .	12,600
Required reduction to Big's beginning retained earnings (Entry <b>B*C</b> ) . . . . .	<u>\$52,600</u>

**Consolidation Entry S**

The beginning stockholders' equity accounts of each subsidiary are eliminated here, and noncontrolling interest balances as of the beginning of the year are recognized. As in previous chapters, the preliminary adjustments described earlier directly affect the amounts involved in this entry. Because Entry \*G removed a \$17,500 beginning inventory profit, Little's January 1, 2018, book value on the worksheet is \$712,500, not \$730,000. This total is the basis for the \$213,750 beginning noncontrolling interest (30 percent) and the \$498,750 elimination (70 percent) from the parent's investment account.

Similarly, Entries \*G (\$30,000) and \*C (\$15,750) have already decreased Middle's book value by \$45,750. Thus, this company's beginning stockholders' equity accounts are now adjusted to a total of \$854,250 ( $\$900,000 - \$45,750$ ). This balance leads to a \$170,850 initial noncontrolling interest valuation (20 percent) and a \$683,400 (80 percent) offset against Big's Investment in Middle account.

**Consolidation Entry A**

The unamortized franchise balances remaining as of January 1, 2018, are removed from the two investment accounts so that this intangible asset can be identified separately on the consolidated balance sheet. Because Entry \*C already recognizes amortization expense for the previous periods, only beginning totals for the year of \$25,000 (\$30,000 – \$5,000) and \$80,000 (\$100,000 – \$20,000) still remain from the original amounts paid. These totals are allocated across the controlling and noncontrolling interests.

**Consolidation Entry I**

This entry eliminates the current intra-entity income figures accrued by each parent through its application of the partial equity method.

**Consolidation Entry D**

Intra-entity dividends declared are removed here from the consolidated financial totals.

**Consolidation Entry E**

The annual amortization expense relating to each of the franchise balances is recognized.

**Consolidation Entry TI**

The intra-entity sales/purchases figures created by the transfer of inventory during 2018 are eliminated on the worksheet.

**Consolidation Entry G**

This final consolidation entry defers the intra-entity gross profits that remain in inventory as of December 31, 2018. The profit on these transfers is removed until the merchandise is subsequently sold to unrelated parties or consumed by the affiliate receiving the transfer.

**Noncontrolling Interests' Share of Consolidated Net Income**

To complete the steps that constitute this consolidation worksheet, the 2018 income accruing to owners outside the consolidated entity must be recognized. This allocation is based on the accrual-based earnings of the two subsidiaries, which, as previously discussed, are calculated beginning with the grandson (Little) followed by the son (Middle):

**Little Company's Accrual-Based Income and Noncontrolling Interest**

Little Company separate income (from Exhibit 7.1) . . . . .	\$100,000
Excess fair-value franchise amortization from acquisition by Middle . . . . .	(5,000)
Recognition of previously deferred gross profits from 2017 (Entry <b>L*G</b> ) . . . . .	17,500
Deferral of intra-entity gross profits as of 12/31/18 (Entry <b>LG</b> ) . . . . .	<u>(25,000)</u>
Little Company's accrual-based net income, 2018 . . . . .	\$ 87,500
Outside ownership . . . . .	<u>30%</u>
Net income attributable to the noncontrolling interest (Little Company) . . . . .	<u>\$ 26,250</u>

**Middle Company's Accrual-Based Income and Noncontrolling Interest**

Middle Company separate income (from Exhibit 7.1 after removing income of Little Company) . . . . .	\$200,000
Excess fair-value franchise amortization from acquisition by Big . . . . .	(10,000)
Recognition of gross profits previously deferred from 2017 (Entry <b>B*G</b> ) . . . . .	30,000
Deferral of intra-entity gross profits as of 12/31/18 (Entry <b>BG</b> ) . . . . .	(40,000)
Equity income accruing from Little Company (70% of \$87,500 accrual-based net income [above]) . . . . .	<u>61,250</u>
Middle Company's accrual-based net income, 2018 . . . . .	\$241,250
Outside ownership . . . . .	<u>20%</u>
Net income attributable to the noncontrolling interest (Middle Company) . . . . .	<u>\$ 48,250</u>

Although computation of Big's earnings is not required here, this figure, along with the consolidated net income allocations to the noncontrolling interests, verifies the accuracy of the worksheet process:

### **Big Company's Accrual-Based Income**

Big Company separate income (from Exhibit 7.1, not including income of Middle Company) .....	\$300,000
Equity income accruing from Middle Company (80% of \$241,250 accrual-based net income [prior schedule]) .....	193,000
Big Company's accrual-based net income, 2018 .....	<u>\$493,000</u>

This \$493,000 figure represents the income derived by the parent from its own operations plus the earnings accrued from the company's two subsidiaries (one directly owned and the other indirectly controlled). This balance equals Big Company's share of the consolidated net income of the consolidated entity. As Exhibit 7.1 shows, the income reported by Big Company does, indeed, net to this same total: \$493,000.

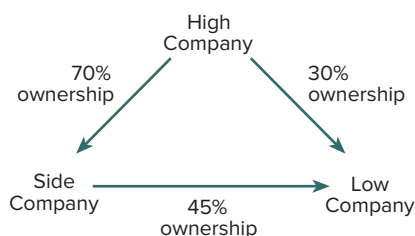
#### **LO 7-2**

Demonstrate the consolidation process when a corporate ownership structure is characterized by a connecting affiliation.

## **Indirect Subsidiary Control—Connecting Affiliation**

The father-son-grandson organization is only one of many corporate ownership patterns. The number of possible configurations found in today's business world is almost limitless. To illustrate the consolidation procedures that accompany these alternative patterns, we briefly discuss a second basic ownership structure referred to as a *connecting affiliation*.

A connecting affiliation exists when two or more companies within a consolidated entity own an interest in another member of that organization. The simplest form of this configuration is frequently drawn as a triangle:



In this example, both High Company and Side Company maintain an ownership interest in Low Company, thus creating a connecting affiliation. Although neither of these individual companies possesses enough voting stock to establish direct control over Low's operations, the consolidated entity's members hold a total of 75 percent of the outstanding shares. Consequently, control lies within the single economic entity's boundaries and requires inclusion of Low's financial information as a part of consolidated statements.

On the date the parent obtains control, the valuation basis for the subsidiary in the parent's consolidated statements is established. For Low, we assume that Side Company's ownership preceded that of High's. Subsequently, High obtained control upon acquiring its 30 percent interest in Low and the valuation basis for inclusion of Low's assets and liabilities (and related excess fair value over book value amortization) was established at that date.

The process for consolidating a connecting affiliation is essentially the same as for a father-son-grandson organization. Perhaps the most noticeable difference is that more than two investments are always present. In this triangular consolidated entity, High owns an interest in both Side and Low while Side also maintains an investment in Low. Thus, unless combined in some manner, three separate sets of consolidation entries appear on the worksheet. Although the added number of entries certainly provides a degree of mechanical

complication, the basic concepts involved in the consolidation process remain the same regardless of the number of investments.

As with the father-son-grandson structure, one key aspect of the consolidation process warrants additional illustration: the determination of accrual-based income figures for each individual company. Therefore, assume that High, Side, and Low have separate incomes (without inclusion of any earnings from their subsidiaries) of \$300,000, \$200,000, and \$100,000, respectively. Each company also retains a \$30,000 net intra-entity gain in its current year income figures. Assume that annual amortization expense of \$10,000 has been identified within the acquisition-date excess fair value over book value for each of the two subsidiaries.

In the same manner as a father-son-grandson organization, determining accrual-based earnings begins with any companies solely in a subsidiary position (Low, in this case). Next, companies that are both parents and subsidiaries (Side) compute their accrual-based income. Finally, this same calculation is made for the one company (High) that has ultimate control over the entire consolidated entity. Accrual-based income figures for the three companies in this consolidated entity are derived as follows:

***Low Company's Accrual-Based Income and Noncontrolling Interest***

Low Company separate income . . . . .	\$100,000
Amortization expense from High and Side Companies' acquisition . . . . .	(10,000)
Deferral of Low Company's net intra-entity gain . . . . .	(30,000)
Low Company's accrual-based net income . . . . .	<u>\$ 60,000</u>
Outside ownership . . . . .	25%
Net income attributable to the noncontrolling interest (Low Company) . . . . .	<u>\$ 15,000</u>

***Side Company's Accrual-Based Income and Noncontrolling Interest***

Side Company separate income . . . . .	\$200,000
Amortization expense relating to High Company's acquisition . . . . .	(10,000)
Deferral of Side Company's net intra-entity gain . . . . .	(30,000)
Equity income accruing from Low Company (45% × \$60,000) (above) . . . . .	<u>27,000</u>
Side Company's accrual-based net income . . . . .	<u>\$187,000</u>
Outside ownership . . . . .	30%
Net income attributable to the noncontrolling interest (Side Company) . . . . .	<u>\$ 56,100</u>

***High Company's Accrual-Based Income***

High Company separate income . . . . .	\$300,000
Deferral of High Company's net intra-entity gain . . . . .	(30,000)
Equity income accruing from Side Company (70% × \$187,000) (above) . . . . .	130,900
Equity income accruing from Low Company—direct ownership (30% × \$60,000) (above) . . . . .	<u>18,000</u>
High Company's net income . . . . .	<u>\$418,900</u>

Although in this illustration a connecting affiliation exists, the basic tenets of the consolidation process remain the same:

- Remove all effects from intra-entity transfers.
- Adjust the parents' beginning retained earnings to recognize the equity income resulting from ownership of the subsidiaries in prior years. Determining accrual-based earnings for this period properly aligns the balances with the perspective of a single economic entity.
- Eliminate the beginning stockholders' equity accounts of each subsidiary and recognize the noncontrolling interests' figures as of the first day of the year.
- Enter all unamortized balances created by the original acquisition-date excess of fair value over book value onto the worksheet and allocated to controlling and noncontrolling interests.



- Recognize amortization expense for the current year.
- Remove intra-entity income and dividends.
- Compute the net income attributable to the noncontrolling interest (as just shown) and include it in the consolidated entity's financial statements.

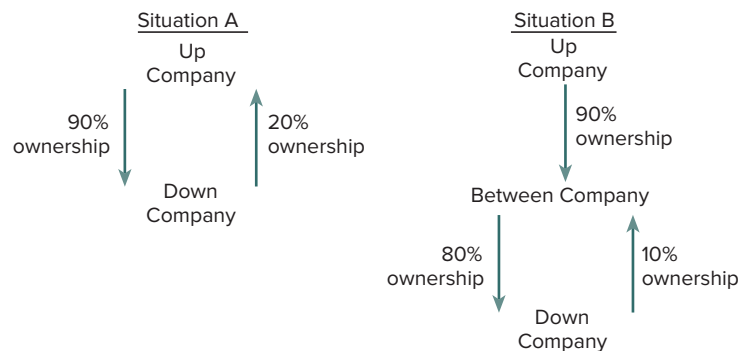
**LO 7-3**

Demonstrate the consolidation process when a corporate ownership structure is characterized by mutual ownership.

## Mutual Ownership

One specific corporate structure that requires further analysis is a mutual ownership. This type of configuration exists when two companies within a business combination hold an equity interest in each other. This ownership pattern is sometimes created as a result of financial battles that occur during takeover attempts. A defensive strategy (often called the *Pac-Man Defense*) is occasionally adopted whereby the target company attempts to avoid takeover by reversing roles and acquiring shares of its investor. Consequently, the two parties hold shares of each other, and one usually gains control.

Two typical mutual ownership patterns follow. In situation A, the parent and the subsidiary possess a percentage of each other's voting shares; in situation B, the mutual ownership exists between two subsidiary companies:



Accounting for mutual ownership raises unique conceptual issues. These concerns center on handling any parent company stock owned by a subsidiary. According to FASB ASC 810-10-45-5,

shares of the parent held by a subsidiary shall not be treated as outstanding shares in the consolidated statement of financial position and, therefore, shall be eliminated in the consolidated financial statements and reflected as treasury shares.

This approach has theoretical merit because ownership of parent shares by its subsidiary does not involve parties outside of the affiliated group. For consolidation purposes, no accounting distinction is drawn between the parent reacquiring its own shares and the same transaction made by its subsidiary. The acquisition of treasury shares by either a parent or its controlled subsidiary represents an identical economic event that should have identical financial reporting implications.

### Treasury Stock Approach

The treasury stock approach to mutual ownership focuses on the parent's control over the subsidiary. Although the affiliated companies maintain separate legal incorporation, only a single economic entity exists, and the parent dominates it. Hence, either company can purchase stock or other items, but all reporting for the business combination must be from the parent's perspective. The focus on the parent's perspective is underscored by the fundamental purpose of consolidated financial statements as observed in FASB ASC 810-10-10-1:

The purpose of consolidated financial statements is to present, primarily for the benefit of the owners and creditors of the parent, the results of operations and the financial position of a parent and all its subsidiaries as if the consolidated group were a single economic entity.

Therefore, as a single economic entity, the purchase of the parent's shares by any of the affiliated members is reported as treasury stock in the consolidated financial statements.

The treasury stock approach has always been common in practice, although its popularity was undoubtedly based as much on the ease of application as on theoretical merit. *The cost of parent shares held by the subsidiary is simply reclassified on the worksheet into a treasury stock account.* Any dividend declarations on this stock are considered intra-entity transfers that must be eliminated. This reporting technique is straightforward, and the shares are indeed no longer accounted for as if they were outstanding.

### Mutual Ownership Illustrated

To illustrate the treasury stock approach, assume that on January 1, 2016, Sun Company purchased 10 percent of Pop Company. Sun paid \$120,000 for these shares, an amount that exactly equaled Pop's proportionate book value. Many possible reasons exist for this transaction. The acquisition could be simply an investment or an attempt to forestall a takeover move by Pop. To simplify the illustration, it is assumed that Pop's shares are not traded actively and therefore continuous market values are unavailable. Under these circumstances, Sun's books appropriately carry the investment in Pop at the \$120,000 initial value.

On January 1, 2017, Pop manages to gain control over Sun by acquiring a 70 percent ownership interest, an acquisition that requires consolidation. Details of the acquisition are as follows:

Consideration transferred for 70% interest. . . . .	\$504,000
30% noncontrolling interest acquisition-date fair value . . . . .	216,000
Sun Company total fair value. . . . .	\$720,000
Sun Company's reported book value . . . . .	<u>600,000</u>
Excess fair value over book value—assigned to franchise contracts (40-year remaining life) . . . . .	\$120,000
Annual additional amortization (\$120,000 over 40 years). . . . .	<u>\$ 3,000</u>
Investment is accounted for internally by the initial value method.	

During the ensuing years, the two companies report these balances and transactions:

Year	Sun Company			Pop Company		
	Reported Separate Income	Dividend Income (10% ownership)	Dividends Declared	Reported Separate Income	Dividend Income (70% ownership)	Dividends Declared
2016	\$20,000	\$3,000	\$ 8,000	\$ 90,000	\$ -0-	\$30,000
2017	30,000	5,000	10,000	130,000	7,000	50,000
2018	40,000	8,000	15,000	160,500	10,500	80,000

### Treasury Stock Approach Illustrated

Exhibit 7.2 presents the consolidation of Pop and Sun for 2018. This worksheet has been developed under the treasury stock approach to mutual ownership so that Pop's investment in Sun is consolidated along routine lines.

Following the calculation of the franchise value and amortization, regular worksheet entries are developed for Pop's investment. Because the initial value method is applied, the \$7,000 dividend income recognized in the prior years of ownership (only 2017, in this case) is converted to an equity accrual in Entry \*C. The parent should recognize 70 percent of the subsidiary's \$35,000 income for 2017, or \$24,500.<sup>1</sup> However, inclusion of the \$2,100 amortization

<sup>1</sup>Although an intra-entity transfer, the \$5,000 dividend from Pop is included here in measuring the subsidiary's previous income. This dividend increased Sun's book value; thus, some accounting must be made within the consolidation process. In addition, at the time of declaration, the parent reduced its Retained Earnings. Hence, the intra-entity portion of this dividend must be reinstated or consolidated Retained Earnings will be too low.

## EXHIBIT 7.2

<b>POP AND CONSOLIDATED SUBSIDIARY Consolidation Worksheet For Year Ending December 31, 2018</b>						
<i>Investment: Initial Value Method Mutual Ownership: Treasury Stock Approach</i>			<b>Consolidation Entries</b>		<b>Noncontrolling Interest</b>	<b>Consolidated Totals</b>
<b>Accounts</b>	<b>Pop Company</b>	<b>Sun Company</b>	<b>Debit</b>	<b>Credit</b>		
<b>Income Statement</b>						
Revenues	(900,000)	(400,000)				(1,300,000)
Expenses	739,500	360,000	(E) 3,000			1,102,500
Dividend income	(10,500)	(8,000)	(I) 18,500			–0–
Separate company net income	(171,000)	(48,000)				
Consolidated net income						(197,500)
Net income attributable to the noncontrolling interest [(\$48,000 – 3,000) × 30%]					(13,500)	13,500
Net income attributable to Pop Company						(184,000)
<b>Statement of Retained Earnings</b>						
Retained earnings, 1/1/18:						
Pop Company	(747,000)	–0–		(*C) 15,400		(762,400)
Sun Company	–0–	(425,000)	(S) 425,000			–0–
Net income (above)	(171,000)	(48,000)				(184,000)
Dividends declared:						
Pop Company	80,000	–0–		(I) 8,000		72,000
Sun Company	–0–	15,000		(I) 10,500	4,500	–0–
Retained earnings, 12/31/18	(838,000)	(458,000)				(874,400)
<b>Balance Sheet</b>						
Current assets	842,000	332,000				1,174,000
Investment in Sun Company	504,000	–0–	(*C) 15,400	(S) 437,500		–0–
Investment in Pop Company	–0–	120,000		(A) 81,900		–0–
Land, buildings, equipment (net)	642,000	516,000		(TS) 120,000		1,158,000
Franchises	–0–	–0–	(A) 117,000	(E) 3,000		114,000
Total assets	1,988,000	968,000				2,446,000
Liabilities	(550,000)	(310,000)				(860,000)
Noncontrolling interest in Sun Company, 1/1/18	–0–	–0–		(S) 187,500		
				(A) 35,100	(222,600)	
Noncontrolling interest in Sun Company, 12/31/18	–0–	–0–			(231,600)	(231,600)
Common stock	(600,000)	(200,000)	(S) 200,000			(600,000)
Retained earnings, 12/31/18 (above)	(838,000)	(458,000)				(874,400)
Treasury stock	–0–	–0–	(TS) 120,000			120,000
Total liabilities and equities	(1,988,000)	(968,000)	898,900	898,900		(2,446,000)

Note: Parentheses indicate a credit balance.

## Consolidation entries:

- (\*C) Conversion of initial value method to equity method. This entry recognizes 70 percent of the increase in Sun Company's book value less amortization expense applicable to the previous year [70% (\$25,000 – \$3,000)].
- (S) Elimination of subsidiary's stockholders' equity accounts along with recognition of January 1, noncontrolling interest.
- (TS) Reclassification of Sun Company's ownership in Pop Company into a treasury stock account.
- (A) Allocation to franchises, unamortized balance recognized as of January 1.
- (I) Elimination of intra-entity dividend income for the period.
- (E) Recognition of amortization expense for the current year.

expense (the parent's 70 percent share) dictates that \$22,400 is the appropriate equity accrual. Because the parent has already recognized \$7,000 in dividend income, Entry \*C records the necessary increase as \$15,400 (\$22,400 – \$7,000).<sup>2</sup>

The remaining entries relating to Pop's investment are standard: The subsidiary's stockholders' equity accounts are eliminated (Entry S), the franchises' allocation is recognized (Entry A), and so on. The existence of the mutual ownership actually affects only two facets of Exhibit 7.2. First, Sun's \$120,000 payment made for the parent's shares is reclassified into a treasury stock account (through Entry TS). Second, the \$8,000 intra-entity dividend flowing from Pop to Sun during the current year of 2018 is eliminated within Entry I (used because the collection was recorded as income). The simplicity of applying the treasury stock approach should be apparent from this one example.

Before leaving the treasury stock approach, a final comment is needed regarding the computation of the noncontrolling interest's share of consolidated net income. In Exhibit 7.2, this balance is recorded as \$13,500, or 30 percent of the subsidiary's \$45,000 adjusted net income (\$48,000 reported net income less \$3,000 excess fair-value amortization). A question can be raised as to the validity of including the \$8,000 dividend within this income total because that amount is eliminated within the consolidation.

These dividends, although intra-entity in nature, increase the subsidiary company's book value (see footnote 1). Therefore, the increment must be reflected in some manner to indicate the change in the amount attributed to the outside owners. For example, the increase could be recognized as a direct adjustment of \$2,400 (30 percent of \$8,000) in the noncontrolling interest balance. More often, as shown here, such cash transfers are considered to be income *when viewed from the perspective of these other unrelated parties*.

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## Income Tax Accounting for a Consolidated Entity

To this point, this textbook has not analyzed the income tax implications of corporate mergers and acquisitions. Only a comprehensive tax course can cover the tax law complexities inherent in this area. Furthermore, essential accounting issues can be overshadowed by intermingling an explanation of the financial reporting process with an in-depth study of related tax consequences.

Despite the attention focused on basic accounting issues associated with consolidated entities, income tax effects cannot be ignored. Certain tax considerations have a direct impact on the financial reporting of any consolidated entity. At a minimum, a fair presentation of the consolidated entity's financial statements requires recognition of current income tax expense figures and deferred income taxes. Therefore, a fundamental knowledge of the income tax effects of a consolidated entity is necessary to understand the consolidated financial reporting process.

As discussed in Chapter 2, U.S. GAAP requires all entities under common control to report their financial statements on a consolidated basis. GAAP consolidated financial statements must report the income taxes payable by the affiliated firms both currently and in the future. However, to properly understand the tax implications of a consolidated entity requires that we first focus on the differences across the consolidation rules for GAAP and federal tax purposes.

<sup>2</sup>The necessary adjustment to beginning retained earnings also can be computed as follows:

Income of subsidiary—2017 . . . . .	\$ 35,000
Dividends declared . . . . .	<u>(10,000)</u>
Increase in book value . . . . .	\$ 25,000
Ownership percentage . . . . .	<u>70%</u>
Income accrual . . . . .	\$ 17,500
Amortization—2017 (70% × \$3,000) . . . . .	<u>(2,100)</u>
Increase in 2018 beginning retained earnings . . . . .	<u>\$ 15,400</u>

## LO 7-4

List the criteria for being a member of an affiliated group for income tax filing purposes.

## Affiliated Groups

A central issue in accounting for the income taxes of an affiliated group involves the entity filing its tax returns. Many consolidated entities require only a single consolidated return; in other cases, some, or even all, of the component corporations prepare separate returns. According to current tax laws, a consolidated entity may elect to file a consolidated return encompassing all companies that compose an *affiliated group* as defined by the Internal Revenue Code. The Code automatically requires all other corporations to submit separate income tax returns. Consequently, a first step in the taxation process is to delineate the boundaries of an affiliated group. Because of specific requirements outlined in the tax laws, this designation does not necessarily cover the same constituents as a consolidated entity.

According to the Internal Revenue Code, the essential criterion for including a subsidiary within an affiliated group is the parent's ownership of at least 80 percent of the voting stock and at least 80 percent of each class of nonvoting stock. This ownership may be direct or indirect, although the parent must meet these requirements in connection with at least one directly owned subsidiary. As another condition, each company in the affiliated group must be a domestic (rather than a foreign) corporation. A company's options can be described as follows:

- *Domestic subsidiary, 80 percent to 100 percent owned:* May file as part of consolidated return or may file separately.
- *Domestic subsidiary, less than 80 percent owned:* Must file separately.
- *Foreign subsidiary:* Must file separately.

Clearly, a distinction exists between consolidated entities (identified for financial reporting) and affiliated groups as defined for tax purposes. Chapter 2 described a consolidated entity as comprising all subsidiaries controlled by a parent company unless control is only temporary. The possession (either directly or indirectly) of a mere majority of voting stock normally supports control. Conversely, the Internal Revenue Code's 80 percent rule creates a smaller circle of companies qualifying for inclusion in an affiliated group.

As noted above, a parent company is not required to file a consolidated tax return. However, for the companies of an affiliated group, the following represent distinct benefits associated with a consolidated tax return:

- Intra-entity profits are not taxed until the asset leaves the consolidated entity; similarly, intra-entity losses (which are rare) are not deducted until the asset leaves the consolidated entity.
- Losses incurred by one affiliated company can be used to reduce taxable income recognized by other group members.

## LO 7-5

Compute taxable income and deferred tax amounts for an affiliated group based on information presented in a consolidated set of financial statements.

## Deferred Income Taxes

Some deviations between generally accepted accounting principles and income tax laws create *temporary differences* whereby (1) a variation between an asset or liability's recorded book value and its tax basis exists and (2) this difference results in taxable or deductible amounts in future years. When a temporary difference is present, financial reporting principles require recognizing a deferred tax asset or liability. The specific amount of this income tax deferral depends somewhat on whether consolidated or separate returns are being filed. Thus, we analyze here the tax consequences of several common transactions to demonstrate a consolidated entity's income tax expense reporting.

### *Intra-Entity Dividends*

For financial reporting, dividends between the members of a consolidated entity always are eliminated; they represent intra-entity cash transfers. For tax accounting, dividends also are removed from income but only if at least 80 percent of the subsidiary's stock is held. Consequently, at this ownership level, no difference between financial and tax reporting exists; both eliminate all intra-entity dividends. Income tax expense is not recorded on the intra-entity dividends. Deferred tax recognition is also ignored because no temporary difference has been created.

However, if less than 80 percent of a subsidiary's stock is held, tax recognition becomes necessary. Intra-entity dividends are taxed partially because, at that ownership level, 20 percent is taxable. The dividends-received deduction on the tax return (the nontaxable portion) is only 80 percent.<sup>3</sup> Thus, an income tax liability is immediately created for the recipient. *In addition, deferred income taxes are required for any of the subsidiary's income not paid currently as a dividend.* A temporary difference is created because tax payments will occur in future years when the subsidiary's earnings eventually are distributed to the parent. Hence, a current tax liability is recorded based on the dividends collected, and a deferred tax liability is recorded for the taxable portion of any income not paid to the parent during the year.

### ***The Impact of Goodwill***

Current law allows, in some cases, the amortization of goodwill and other purchased intangibles (referred to as *Section 197 property*) over a 15-year period. For financial reporting, goodwill is written off if it is impaired or if the related business is disposed of in some manner. Because of the difference in the periods in which taxable income and financial income are reduced, the presence of tax-deductible goodwill creates a temporary difference that necessitates recognizing deferred income taxes. A temporary difference will also exist for other purchased intangibles that qualify as *Section 197 property*.

### ***Intra-Entity Gains***

Taxes on intra-entity gains that result from transfers between related companies within a consolidated entity create a special accounting situation. On consolidated financial statements, the impact of all such transactions is deferred until the asset leaves the group (either through sale or use). The same is true for a consolidated tax return; the intra-entity gains are removed until the transferred asset leaves the group. No temporary difference is created.

If separate returns are filed, though, tax laws require the profits to be reported in the period of transfer even though not yet recognized by the consolidated entity. Thus, the income is taxed immediately, although no sale is recognized from a financial reporting perspective. This "prepayment" of the tax creates a deferred income tax asset based on the amount of taxes paid on the intra-entity gain by the selling affiliate.<sup>4</sup>

### **Consolidated Tax Returns—Illustration**

To illustrate accounting effects created by filing a consolidated tax return, assume that Great Company possesses 90 percent of Small Company's voting and nonvoting stocks. Subsequent to the acquisition, the two companies continue normal operations, which includes significant intra-entity transactions. Each company's separate operating and dividend incomes for the current time period are presented below, along with the effects of intra-entity gains. No income tax accruals have been recognized within these totals:

	<b>Great Company</b>	<b>Small Company (90% owned)</b>
Separate operating income (excludes equity or dividend income from subsidiary) . . . . .	\$160,000	\$40,000
Net intra-entity gains on assets remaining in the consolidated entity in current year income (included in separate operating income above) . . . . .	30,000	8,000
Dividends received (from Small) . . . . .	9,000	—0—
Dividends paid . . . . .	20,000	10,000

<sup>3</sup> If less than 20 percent of a company's stock is owned, the dividends-received deduction is only 70 percent. However, this level of ownership is not applicable to a subsidiary within a business combination.

<sup>4</sup> The FASB's 2015 *Proposed Accounting Standards Update (ASU) on Income Taxes (Topic 740)* entitled, "Intra-Entity Asset Transfers," would require an entity to recognize a deferred tax asset based on the income tax rate in the buyer's jurisdiction. The seller would record as current tax expense the taxes paid on the intra-entity gain on sale. However, more recent FASB deliberations (June 15, 2016, FASB Board Meeting) would limit the deferred tax asset treatment to intra-entity transfers of assets other than inventory.

From the perspective of the single economic entity, Great's separate company income for the period amounts to \$130,000: \$160,000 in internal separate operating incomes less \$30,000 in intra-entity gains on assets remaining within the consolidated entity. Using this same approach, Small's income is \$32,000 after removing the effects of the intra-entity transfers (\$40,000 separate operating income less \$8,000 in intra-entity gains). Thus, the income to report in consolidated financial statements before the reduction for noncontrolling interest is \$162,000 (\$130,000 + \$32,000). For financial reporting, both intra-entity dividends and the effects of intra-entity gains are eliminated in arriving at this total. Income prior to the noncontrolling interest is computed here because any allocation to these other owners is not deductible for tax purposes.

Because the parent owns more than 80 percent of Small's stock, dividends from the subsidiary are tax-free. Likewise, intra-entity gains are not taxable presently because a consolidated return is filed. Hence, *financial and tax accounting are the same for both items*; neither of these items produces a temporary difference and deferred income taxes are not needed.

The affiliated group pays taxes on \$162,000 and, assuming a statutory tax rate of 30 percent, must convey \$48,600 ( $\$162,000 \times 30\%$ ) to the government this year. Because no temporary differences exist, deferred income tax recognition is not applicable. Consequently, \$48,600 is the reported GAAP tax expense. This amount is recognized for the consolidated entity by means of a worksheet entry or through an individual accrual by each company.

### Income Tax Expense Assignment

After computing its income taxes for financial reporting purposes, a parent company includes a single total income tax expense figure on its consolidated income statement. This total income tax expense is then allocated across the members of the affiliated group. This figure is especially important to the subsidiary if it must produce separate financial statements for a loan or a future issuance of equity. The subsidiary's expense also serves as a basis for calculating the net income attributable to the noncontrolling interest.

Several techniques can accomplish this proration. For example, the expense charged to the subsidiary often is based on the percentage of the total taxable income from each company (the percentage allocation method) or on the appropriate taxable income figures if separate returns were filed (the separate return method).

To illustrate, we again use the figures from Great and Small in the previous example. Great owned 90 percent of Small's outstanding stock. Based on filing a consolidated return, total GAAP income tax expense of \$48,600 was recognized. How should these two companies allocate this figure?

#### *Percentage Allocation Method*

The percentage allocation method attributes the GAAP tax expense based on the relative contribution of each affiliate to taxable income. Total taxable income on this consolidated return was \$162,000. Of this amount, \$130,000 was applied to the parent (separate operating income after deferral of intra-entity gain), and \$32,000 came from the subsidiary (computed in the same manner). Thus, 19.753 percent ( $\$32,000/\$162,000$ ) of total expense should be assigned to the subsidiary, an amount that equals \$9,600 (19.753 percent of \$48,600).

#### *Separate Return Method*

An alternative allocation technique uses the taxable income that results from filing separate tax returns. On separate returns, intra-entity gains are taxable. Therefore, the separate returns of these two companies appear as follows:

	Great	Small	Total
Taxable income (separate operating income) . . . .	\$160,000	\$40,000	
Tax rate . . . . .	30%	30%	
Income tax expense—separate returns . . . . .	<u>\$ 48,000</u>	<u>\$12,000</u>	<u>\$60,000</u>

By filing a consolidated return, an expense of only \$48,600 is recorded for the consolidated entity. Because 20 percent of income tax expense on the separate returns ( $\$12,000/\$60,000$ )

came from the subsidiary, \$9,720 of the expense ( $\$48,600 \times 20\%$ ) is assigned to Small.

Under this second approach, the noncontrolling interest's share of consolidated net income is computed as follows:

Small Company—reported net income . . . . .	\$40,000
Less: Intra-entity gains on assets remaining in the consolidated entity . . . . .	(8,000)
Less: Assigned income tax expense . . . . .	<u>(9,720)</u>
Small Company—adjusted income . . . . .	\$22,280
Outside ownership . . . . .	<u>10%</u>
Net income attributable to the noncontrolling interest . . . . .	<u>\$ 2,228</u>

#### LO 7-6

Compute taxable income and deferred tax amounts to be recognized when separate tax returns are filed by any of the affiliates of a consolidated entity.

### Filing of Separate Tax Returns

Despite the advantages of filing as an affiliated group, a single consolidated return cannot always encompass every member of a consolidated entity. Separate returns are mandatory for foreign subsidiaries and for domestic corporations not meeting the 80 percent ownership rule.<sup>5</sup> Also, a company may still elect to file separately even if it meets the conditions for inclusion within an affiliated group. If all companies in an affiliated group are profitable and few intra-entity transactions occur, they may prefer separate returns. Filing in this manner gives the various companies more flexibility in their choice of accounting methods and fiscal tax years. Tax laws, though, do not allow a company to switch back and forth between consolidated and separate returns. Once a company elects to file a consolidated tax return as part of an affiliated group, obtaining Internal Revenue Service permission to file separately can be difficult.

When members of a consolidated entity do file separate tax returns, temporary differences often emerge across income recognized for consolidated financial reporting and for income tax reporting. The sources of such differences include (1) the immediate taxation of intra-entity gains (and losses) and (2) possible future tax effects of subsidiary income in excess of dividend payments. Differences in the timing of income recognition across consolidated reporting and income tax purposes create deferred tax assets and/or liabilities. For example, intra-entity gains and losses must be included on a separate tax return at the time of transfer rather than when the goods are sold to outside customers or consumed within the consolidated entity. Because the tax is paid in the current year, but the profit is not recognized until a subsequent year, a deferred tax asset is created—similar to a prepaid item. On the other hand when a parent recognizes subsidiary profits for financial reporting purposes, both current income and net assets increase. But if the parent delays paying tax on the profits until the subsidiary pays a dividend, the parent also needs to account for the delayed tax effect. Accordingly the parent recognizes and reports a deferred tax liability.

However, not all subsidiary dividend distributions result in deferred taxes. For dividend payments, deferred taxes are not required when ownership equals or exceeds 80 percent. Because the tax law provides a 100 percent dividends-received deduction, the transfer is non-taxable even on a separate return; no expense recognition is required.

If the amount distributed by a subsidiary that is less than 80 percent owned equals current earnings, 20 percent of the dividend is taxed immediately to the recipient, but no temporary difference is created because no future tax effect is produced. Hence, again, deferred income tax recognition is not appropriate.

Conceptually, questions about the recognition of deferred taxes arise when a less than 80 percent-owned subsidiary pays less in dividends than its current income. If a subsidiary earns \$100,000, for example, but pays dividends of only \$60,000, will the parent's share of the \$40,000 remainder ever become taxable income? Do these undistributed earnings represent temporary differences? If so, immediate recognition of the associated tax effect is required even though payment of this \$40,000 is not anticipated for the foreseeable future.

<sup>5</sup> Canadian and Mexican subsidiaries can qualify for treatment as domestic companies for purposes of filing a consolidated return.



FASB ASC 740-30-25-4 addresses this issue as follows: “A deferred tax liability shall be recognized for . . . an excess of the amount for financial reporting over the tax basis of an investment in a domestic subsidiary.” Therefore, other than one exception noted later in this chapter, any portion of the subsidiary’s income not distributed in the form of dividends creates a temporary difference but is not taxed until a later date; thus, a deferred tax liability is created. Because many companies retain a substantial portion of their income to finance growth, an expense recognized here may not be paid for many years.

### Deferred Tax on Undistributed Earnings—Illustrated

Assume that Parent Company owns 70 percent of Child Company, a domestic entity. Because ownership is less than 80 percent, the two companies must file separate tax returns. In the current year, Parent’s separate operating earnings (excluding taxes and any income from this investment) amount to \$200,000, and Child reports a pretax net income of \$100,000. During the period, the subsidiary paid a total of \$20,000 in cash dividends, \$14,000 (70 percent) to Parent and the remainder to the other owners. To avoid complications in this initial example, we assume that no intra-entity gains and losses are present.

The reporting of Child’s income taxes does not provide a significant difficulty because it involves no temporary differences. Using a statutory tax rate of 30 percent, the subsidiary accrues income tax expense of \$30,000 ( $\$100,000 \times 30\%$ ), leaving an after-tax profit of \$70,000. *Because it paid only \$20,000 in dividends, undistributed earnings for the period amount to \$50,000.*

For Parent, Child’s undistributed earnings represent a temporary tax difference. The following schedules have been developed to calculate Parent’s current tax liability and deferred tax liability.

#### ***Income Tax Currently Payable—Parent Company***

Reported separate operating income—Parent Company . . .		\$200,000
Dividends received . . . . .	\$ 14,000	
Less: Dividends-received deduction (80%) . . . . .	(11,200)	<u>2,800</u>
Taxable income—current year . . . . .		\$202,800
Tax rate . . . . .		<u>30%</u>
Income tax payable—current period (Parent) . . . . .		<u>\$ 60,840</u>

#### ***Deferred Income Tax Payable—Parent Company***

Undistributed earnings of Child Company . . . . .	\$ 50,000
Parent Company’s ownership . . . . .	<u>70%</u>
Undistributed earnings accruing to Parent . . . . .	\$ 35,000
Dividends-received deduction upon eventual distribution (80%) . . . . .	<u>(28,000)</u>
Income to be taxed—subsequent dividend payments . . . . .	\$ 7,000
Tax rate . . . . .	<u>30%</u>
Deferred income tax payable . . . . .	<u>\$ 2,100</u>

The above computations show a total income tax expense of \$62,940: a current tax liability of \$60,840 and a deferred tax liability of \$2,100. The deferred tax balance results entirely from Child’s undistributed earnings. Although the subsidiary has a \$70,000 after-tax income, it distributes only \$20,000 in the form of dividends. The \$50,000 that Child retains represents a temporary tax difference to the stockholders. Thus, Child recognizes the deferred income tax associated with these undistributed earnings. The income is recognized now; therefore, the liability is recorded in the current period.

FASB ASC Topic 740: Income Taxes provides one important exception to the recognition of deferred income taxes on a subsidiary’s undistributed income. FASB ASC 740-30-25-18

states that a deferred tax liability is not recognized for the excess amount for financial reporting over the tax basis of an investment in a *foreign* subsidiary that is essentially permanent in duration. Also, Parent Company includes subsidiary dividends in its taxable income. The dividends-received deduction is not allowed for distributions remitted by a foreign subsidiary to a U.S. parent. Instead, a foreign income tax credit is available to avoid double taxation across jurisdictions.

To demonstrate income tax differences across domestic and foreign subsidiaries, we use the same Parent and Child illustration above—except in this case Child is a foreign company. We also assume that the amount of foreign tax attributable to Child’s \$14,000 dividend payment to Parent is \$2,000. The following schedule shows the calculation of Parent’s income tax payable:

### ***Income Tax Currently Payable—Parent Company and Foreign Subsidiary***

Reported separate operating income—Parent Company .....	\$200,000
Dividends received from Child .....	14,000
	<u>          </u>
Taxable income—current year .....	\$214,000
Tax rate .....	30%
	<u>          </u>
Income tax before foreign tax credit .....	\$ 64,200
Foreign tax credit .....	2,000
	<u>          </u>
Income tax payable—current period (Parent) .....	<u>\$ 62,200</u>

Importantly, if Parent declares that there are no plans to remit the \$50,000 in undistributed earnings of the subsidiary, it records no deferred tax liability on its share of this income. In fact, many U.S. corporations elect to keep overseas large amounts of cash from foreign subsidiaries’ earnings which the U.S. parent designates as “permanently invested.” As of 2015, an estimated \$2.1 trillion remained overseas and would result in an estimated \$620 billion in tax receipts if the funds were repatriated.<sup>6</sup>

### **Separate Tax Returns Illustrated**

A complete example best demonstrates the full accounting impact created by filing separate tax returns. As a basis for this illustration, assume that Lion Corporation reported the following data with its 60 percent–owned domestic subsidiary, Cub Company, for the current year:

	<b>Lion Corporation</b>	<b>Cub Company (60% owned by Lion)</b>
Separate company operating income .....	\$ 500,000	\$200,000
Intra-entity gross profits in ending inventory (included in separate operating income) .....	40,000	30,000
Dividend income from Cub Company .....	24,000	Not applicable
Dividends paid .....	Not applicable	40,000
Applicable tax rate .....	30%	30%

### ***Subsidiary’s Income Tax Expense***

Because the companies must file separate tax returns, they do not defer the intra-entity gross profits in ending inventory but instead leave them in both companies’ separate operating incomes. Thus, Cub’s taxable income is \$200,000, an amount that creates a current payable of \$60,000 ( $\$200,000 \times 30\%$ ). The intra-entity inventory gross profit is a temporary difference for financial reporting purposes, creating a deferred income tax asset (payment of the tax comes before the income actually is recognized) of \$9,000 ( $\$30,000 \times 30\%$ ). Therefore, the subsidiary recognizes only \$51,000 of tax expense.

<sup>6</sup> David Alexander, “Big U.S. firms hold \$2.1 trillion overseas to avoid taxes: study,” *Reuters*, October 6, 2015.

**Income Tax Expense—Cub**

Income currently taxable .....	\$200,000	
Tax rate .....	30%	\$ 60,000
Temporary difference (intra-entity gross profit is taxed before the asset leaves the consolidated group—either through sale or use).....	\$(30,000)	
Tax rate .....	30%	(9,000)
Income tax expense—Cub.....		<u>\$ 51,000</u>

Consequently, Cub reports after-tax income of \$119,000 (\$200,000 separate operating income less \$30,000 intra-entity gross profit less \$51,000 in income tax expense). This profit figure is the basis for recognizing \$47,600 ( $\$119,000 \times 40\%$  outside ownership) as the non-controlling interest's share of consolidated income.

**Parent's Income Tax Expense**

On Lion's separate return, its own intra-entity gross profits remain within income. The taxable portion of the dividends received from Cub also must be included. Hence, the parent's taxable earnings total \$504,800, a balance that creates a \$151,440 current tax liability for the company.

**Income Tax Currently Payable—Lion**

Separate operating income—Lion Corporation (includes \$40,000 intra-entity inventory gross profit).....		\$500,000
Dividends received from Cub Company (60%).....	\$24,000	
Less: 80% dividends-received deduction .....	(19,200)	4,800
Taxable income .....		\$504,800
Tax rate .....		30%
Income tax payable—current (Lion) .....		<u>\$151,440</u>

Although we present Lion's tax return information here, Lion determines its total tax expense for the period only by accounting for the impact of the two temporary differences: the parent's \$40,000 in intra-entity gross profits in ending inventory and the undistributed earnings of the subsidiary. The undistributed earnings amount to \$47,400, computed as follows:

After-tax income of Cub (above) .....	\$119,000
Dividends paid .....	(40,000)
Undistributed earnings .....	\$79,000
Lion's ownership .....	60%
Lion's portion of undistributed earnings .....	<u>\$47,400</u>

Now the parent can derive its deferred income tax effects for financial reporting.

**Deferred Income Taxes—Lion Company****Intra-Entity Gross Profits in Ending Inventory**

Amount taxable now prior to being recognized.....	\$40,000
Tax rate .....	30%
Deferred income tax asset.....	<u>\$12,000</u>

**Undistributed Earnings of Subsidiary**

Undistributed earnings of Cub—to be taxed later (computed above) .....	\$ 47,400
Dividends-received deduction upon eventual distribution (80%) .....	(37,920)
Income eventually taxable .....	\$9,480
Tax rate .....	30%
Deferred income tax liability .....	<u>\$2,844</u>

The two temporary differences exert opposite effects on Lion's reported income taxes. Because the firms file separate returns, the intra-entity gross profits in ending inventory are taxable in the current period despite not actually having been sold to an outside customer or consumed internally within the consolidated entity. From an accounting perspective, paying the tax on these gross profits now creates a deferred income tax asset of \$12,000 ( $\$40,000 \times 30\%$ ). In contrast, the parent currently recognizes the undistributed earnings (through consolidation of the investment). However, this portion of the subsidiary's income is not yet taxable to the parent. Because the tax payment is not due until the parent receives the dividends, a \$2,844 deferred income tax liability ( $\$9,480 \times 30\%$ ) occurs.

The parent reports the deferred tax asset as a current asset because it relates to inventory, whereas the deferred tax liability is long term because ownership of the investment created it. Lion's reported income tax expense results from the creation of these three accounts:

Lion's Financial Records		
Deferred Income Tax Asset—Current . . . . .	12,000	
Income Tax Expense . . . . .	142,284	
Deferred Income Tax Liability—Long Term . . . . .		2,844
Income Tax Currently Payable . . . . .		151,440
To record current and deferred taxes of parent company.		

### LO 7-7

Determine the deferred tax consequences for temporary differences generated when a business combination is created.

## Temporary Differences Generated by Business Combinations

Based on the transaction's nature, the tax laws deem some acquisitions to be tax-free (to the seller) but others to be taxable. In most tax-free acquisitions and in a few taxable acquisitions, the resulting book values of the acquired company's assets and liabilities differ from their tax bases. Such differences result because the subsidiary's cost is retained for tax purposes (in tax-free exchanges) or because the allocations for tax purposes vary from those used for financial reporting (a situation found in some taxable transactions).

Thus, formation of a business combination can create temporary differences. Any deferred income tax assets and liabilities the subsidiary previously recorded are not at issue; the parent consolidates these accounts in the same manner as other subsidiary assets and liabilities. The question here concerns differences in book value and tax basis that stem from the takeover.

As an illustration, assume that Son Company owns a single asset, a building that has a \$150,000 tax basis (cost less accumulated depreciation) but presently has a \$210,000 fair value. Pop Corporation conveys a total value of \$300,000 to acquire this company and assigns any excess fair value to nondeductible goodwill. The exchange is structured to be tax-free. After this transaction, the building continues to have a tax basis of only \$150,000. However, its consolidated book value is \$210,000, an amount \$60,000 more than the figure applicable for tax purposes. How does this \$60,000 difference affect the consolidated statements?

GAAP provides extensive guidance on reporting deferred tax assets and deferred tax liabilities created in a business combination. According to FASB ASC 805-740-25-2,

an acquirer shall recognize a deferred tax asset or deferred tax liability arising from the assets acquired and liabilities assumed in a business combination and shall account for the potential tax effects of temporary differences, carryforwards, and any income tax uncertainties of an acquiree that exist at the acquisition date . . .

Thus, any temporary difference that is found in Pop's acquisition of Son creates a deferred tax asset or liability. Because the asset's tax basis is \$150,000 but its recorded value within consolidated statements is \$210,000, a temporary difference of \$60,000 exists. Assuming a 30 percent tax rate, the newly formed consolidated entity must recognize a deferred income tax liability of \$18,000 ( $\$60,000 \times 30\%$ ).

Consequently, in a consolidated balance sheet prepared immediately after Pop obtains control over Son, the building is recorded at \$210,000 fair value. In addition, Pop reports the new deferred tax liability of \$18,000. Because the net value of these two accounts is

\$192,000, goodwill of \$108,000 emerges as the figure remaining from the \$300,000 acquisition value as shown below:

Consideration transferred (cash) . . . . .		\$300,000
to building at fair value . . . . .	\$210,000	
to deferred tax liability on building [ $(\$210,000 - \$150,000) \times 30\%$ ] . . . . .		<u>(18,000)</u> 192,000
Goodwill . . . . .		<u>\$108,000</u>

This \$18,000 deferred tax liability systematically declines to zero over the building's life. The consolidated entity must compute depreciation for tax purposes based on the \$150,000 basis and is, therefore, less each year than the expense shown for financial reporting purposes (based on \$210,000). With less tax basis depreciation, taxable income is more than book income for the remaining years of the asset's life. However, the extra tax payment that results is not charged to expense but instead reduces the deferred tax liability initially established at the acquisition date. To illustrate, assume that this building generates revenues of \$40,000 per year. Assume also that it has a 10-year life and that the company uses the straight-line method of depreciation.

	Financial Reporting	Income Tax Reporting	Temporary Difference
Revenues . . . . .	\$40,000	\$40,000	\$ -0-
Depreciation expense:			
10% of \$210,000 . . . . .	21,000		
10% of \$150,000 . . . . .		<u>15,000</u>	<u>6,000</u>
Income . . . . .	\$19,000	\$25,000	\$6,000
Tax rate . . . . .	<u>30%</u>	<u>30%</u>	<u>30%</u>
Tax effect . . . . .	<u>\$ 5,700</u>	<u>\$ 7,500</u>	<u>\$1,800</u>

Although the consolidated entity must pay \$7,500 to the government, the financial reporting tax expense is only \$5,700 of that amount. The other \$1,800 (\$6,000 reversal of temporary difference  $\times$  30%) resulted because of the use of the previous basis for tax purposes. Therefore, the following entry is made:

Income Tax Expense . . . . .	5,700	
Deferred Income Tax Liability (to remove part of balance created at acquisition date) . . . . .	1,800	
Income Tax Currently Payable . . . . .		7,500
To accrue current income taxes as well as impact of temporary difference in asset of subsidiary.		

### LO 7-8

Explain the impact that a net operating loss of an acquired affiliate has on consolidated figures.

## Consolidated Entities and Operating Loss Carryforwards

Tax laws in the United States provide a measure of relief for companies incurring net operating losses (NOLs) when they file current tax returns. They may carry such losses back for two years and apply them as a reduction to taxable income figures previously reported. This procedure generates a cash refund of income taxes the company paid during these earlier periods.

If a loss still exists after the carryback (or if the taxpayer elects not to carry the loss back), a carryforward for the subsequent 20 years also is allowed.<sup>7</sup> Carrying the loss forward reduces subsequent taxable income levels until the NOL is entirely eliminated or the time period expires. *Thus, NOL carryforwards can benefit the company only if it has future positive taxable income.* The recognition of future tax savings associated with NOL carryforwards has always been controversial because it requires the company to anticipate positive taxable income.

<sup>7</sup>If a taxpayer believes that future tax rates will increase, choosing not to carry a loss back in favor of only a carryforward could be financially preferable.

In the past, some companies created business combinations, at least in part, to take advantage of tax carryforwards. If an acquired company had an unused NOL while the parent projected significant profitability, the consolidated entity could use the acquired company's NOL to offset the parent's taxable income after the acquisition. U.S. laws have now been changed so that only the company that reported the loss can use virtually all of an NOL carryforward. Hence, acquiring companies with an NOL carryforward has ceased to be a popular business strategy. However, because the practice has not disappeared, reporting rules for a subsidiary's NOL carryforward are still needed.

FASB ASC Topic 740: Income Taxes requires an acquiring firm to recognize a deferred income tax asset for any NOL carryforward. However, a valuation allowance also must be recognized

if, based on the weight of available evidence, it is *more likely than not* (a likelihood of more than 50 percent) that some portion or all of the deferred tax assets will not be realized. The valuation allowance should be sufficient to reduce the deferred tax asset to the amount that is more likely than not to be realized. (FASB ASC 740-10-30-5)

As an example, assume that a company has one asset (a building) worth \$500,000. Because of recent losses, this company has a \$200,000 NOL carryforward. The assumed tax rate is 30 percent so that the company will derive \$60,000 in future tax savings (\$200,000 × 30%) if it earns future taxable income.

Assume that the parent acquired this company for \$640,000. In accounting for the acquisition, the parent must anticipate the likelihood that the new subsidiary will utilize some or all of the NOL carryforward. If it is more likely than not that the benefit will be realized, goodwill of \$80,000 results:

Consideration transferred . . . . .			\$640,000
Subsidiary assets:			
Building . . . . .		\$500,000	
Deferred income tax asset (NOL carryforward) . . . . .		<u>60,000</u>	<u>560,000</u>
Goodwill . . . . .			<u>\$ 80,000</u>

Conversely, if the chances that this subsidiary will use the NOL carryforward are 50 percent or less, the parent must record a valuation allowance against the NOL carryforward deferred tax asset. This will cause the recognition of \$140,000 of consolidated goodwill.

Consideration transferred . . . . .			\$640,000
Subsidiary assets:			
Building . . . . .		\$500,000	
Deferred income tax asset . . . . .	\$ 60,000		
Valuation allowance . . . . .	<u>(60,000)</u>	<u>—0—</u>	<u>500,000</u>
Goodwill . . . . .			<u>\$140,000</u>

In this second case, a question arises if this carryforward successfully reduces future taxes: How should the company remove the valuation allowance? Any changes in a valuation allowance for an acquired entity's deferred tax asset must be reported as a reduction or increase to income tax expense.<sup>8</sup> However, changes within the measurement period that result from new information about facts and circumstances that existed at the acquisition date are recognized through a corresponding adjustment to goodwill.<sup>9</sup>

<sup>8</sup> Alternatively, a postacquisition change in the valuation allowance may result in a direct adjustment to contributed capital if the original transaction was accounted for directly through other comprehensive income or other elements of stockholders' equity.

<sup>9</sup> However, once goodwill is reduced to zero, an acquirer recognizes any additional decrease in the valuation allowance as a bargain purchase.

## Income Taxes and Consolidated Entities—Comparisons with International Accounting Standards

U.S. GAAP on accounting for income taxes and *International Accounting Standard (IAS) 12* each require consolidated entities to recognize both current tax effects and anticipated future tax consequences using deferred tax assets and liabilities. For many financial reporting tax issues that arise with consolidated entities, the standards are the same.

One area, however, where a difference remains concerns taxes on intra-entity asset transfers that remain within the consolidated group. U.S. GAAP requires the deferral of intra-entity profits on assets that have been transferred across affiliates until the asset is sold to a third party or consumed within the consolidated group. Therefore the selling firm defers any related current tax effects until the asset leaves the consolidated group. In contrast, IFRS requires the taxes paid by the selling firm on intra-entity profits to be recognized as incurred. Further, although prohibited by U.S. GAAP, IFRS requires tax deferral on differences between the tax bases of assets transferred across entities (and tax jurisdictions) that remain within the consolidated group.<sup>10</sup>

However, as noted previously in this chapter's footnote 4, the FASB in 2015 issued *Proposed Accounting Standards Update (ASU) on Income Taxes (Topic 740), "Intra-Entity Asset Transfers."* The proposed accounting would converge the IFRS and U.S. GAAP treatment. First, the selling affiliate in an intra-entity asset transfer would recognize an expense for current income taxes paid in its jurisdiction. Then, the buying affiliate would recognize tax deferrals on intra-entity transfers that remain within its possession. Further, the proposed ASU would require that the income tax rate in the buyer's tax jurisdiction (as opposed to the seller's) be used to calculate the deferred taxes reported in the consolidated financial statements. The proposed ASU would particularly affect cross-border intra-entity transfers where income tax rates differ across jurisdictions. However, according to a June 15, 2016 FASB Board meeting

The Board decided to require that an entity recognize the income tax consequences of an intra-entity asset transfer, other than an intra-entity asset transfer of inventory, when the transfer occurs. For intra-entity asset transfers of inventory, the Board decided to retain current GAAP, which requires an entity to recognize the income tax consequences when the inventory has been sold to an outside party.<sup>11</sup>

Thus, if the FASB excludes the recognition of the income tax consequences of intra-entity transfers of inventory when the transfer occurs, then the convergence between U.S. GAAP and IFRS would be limited to the tax treatment of intra-entity transfers of long-term assets, but not inventories.

### Summary

1. For consolidation purposes, a parent need not possess majority ownership of each of the component companies constituting a business combination. Often control is indirect: One subsidiary owns a majority of an affiliated subsidiary's shares. Although the parent might own stock in only one of these companies, control has been established over both. Such an arrangement often is referred to as a *father-son-grandson configuration*.
2. The consolidation of financial information for a father-son-grandson business combination does not differ conceptually from a consolidation involving only direct ownership. All intra-entity, reciprocal balances are eliminated. Goodwill, other allocations, and amortization usually must be recognized if an acquisition has taken place. Because more than one investment is involved, the number of worksheet entries increases, but that is more of a mechanical inconvenience than a conceptual concern.
3. One aspect of a father-son-grandson consolidation that warrants attention is determining accrual-based income figures for each subsidiary. Any company within a business combination that holds both a parent and subsidiary position must determine the income accruing from ownership of its subsidiary before computing its own earnings. This procedure is important because net income is the basis for each parent's equity accruals and noncontrolling interest allocations.

<sup>10</sup> Ernst & Young LLP, *US GAAP vs. IFRS: The Basics*, December 2015.

<sup>11</sup> FASB Action Alert, Tentative Board Decisions, June 15, 2016 FASB Board Meeting.

4. If a subsidiary possesses shares of its parent, a mutual affiliation exists. This investment is intra-entity in nature and must be eliminated for consolidation purposes. The treasury stock approach reclassifies the cost of these shares as treasury stock with no equity accrual recorded.
5. Under present tax laws, an affiliated group of only domestic corporations can file a single consolidated income tax return. The parent must control 80 percent of the voting stock as well as 80 percent of the nonvoting stock (either directly or indirectly). A consolidated return allows the companies to defer recognition of intra-entity gains and gross profits until sold to an outside customer or consumed internally within the consolidated group. Furthermore, losses incurred by one member of the group reduce taxable income recognized by the others. Intra-entity dividends are also nontaxable on a consolidated return, although such distributions are never taxable when paid between companies within an affiliated group.
6. Separate tax returns apply to some members of a business combination. Foreign corporations and any company not meeting the 80 percent ownership rule, as examples, must report in this manner. In addition, a company might simply elect to file in this manner if a consolidated return provides no advantages. For financial reporting purposes, a separate return often necessitates recognition of deferred income taxes because temporary differences can result from intra-entity transfer gains as well as intra-entity dividends (if 80 percent ownership is not held).
7. When a business combination is created, the subsidiary’s assets and liabilities sometimes have a tax basis that differs from their assigned values. In such cases, the company must recognize a deferred tax asset or liability at the time of acquisition to reflect the tax impact of these differences.

## Comprehensive Illustration

### Problem

(Estimated Time: 60 to 75 Minutes) On January 1, 2016, Gold Company acquired 90 percent of Silver Company. Details of the acquisition are as follows:

Consideration transferred by Gold .....	\$576,000
Noncontrolling interest acquisition-date fair value .....	64,000
Silver total fair value .....	\$640,000
Silver book value .....	600,000
Excess fair value over book value assigned to brand name (20-year life)	\$ 40,000

Subsequently, on January 1, 2017, Silver purchased 10 percent of Gold for \$150,000. This price equaled the book value of Gold’s underlying net assets and no allocation was made to either goodwill or any specific accounts.

On January 1, 2018, Gold and Silver each acquired 30 percent of the outstanding shares of Bronze for \$105,000 apiece, which resulted in Gold obtaining control over Bronze. Details of this acquisition are as follows:

Consideration transferred by Gold and Silver (\$105,000 each) .....	\$210,000
Noncontrolling interest acquisition-date fair value .....	140,000
Bronze total fair value .....	\$350,000
Bronze book value .....	300,000
Excess fair value over book value assigned to copyright (10-year life)	\$ 50,000

After the formation of this business combination Silver made significant intra-entity inventory sales to Gold. The volume of these transfers follows:

Year	Transfer Price to Gold Company	Markup on Transfer Price	Inventory Retained at Year-End (at transfer price)
2016	\$100,000	30%	\$ 60,000
2017	160,000	25	90,000
2018	200,000	28	120,000

In addition, on July 1, 2018, Gold sold Bronze a tract of land for \$25,000. This property cost \$12,000 when the parent acquired it several years ago.



The initial value method is used to account for all investments. The individual firms recognize income from the investments when dividends are declared. Because consolidated statements are prepared for the business combination, accounting for the investments affects internal reporting only. During 2016 and 2017, Gold and Silver individually reported the following information:

	Gold Company	Silver Company
2016:		
Separate company income . . . . .	\$180,000	\$120,000
Dividend income—Silver Company (90%) . . . . .	36,000	–0–
Dividends declared . . . . .	80,000	40,000
2017:		
Separate company income . . . . .	240,000	150,000
Dividend income—Gold Company (10%) . . . . .	–0–	9,000
Dividend income—Silver Company (90%) . . . . .	27,000	–0–
Dividends declared . . . . .	90,000	30,000

The 2018 financial statements for each of the three companies comprising this business combination are presented in Exhibit 7.3. These figures ignore income tax effects.

### Required

- Prepare worksheet entries to consolidate the 2018 financial statements for this combination. Assume that the mutual ownership between Gold and Silver is accounted for by means of the treasury stock approach. Compute the noncontrolling interests in consolidated net income from Bronze's income and in Silver's income.
- Assume that consolidated net income (before deducting any balance for the noncontrolling interests) amounts to \$498,900. Assume also that the effective tax rate is 40 percent and that Gold and Silver file a consolidated tax return but Bronze files separately. Calculate the income tax expense recognized within the consolidated income statement for 2018.

### EXHIBIT 7.3 Individual Financial Statements—2018

	Gold Company	Silver Company	Bronze Company
Sales . . . . .	\$ (800,000)	\$ (600,000)	\$ (300,000)
Cost of goods sold . . . . .	380,000	300,000	120,000
Operating expenses . . . . .	193,000	100,000	90,000
Gain on sale of land . . . . .	(13,000)	–0–	–0–
Dividend income from Gold Company . . . . .	–0–	(10,000)	–0–
Dividend income from Silver Company . . . . .	(36,000)	–0–	–0–
Dividend income from Bronze Company . . . . .	(6,000)	(6,000)	–0–
Net income . . . . .	<u>\$ (282,000)</u>	<u>\$ (216,000)</u>	<u>\$ (90,000)</u>
Retained earnings, 1/1/18 . . . . .	\$(923,200)	\$ (609,000)	\$ (200,000)
Net income (above) . . . . .	(282,000)	(216,000)	(90,000)
Dividends declared . . . . .	100,000	40,000	20,000
Retained earnings, 12/31/18 . . . . .	<u>\$(1,105,200)</u>	<u>\$ (785,000)</u>	<u>\$ (270,000)</u>
Cash and receivables . . . . .	\$ 289,000	\$ 190,000	\$ 130,000
Inventory . . . . .	459,000	410,000	110,000
Investment in Silver Company . . . . .	576,000	–0–	–0–
Investment in Gold Company . . . . .	–0–	150,000	–0–
Investment in Bronze Company . . . . .	105,000	105,000	–0–
Land, buildings, and equipment (net) . . . . .	980,000	670,000	380,000
Total assets . . . . .	<u>\$ 2,409,000</u>	<u>\$ 1,525,000</u>	<u>\$ 620,000</u>
Liabilities . . . . .	\$ (603,800)	\$ (540,000)	\$ (250,000)
Common stock . . . . .	(700,000)	(200,000)	(100,000)
Retained earnings, 12/31/18 . . . . .	(1,105,200)	(785,000)	(270,000)
Total liabilities and equities . . . . .	<u>\$(2,409,000)</u>	<u>\$(1,525,000)</u>	<u>\$ (620,000)</u>

Note: Parentheses indicate a credit balance.

## Solution

a. The 2018 consolidation entries for Gold, Silver, and Bronze follow.

**Entry \*G**

The consolidation process begins with Entry \*G, which recognizes the intra-entity gross profit (on transfers from Silver to Gold) created in the previous period. The intra-entity gross profit within ending inventory is deferred from the previous period into the current period.

**Consolidation Entry \*G**

Retained earnings, 1/1/18 (Silver Company) . . . . .	22,500	
Cost of goods sold . . . . .		22,500
To recognize gross profits on intra-entity sales made from Silver to Gold during the preceding year (25% markup × \$90,000).		

**Consolidation Entry \*C (Gold)**

Investment in silver Company . . . . .	164,250	
Retained earnings, 1/1/18 (Gold Company) . . . . .		164,250
To convert Gold's investment income figures for the two preceding years to equity income accruals computed as follows:		
Increase in Silver's book value from 1/1/16 to 1/1/18 (\$809,000 – 600,000) . . . . .	\$ 209,000	
Excess fair-value amortization (\$2,000 × 2 years) . . . . .	(4,000)	
Deferral of 12/31/17 intra-entity inventory profit (25% × \$90,000) . . . . .	<u>(22,500)</u>	
Silver's increase in book value adjusted for accruals recognized in combination . . . . .	\$ 182,500	
Gold's ownership percentage . . . . .	<u>90%</u>	
Conversion from initial value method to equity method . . . . .	<u>\$ 164,250</u>	

**Consolidation Entry S1**

Common stock (Silver Company) . . . . .	200,000	
Retained earnings, 1/1/18 (Silver Company) . . . . .	586,500	
Investment in Silver Company (90%) . . . . .		707,850
Noncontrolling interest in Silver Company, 1/1/18 (10%) . . . . .		78,650
To eliminate the beginning stockholders' equity accounts of Silver and to recognize a 10 percent noncontrolling interest in the subsidiary. Retained earnings has been adjusted for Entry *G.		

**Consolidation Entry S2**

Common stock (Bronze Company) . . . . .	100,000	
Retained earnings, 1/1/18 (Bronze Company) . . . . .	200,000	
Investment in Bronze Company (60%) . . . . .		180,000
Noncontrolling interest in Bronze Company, 1/1/18 (40%) . . . . .		120,000
To eliminate Bronze's beginning stockholders' equity accounts and to recognize outside ownership of the company's remaining shares. The investments of both Gold and Silver are accounted for concurrently through this one entry.		

**Consolidation Entry TS**

Treasury stock . . . . .	150,000	
Investment in Gold . . . . .		150,000
To reclassify Silver's investment in Gold as treasury stock.		

**Consolidation Entry A**

Brand name . . . . .	36,000	
Copyright . . . . .	50,000	
Investment in Silver . . . . .		32,400
Noncontrolling interest in Silver . . . . .		3,600
Investment in Bronze . . . . .		30,000
Noncontrolling interest in Bronze . . . . .		20,000
To recognize unamortized beginning-of-the-year balances from the excess fair value over book value acquisition-date allocations.		

**Consolidation Entry I**

Dividend income from Gold Company .....	10,000	
Dividend income from Silver Company.....	36,000	
Dividend income from Bronze Company.....	12,000	
Dividends declared (Gold Company) .....		10,000
Dividends declared (Silver Company).....		36,000
Dividends declared (Bronze Company).....		12,000
To eliminate intra-entity dividend transfers recorded as income based on application of the initial value method.		

**Consolidation Entry E**

Amortization expense .....	7,000	
Brand name.....		2,000
Copyright.....		5,000
To recognize current year amortizations of the acquisition-date excess fair-value allocations.		

**Consolidation Entry TI**

Sales .....	200,000	
Cost of goods sold.....		200,000
To eliminate the intra-entity transfer of inventory made in the current year by Silver.		

**Consolidation Entry G**

Cost of goods sold .....	33,600	
Inventory.....		33,600
To eliminate intra-entity gross profits remaining in Gold's December 31 current year inventory (28% gross profit rate × the parent's \$120,000 ending inventory balance).		

**Consolidation Entry GL**

Gain on sale of land .....	13,000	
Land .....		13,000
To eliminate gross profit on intra-entity transfer of land from Gold to Bronze during the year.		

***Net Income Attributable to the Noncontrolling Interest (Bronze Company)***

As in all previous examples, the noncontrolling interest calculates its claim to a portion of consolidated income based on the subsidiary's income after amortizations and intra-entity profit deferrals and recognitions. Because this subsidiary has no intra-entity profits, the \$90,000 income figure reported in Exhibit 7.3 is applicable and is adjusted only for the \$5,000 excess fair-value amortization. Thus, Bronze's noncontrolling interest in consolidated net income is \$34,000 [40% × (\$90,000 – \$5,000)].

***Net Income Attributable to the Noncontrolling Interest (Silver Company)***

Again, the noncontrolling interest calculates its claim to a portion of consolidated income based on the subsidiary's income after amortizations and intra-entity profit deferrals and recognitions. For Silver Company the adjustments are as follows:

Silver's separate company net income.....	\$210,000
Excess fair-value amortization .....	(2,000)
Equity in earnings of Bronze (30%) .....	27,000
Beginning inventory intra-entity profit recognized .....	22,500
Ending inventory intra-entity profit deferral .....	(33,600)
Silver's income adjusted for combination accruals.....	\$223,900
Noncontrolling interest percentage.....	10%
Net income attributable to the noncontrolling interest (Silver Company).....	<u>\$ 22,390</u>

b. No differences exist between Bronze's book values and tax basis. No computation of deferred income taxes is required; thus, this company's separate tax return is relatively straightforward. The \$90,000 income figure creates a current tax liability of \$36,000 (using the 40 percent tax rate).

In contrast, the consolidated tax return filed for Gold and Silver must include the following financial information. When applicable, figures reported in Exhibit 7.3 have been combined for the two companies.

**Tax Return Information—Consolidated Return**

Sales	\$1,400,000	
Less: Intra-entity sales (2018)	(200,000)	\$1,200,000
Cost of goods sold	\$ 680,000	
Less: 2018 intra-entity purchases	(200,000)	
Less: 2017 intra-entity inventory gross profits recognized in 2018 (\$90,000 × 25%)	(22,500)	
Add: 2018 intra-entity inventory gross profits (\$120,000 × 28%)	33,600	491,100
Gross profit		\$ 708,900
Operating expenses (including amortization)		300,000
Operating income		\$ 408,900
Other income (since Bronze is not part of affiliated group):		
Gain on sale of land		13,000
Dividend income—Bronze Company	\$ 12,000	
Less: 80% dividends-received deduction	(9,600)	2,400
Taxable income		\$ 424,300
Tax rate		40%
Income tax payable by Gold Company and Silver Company for 2018		<u>\$ 169,720</u>

Members of this business combination must pay a total of \$205,720 to the government in 2018 (\$36,000 for Bronze and \$169,720 in connection with the consolidated return of Gold and Silver). Any temporary differences that originate or reverse during the year necessitate accounting for deferred income tax assets and/or liabilities. *In this illustration, only the dividend payments from Bronze and the intra-entity gain on the sale of land to Bronze actually create such differences.* For example, amortization of the intangible assets is the same for book and tax purposes. Other items encountered do not lead to deferred income taxes:

- Because Gold and Silver file a consolidated return, they defer the intra-entity inventory gross profits for both tax purposes and financial reporting so that no difference is created.
- The dividends that Silver pays to Gold are not subject to taxation because these distributions were made between members of an affiliated group.

However, recognition of a deferred tax liability is required because Bronze's adjusted income (\$54,000 after income tax expense of \$36,000) is higher than its \$20,000 dividend distribution. Gold and Silver own 60 percent of Bronze, indicating that the consolidated income statement includes \$32,400 (\$54,000 × 60%) of its income. Because this figure is \$20,400 more than the amount of dividends it paid Gold and Silver (\$12,000, or 60 percent of \$20,000), a deferred tax liability is required. The temporary difference is actually \$4,080 (20 percent of \$20,400) because of the 80 percent dividends-received deduction. The future tax effect on this difference is \$1,632 based on the 40 percent tax rate applied.

A deferred tax asset also is needed in connection with Gold's intra-entity sale of land to Bronze. These companies file separate returns. Thus, the gain is taxed immediately, although this \$13,000 is not recognized for reporting purposes until a future resale occurs. From an accounting perspective, the tax of \$5,200 (\$13,000 × 40%) is being prepaid in 2018.

Recognition of the current payable as well as the two deferrals leads to an income tax expense of \$202,152:

Income Tax Expense	202,152	
Deferred Income Tax—Asset	5,200	
Income Taxes Payable—Current		205,720
Deferred Income Tax—Liability		1,632

## Questions

1. What is a *father-son-grandson relationship*?
2. When an indirect ownership is present, why is a specific ordering necessary for determining the incomes of the component corporations?
3. Able Company owns 70 percent of the outstanding voting stock of Baker Company, which, in turn, holds 80 percent of Carter Company. Carter possesses 60 percent of Dexter Company's capital stock. How much income actually accrues to the consolidated entity from each of these companies after considering the various noncontrolling interests?
4. How does the presence of an indirect ownership (such as a father-son-grandson relationship) affect the mechanical aspects of the consolidation process?
5. What is the difference between a connecting affiliation and a mutual ownership?
6. In accounting for mutual ownerships, what is the treasury stock approach?
7. For income tax purposes, how is *affiliated group* defined?
8. What are the advantages to a business combination filing a consolidated tax return? Considering these advantages, why do some members of a business combination file separate tax returns?
9. Why is the allocation of the income tax expense figure between the members of a business combination important? By what methods can this allocation be made?
10. If a parent and its subsidiary file separate income tax returns, why will the parent frequently have to recognize deferred income taxes? Why might the subsidiary have to recognize deferred income taxes?
11. In a recent acquisition, the consolidated value of a subsidiary's assets exceeded the basis appropriate for tax purposes. How does this difference affect the consolidated balance sheet?
12. Jones acquires Wilson, in part because the new subsidiary has an unused net operating loss carryforward for tax purposes. How does this carryforward affect the consolidated figures at the acquisition date?
13. A subsidiary that has a net operating loss carryforward is acquired. The related deferred income tax asset is \$230,000. Because the parent believes that a portion of this carryforward likely will never be used, it also recognizes a valuation allowance of \$150,000. At the end of the first year of ownership, the parent reassesses the situation and determines that the valuation allowance should be reduced to \$110,000. What effect does this change have on the business combination's reporting?

## Problems

### LO 7-1

1. In a father-son-grandson business combination, which of the following is true?
  - a. The father company always must have its total accrual-based income computed first.
  - b. The computation of a company's accrual-based net income has no effect on the accrual-based net income of other companies within a business combination.
  - c. A father-son-grandson configuration does not require consolidation unless one company owns shares in all of the other companies.
  - d. All companies solely in subsidiary positions must have their accrual-based net income computed first within the consolidation process.

### LO 7-3

2. A subsidiary owns shares of its parent company. Which of the following is true concerning the treasury stock approach?
  - a. It is one of several options to account for mutual holdings available under current accounting standards.
  - b. The original cost of the subsidiary's investment is a reduction in consolidated stockholders' equity.
  - c. The subsidiary accrues income on its investment by using the equity method.
  - d. The treasury stock approach eliminates these shares entirely within the consolidation process.

### LO 7-3

3. On January 1, Balanger Company buys 10 percent of the outstanding shares of its parent, Altgeld, Inc. Although the total book and fair values of Altgeld's net assets equaled \$3.2 million, the price paid for these shares was \$340,000. During the year, Altgeld reported \$415,000 of separate operating income (no subsidiary income was included) and declared dividends of \$35,000. How are the shares of the parent owned by the subsidiary reported at December 31?
  - a. Consolidated stockholders' equity is reduced by \$340,000.
  - b. An investment balance of \$378,000 is eliminated for consolidation purposes.
  - c. Consolidated stockholders' equity is reduced by \$378,000.
  - d. An investment balance of \$358,000 is eliminated for consolidation purposes.

LO 7-4

4. Which of the following is correct for two companies that want to file a consolidated tax return as an affiliated group?
- One company must hold at least 51 percent of the other company's voting stock.
  - One company must hold at least 65 percent of the other company's voting stock.
  - One company must hold at least 80 percent of the other company's voting stock.
  - They cannot file one unless one company owns 100 percent of the other's voting stock.

LO 7-5

5. How does the amortization of tax-deductible goodwill affect the computation of a parent company's income taxes?
- It is a deductible expense only if the parent owns at least 80 percent of subsidiary's voting stock.
  - It is deductible only as impairments are recognized.
  - It is a deductible item over a 15-year period.
  - It is deductible only if a consolidated tax return is filed.

LO 7-4

6. Which of the following is *not* a reason for two companies to file separate tax returns?
- The parent owns 68 percent of the subsidiary.
  - They have no intra-entity transactions.
  - Intra-entity dividends are tax-free only on separate returns.
  - Neither company historically has had an operating tax loss.

LO 7-1

7. Diamond Company owns 80 percent of Emerald and Emerald owns 90 percent of Sapphire, Inc. Separate operating income totals for the current year follow; they contain no investment income. None of these acquisitions required amortization expense. Included in Sapphire's income is a \$50,000 intra-entity gain on transfers to Emerald still in Emerald's possession.

	Diamond	Emerald	Sapphire
Separate operating income . . . . .	\$348,000	\$228,000	\$210,000

What is Diamond's accrual-based net income for the year?

- \$658,400
- \$674,400
- \$666,800
- \$645,600

LO 7-1

8. Arnold Corporation holds 70 percent of Belvista, which, in turn, owns 70 percent of Stang. Separate operating income figures (excluding investment income) and intra-entity upstream gains (on assets remaining within the consolidated group) included in the income for the current year follow:

	Arnold	Belvista	Stang
Separate operating income . . . . .	\$625,000	\$305,000	\$240,000
Intra-entity gains . . . . .	—0—	18,000	50,000

What is the amount of consolidated net income attributable to the noncontrolling interests?

- \$143,100
- \$163,500
- \$183,000
- \$213,900

LO 7-3

9. Arryn, Inc., owns 95 percent of Stark Corporation's voting stock. The acquisition price exceeded book and fair value by \$85,500 which was appropriately attributed to goodwill. Stark holds 15 percent of Arryn's voting stock. The price paid for the shares by Stark equaled 15 percent of the parent's book value and the net fair values of its assets and liabilities.

During the current year, Arryn reported separate operating income of \$228,000 and dividend income from Stark of \$52,500. At the same time, Stark reported separate operating income of \$78,000 and dividend income from Arryn of \$18,000.

What is the net income attributable to the noncontrolling interest under the treasury stock approach?

- \$4,800
- \$2,700
- \$24,600
- \$26,700

## LO 7-7

10. Marc, Inc., owns 75 percent of SRS Company. During the current year, SRS reported net income of \$415,000 but paid a total cash dividend of only \$110,000. What deferred income tax liability must be recognized in the consolidated balance sheet? Assume the tax rate is 40 percent.
- \$25,380
  - \$18,300
  - \$22,140
  - \$41,340

## LO 7-7

11. Plumas, Inc., owns 85 percent of Santa Cruz Corporation. Both companies have been profitable for many years. During the current year, the parent sold for \$100,000 merchandise costing \$70,000 to the subsidiary, which still held 20 percent of this merchandise at the end of the year. Assume that the tax rate is 25 percent and that separate tax returns are filed. What deferred income tax asset amount is created?
- 0–
  - \$300
  - \$1,500
  - \$7,500

## LO 7-5

12. What would be the answer to problem (11) if a consolidated tax return were filed?
- 0–
  - \$300
  - \$1,500
  - \$7,500

## LO 7-7

13. Baratheon Company purchases all of Tyrell Company for \$450,000 in cash. On that date, the subsidiary has net assets with a \$454,000 fair value but a \$310,000 book value and tax basis. The tax rate is 40 percent. Neither company has reported any deferred income tax assets or liabilities. What amount of goodwill should be recognized on the date of the acquisition?
- \$53,600
  - \$123,600
  - \$23,600
  - \$39,600

## LO 7-1

14. On January 1, 2016, Aspen Company acquired 80 percent of Birch Company's voting stock for \$288,000. Birch reported a \$300,000 book value, and the fair value of the noncontrolling interest was \$72,000 on that date. Then, on January 1, 2017, Birch acquired 80 percent of Cedar Company for \$104,000 when Cedar had a \$100,000 book value and the 20 percent noncontrolling interest was valued at \$26,000. In each acquisition, the subsidiary's excess acquisition-date fair over book value was assigned to a trade name with a 30-year remaining life.

These companies report the following financial information. Investment income figures are not included.

	2016	2017	2018
Sales:			
Aspen Company . . . . .	\$415,000	\$545,000	\$688,000
Birch Company . . . . .	200,000	280,000	400,000
Cedar Company . . . . .	Not available	160,000	210,000
Expenses:			
Aspen Company . . . . .	\$310,000	\$420,000	\$510,000
Birch Company . . . . .	160,000	220,000	335,000
Cedar Company . . . . .	Not available	150,000	180,000
Dividends declared:			
Aspen Company . . . . .	\$ 20,000	\$ 40,000	\$ 50,000
Birch Company . . . . .	10,000	20,000	20,000
Cedar Company . . . . .	Not available	2,000	10,000

Assume that each of the following questions is independent:

- If all companies use the equity method for internal reporting purposes, what is the December 31, 2017, balance in Aspen's Investment in Birch Company account?

- b. What is the consolidated net income for this business combination for 2018?
- c. What is the net income attributable to the noncontrolling interest in 2018?
- d. Assume that Birch made intra-entity inventory transfers to Aspen that have resulted in the following intra-entity gross profits in inventory at the end of each year:

Date	Amount
12/31/16	\$10,000
12/31/17	16,000
12/31/18	25,000

What is the accrual-based net income of Birch in 2017 and 2018, respectively?

**LO 7-3**

15. On January 1, 2016, Uncle Company purchased 80 percent of Nephew Company’s capital stock for \$500,000 in cash and other assets. Nephew had a book value of \$600,000, and the 20 percent noncontrolling interest fair value was \$125,000 on that date. On January 1, 2015, Nephew had acquired 30 percent of Uncle for \$280,000. Uncle’s appropriately adjusted book value as of that date was \$900,000.

Separate operating income figures (not including investment income) for these two companies follow. In addition, Uncle declares and pays \$20,000 in dividends to shareholders each year and Nephew distributes \$5,000 annually. Any excess fair-value allocations are amortized over a 10-year period.

Year	Uncle Company	Nephew Company
2016 .....	\$ 90,000	\$30,000
2017 .....	120,000	40,000
2018 .....	140,000	50,000

- a. Assume that Uncle applies the equity method to account for this investment in Nephew. What is the subsidiary’s income recognized by Uncle in 2018?
- b. What is the net income attributable to the noncontrolling interest for 2018?

**LO 7-1**

16. Boulder, Inc., obtained 90 percent of Rock Corporation on January 1, 2016. Annual amortization of \$22,000 is applicable on the allocations of Rock’s acquisition-date business fair value. On January 1, 2017, Rock acquired 75 percent of Stone Company’s voting stock. Excess business fair-value amortization on this second acquisition amounted to \$8,000 per year. For 2018, each of the three companies reported the following information accumulated by its separate accounting system. Separate operating income figures do not include any investment or dividend income.

	Separate Operating Income	Dividends Declared
Boulder .....	\$245,000	\$120,000
Rock .....	85,000	28,000
Stone .....	150,000	42,000

- a. What is consolidated net income for 2018?
- b. How is consolidated net income distributed to the controlling and noncontrolling interests?

**LO 7-2**

17. Baxter, Inc., owns 90 percent of Wisconsin, Inc., and 20 percent of Cleveland Company. Wisconsin, in turn, holds 60 percent of Cleveland’s outstanding stock. No excess amortization resulted from these acquisitions. During the current year, Cleveland sold a variety of inventory items to Wisconsin for \$40,000 although the original cost was \$30,000. Of this total, Wisconsin still held \$12,000 in inventory (at transfer price) at year-end.

During this same period, Wisconsin sold merchandise to Baxter for \$100,000 although the original cost was only \$70,000. At year-end, \$40,000 of these goods (at the transfer price) was still on hand.

The initial value method was used to record each of these investments. None of the companies holds any other investments.



Using the following separate income statements, determine the figures that would appear on a consolidated income statement:

	Baxter	Wisconsin	Cleveland
Sales .....	\$(1,000,000)	\$(450,000)	\$(280,000)
Cost of goods sold .....	670,000	280,000	190,000
Expenses .....	110,000	60,000	30,000
Dividend income:			
Wisconsin .....	(36,000)	–0–	–0–
Cleveland .....	<u>(4,000)</u>	<u>(12,000)</u>	<u>–0–</u>
Net income .....	<u>\$ (260,000)</u>	<u>\$(122,000)</u>	<u>\$(60,000)</u>

## LO 7-8

18. Firenze Company developed a specialized banking application software program that it licenses to various financial institutions through multiple-year agreements. On January 1, 2018, these licensing agreements have a fair value of \$830,000 and represent Firenze's sole asset. Although Firenze currently has no liabilities, the company has a \$155,000 net operating loss (NOL) carryforward because of recent operating losses.

On January 1, 2018, Parma, Inc., acquired all of Firenze's voting stock for \$1,080,000. Parma expects to extract operating synergies by integrating Firenze's software into its own products. Parma also hopes that Firenze will be able to receive a future tax reduction from its NOL. Assume an applicable federal income tax rate of 35 percent.

- If there is a greater than 50 percent chance that the subsidiary will be able to utilize the NOL carryforward, how much goodwill should Parma recognize from the acquisition?
- If there is a less than 50 percent chance that the subsidiary will be able to utilize the NOL carryforward, how much goodwill should Parma recognize from the acquisition?

## LO 7-6

19. Up and its 80 percent-owned subsidiary (Down) reported the following figures for the year ending December 31, 2018. Down paid dividends of \$30,000 during this period.

	Up	Down
Sales .....	\$(600,000)	\$(300,000)
Cost of goods sold .....	300,000	140,000
Operating expenses .....	174,000	60,000
Dividend income .....	<u>(24,000)</u>	<u>–0–</u>
Net income .....	<u>\$ (150,000)</u>	<u>\$(100,000)</u>

In 2017, intra-entity gross profits of \$30,000 on upstream transfers of \$90,000 were deferred into 2018. In 2018, intra-entity gross profits of \$40,000 on upstream transfers of \$110,000 were deferred into 2019.

- What amounts appear for each line in a consolidated income statement? Explain your computations.
  - What income tax expense should appear on the consolidated income statement if each company files a separate return? Assume that the tax rate is 30 percent.
20. Clarke has a controlling interest in Rogers's outstanding stock. At the current year-end, the following information has been accumulated for these two companies:

	Separate Operating Income	Dividends Paid
Clarke	\$500,000 (includes a \$90,000 net gross profit in intra-entity ending inventory)	\$90,000
Rogers	240,000	80,000

## LO 7-5, 7-6

Clarke uses the initial value method to account for the investment in Rogers. The separate operating income figures just presented include neither dividend nor other investment income. The effective tax rate for both companies is 40 percent.

- a. Assume that Clarke owns 100 percent of Rogers’s voting stock and is filing a consolidated tax return. What income tax amount does this affiliated group pay for the current period?
- b. Assume that Clarke owns 92 percent of Rogers’s voting stock and is filing a consolidated tax return. What amount of income taxes does this affiliated group pay for the current period?
- c. Assume that Clarke owns 80 percent of Rogers’s voting stock, but the companies elect to file separate tax returns. What is the total amount of income taxes that these two companies pay for the current period?
- d. Assume that Clarke owns 70 percent of Rogers’s voting stock, requiring separate tax returns. What is the total amount of income tax expense to be recognized in the consolidated income statement for the current period?
- e. Assume that Clarke owns 70 percent of Rogers’s voting stock so that separate tax returns are required. What amount of income taxes does Clarke have to pay for the current year?

**LO 7-5, 7-6**

21. On January 1, 2017, Abbey acquires 90 percent of Benjamin’s outstanding shares. Financial information for these two companies for the years 2017 and 2018 follows:

	2017	2018
Abbey Company:		
Sales .....	\$(500,000)	\$(700,000)
Operating expenses .....	300,000	400,000
Intra-entity gross profits in ending inventory (included in above figures) .....	(120,000)	(150,000)
Dividend income—Benjamin Company .....	(18,000)	(36,000)
Benjamin Company:		
Sales .....	(210,000)	(270,000)
Operating expenses .....	130,000	170,000
Dividends paid .....	(20,000)	(40,000)

Assume that a tax rate of 35 percent is applicable to both companies.

- a. On consolidated financial statements for 2018, what are the income tax expense and the income tax currently payable if Abbey and Benjamin file a consolidated tax return as an affiliated group?
- b. On consolidated financial statements for 2018, what are the income tax expense and income tax currently payable if they choose to file separate returns?

**LO 7-6**

22. Lake acquired a controlling interest in Boxwood several years ago. During the current fiscal period, the two companies individually reported the following income (exclusive of any investment income):

Lake .....	\$300,000
Boxwood .....	100,000

Lake paid a \$90,000 cash dividend during the current year and Boxwood distributed \$10,000.

Boxwood sells inventory to Lake each period. Intra-entity gross profits of \$18,000 were present in Lake’s beginning inventory for the current year, and its ending inventory carried \$32,000 in intra-entity gross profits.

View each of the following questions as an independent situation. The effective tax rate for both companies is 40 percent.

- a. If Lake owns a 60 percent interest in Boxwood, what total income tax expense must be reported on a consolidated income statement for this period?
- b. If Lake owns a 60 percent interest in Boxwood, what total amount of income taxes must be paid by these two companies for the current year?
- c. If Lake owns a 90 percent interest in Boxwood and a consolidated tax return is filed, what amount of income tax expense would be reported on a consolidated income statement for the year?

## LO 7-5, 7-6

23. Garrison holds a controlling interest in Robertson's outstanding stock. For the current year, the following information has been gathered about these two companies:

	Garrison	Robertson
Separate operating income . . . . . (includes \$50,000 intra-entity gross profit in ending inventory)	\$300,000	\$200,000
Dividends paid . . . . .	32,000	50,000
Tax rate . . . . .	40%	40%

Garrison uses the initial value method to account for the investment in Robertson. Garrison's separate operating income figure does not include dividend income for the current year.

- Assume that Garrison owns 80 percent of Robertson's voting stock. On a consolidated tax return, what amount of income tax is paid?
  - Assume that Garrison owns 80 percent of Robertson's voting stock. On separate tax returns, what total amount of income tax is paid?
  - Assume that Garrison owns 70 percent of Robertson's voting stock. What total amount of income tax expense does a consolidated income statement recognize?
  - Assume that Garrison holds 60 percent of Robertson's voting stock. On a separate income tax return, what amount of income tax does Garrison have to pay?
24. King's Road recently acquired all of Oxford Corporation's stock and is now consolidating the financial data of this new subsidiary. King's Road paid a total of \$850,000 for Oxford, which has the following accounts:

	Fair Value	Tax Basis
Accounts receivable . . . . .	\$153,000	\$153,000
Inventory . . . . .	141,000	141,000
Land . . . . .	136,000	136,000
Buildings . . . . .	276,000	221,000
Equipment . . . . .	233,000	160,000
Liabilities . . . . .	(281,000)	(281,000)

- What amount of deferred tax liability arises in the acquisition?
  - What amounts will be used to consolidate Oxford with King's Road at the date of acquisition?
  - On a consolidated balance sheet prepared immediately after this takeover, how much goodwill should King's Road recognize? Assume a 40 percent effective tax rate.
25. House Corporation has been operating profitably since its creation in 1960. At the beginning of 2016, House acquired a 70 percent ownership in Wilson Company. At the acquisition date, House prepared the following fair-value allocation schedule:

Consideration transferred for 70% interest in Wilson. . . . .		\$ 707,000
Fair value of the 30% noncontrolling interest . . . . .		303,000
Wilson business fair value . . . . .		\$1,010,000
Wilson book value . . . . .		790,000
Excess fair value over book value . . . . .		\$ 220,000
Assignments to adjust Wilson's assets to fair value:		
To buildings (20-year remaining life). . . . .	\$ 60,000	
To equipment (4-year remaining life) . . . . .	(20,000)	
To franchises (10-year remaining life). . . . .	40,000	80,000
To goodwill (indefinite life) . . . . .		\$ 140,000

House regularly buys inventory from Wilson at a markup of 25 percent more than cost. House's purchases during 2016 and 2017 and related ending inventory balances follow:

## LO 7-6

## LO 7-2



Year	Intra-Entity Purchases	Remaining Intra-Entity Inventory—End of Year (at transfer price)
2016	\$120,000	\$40,000
2017	150,000	60,000

On January 1, 2018, House and Wilson acted together as co-acquirers of 80 percent of Cuddy Company's outstanding common stock. The total price of these shares was \$240,000, indicating neither goodwill nor other specific fair-value allocations. Each company put up one-half of the consideration transferred. During 2018, House acquired additional inventory from Wilson at a price of \$200,000. Of this merchandise, 45 percent is still held at year-end.

Using the three companies' following financial records for 2018, prepare a consolidation worksheet. The partial equity method based on *separate company incomes* has been applied to each investment.

	House Corporation	Wilson Company	Cuddy Company
Sales and other revenues	\$ (900,000)	\$ (700,000)	\$ (300,000)
Cost of goods sold	551,000	300,000	140,000
Operating expenses	219,000	270,000	90,000
Income of Wilson Company	(91,000)	—0—	—0—
Income of Cuddy Company	(28,000)	(28,000)	—0—
Net income	<u>\$ (249,000)</u>	<u>\$ (158,000)</u>	<u>\$ (70,000)</u>
Retained earnings, 1/1/18	\$ (820,000)	\$ (590,000)	\$ (150,000)
Net income (above)	(249,000)	(158,000)	(70,000)
Dividends declared	100,000	96,000	50,000
Retained earnings, 12/31/18	<u>\$ (969,000)</u>	<u>\$ (652,000)</u>	<u>\$ (170,000)</u>
Cash and receivables	\$ 220,000	\$ 334,000	\$ 67,000
Inventory	390,200	320,000	103,000
Investment in Wilson Company	807,800	—0—	—0—
Investment in Cuddy Company	128,000	128,000	—0—
Buildings	385,000	320,000	144,000
Equipment	310,000	130,000	88,000
Land	180,000	300,000	16,000
Total assets	<u>\$ 2,421,000</u>	<u>\$ 1,532,000</u>	<u>\$ 418,000</u>
Liabilities	\$ (632,000)	\$ (570,000)	\$ (98,000)
Common stock	(820,000)	(310,000)	(150,000)
Retained earnings, 12/31/18	<u>(969,000)</u>	<u>(652,000)</u>	<u>(170,000)</u>
Total liabilities and equities	<u>\$ (2,421,000)</u>	<u>\$ (1,532,000)</u>	<u>\$ (418,000)</u>

## LO 7-3

26. Mighty Company purchased a 60 percent interest in Lowly Company on January 1, 2017, for \$420,000 in cash. Lowly's book value at that date was reported as \$600,000 and the fair value of the noncontrolling interest was assessed at \$280,000. Any excess acquisition-date fair value over Lowly's book value is assigned to trademarks to be amortized over 20 years. Subsequently, on January 1, 2018, Lowly acquired a 20 percent interest in Mighty. The price of \$240,000 was equivalent to 20 percent of Mighty's book and fair value.

Neither company has paid dividends since these acquisitions occurred. On January 1, 2018, Lowly's book value was \$800,000, a figure that rises to \$840,000 (common stock of \$300,000 and retained earnings of \$540,000) by year-end. Mighty's book value was \$1.7 million at the beginning of 2018 and \$1.8 million (common stock of \$1 million and retained earnings of \$800,000) at December 31, 2018. No intra-entity transactions have occurred and no additional stock has been sold. Each company applies the initial value method in accounting for the individual investments. What worksheet entries are required to consolidate these two companies for 2018? What is the net income attributable to the noncontrolling interest for this year?

LO 7-1, 7-5, 7-6



27. On January 1, 2017, Travers Company acquired 90 percent of Yarrow Company's outstanding stock for \$720,000. The 10 percent noncontrolling interest had an assessed fair value of \$80,000 on that date. Any acquisition-date excess fair value over book value was attributed to an unrecorded customer list developed by Yarrow with a remaining life of 15 years.

On the same date, Yarrow acquired an 80 percent interest in Stookey Company for \$344,000. At the acquisition date, the 20 percent noncontrolling interest fair value was \$86,000. Any excess fair value was attributed to a fully amortized copyright that had a remaining life of 10 years. Although both investments are accounted for using the initial value method, neither Yarrow nor Stookey has distributed dividends since the acquisition date. Travers has a policy to declare and pay cash dividends each year equal to 40 percent of its separate company operating earnings. Reported income totals for 2017 follow:

Travers Company .....	\$300,000
Yarrow Company .....	160,000
Stookey Company .....	120,000

Following are the 2018 financial statements for these three companies. Stookey has transferred numerous amounts of inventory to Yarrow since the takeover amounting to \$80,000 (2017) and \$100,000 (2018). These transactions include the same markup applicable to Stookey's outside sales. In each year, Yarrow carried 20 percent of this inventory into the succeeding year before disposing of it. An effective tax rate of 45 percent is applicable to all companies. All dividend declarations are paid in the same period.

	Travers Company	Yarrow Company	Stookey Company
Sales .....	\$ (900,000)	\$ (600,000)	\$ (500,000)
Cost of goods sold .....	480,000	320,000	260,000
Operating expenses .....	100,000	80,000	140,000
Net income .....	<u>\$ (320,000)</u>	<u>\$ (200,000)</u>	<u>\$ (100,000)</u>
Retained earnings, 1/1/18 .....	\$ (700,000)	\$ (600,000)	\$ (300,000)
Net income (above) .....	(320,000)	(200,000)	(100,000)
Dividends declared .....	128,000	—0—	—0—
Retained earnings, 12/31/18 .....	<u>\$ (892,000)</u>	<u>\$ (800,000)</u>	<u>\$ (400,000)</u>
Current assets .....	\$ 444,000	\$ 380,000	\$ 280,000
Investment in Yarrow Company .....	720,000	—0—	—0—
Investment in Stookey Company .....	—0—	344,000	—0—
Land, buildings, and equipment (net) ...	949,000	836,000	520,000
Total assets .....	<u>\$ 2,113,000</u>	<u>\$ 1,560,000</u>	<u>\$ 800,000</u>
Liabilities .....	\$ (721,000)	\$ (460,000)	\$ (200,000)
Common stock .....	(500,000)	(300,000)	(200,000)
Retained earnings, 12/31/18 .....	<u>(892,000)</u>	<u>(800,000)</u>	<u>(400,000)</u>
Total liabilities and equities .....	<u>\$ (2,113,000)</u>	<u>\$ (1,560,000)</u>	<u>\$ (800,000)</u>

- Prepare the business combination's 2018 consolidation worksheet; ignore income tax effects.
  - Determine the amount of income tax for Travers and Yarrow on a consolidated tax return for 2018.
  - Determine the amount of Stookey's income tax on a separate tax return for 2018.
  - Based on the answers to requirements (b) and (c), what journal entry does this combination make to record 2018 income tax?
28. Parson Company acquired an 80 percent interest in Syber Company on January 1, 2017. Any portion of Syber's business fair value in excess of its corresponding book value was assigned to trademarks. This intangible asset has subsequently undergone annual amortization based on a 15-year life. Over the past two years, regular intra-entity inventory sales transpired between the two companies. No payment has yet been made on the latest transfer. All dividends are paid in the same period as declared.

LO 7-5, 7-6

The individual financial statements for the two companies as well as consolidated totals for 2018 follow:

	Parson Company	Syber Company	Consolidated Totals
Sales .....	\$ (800,000)	\$(600,000)	\$(1,280,000)
Cost of goods sold .....	500,000	400,000	784,000
Operating expenses .....	100,000	100,000	202,500
Income of Syber .....	(74,800)	–0–	–0–
Separate company net income ...	<u>\$ (274,800)</u>	<u>\$(100,000)</u>	
Consolidated net income .....			\$ (293,500)
Net income attributable to noncontrolling interest .....			<u>18,700</u>
Net income attributable to Parson Company .....			<u>\$ (274,800)</u>
Retained earnings, 1/1/18 .....	\$ (611,600)	\$(290,000)	\$ (611,600)
Net income (above) .....	(274,800)	(100,000)	(274,800)
Dividends declared .....	70,000	30,000	70,000
Retained earnings, 12/31/18 .....	<u>\$ (816,400)</u>	<u>\$(360,000)</u>	<u>\$ (816,400)</u>
Cash and receivables .....	\$ 298,000	\$ 80,000	\$ 358,000
Inventory .....	190,000	160,000	338,000
Investment in Syber Company .....	368,400	–0–	–0–
Land, buildings, and equipment .....	380,000	260,000	640,000
Trademarks .....	–0–	–0–	32,500
Total assets .....	<u>\$ 1,236,400</u>	<u>\$ 500,000</u>	<u>\$ 1,368,500</u>
Liabilities .....	\$ (270,000)	\$ (60,000)	\$ (310,000)
Common stock .....	(120,000)	(80,000)	(120,000)
Additional paid-in capital .....	(30,000)	–0–	(30,000)
Noncontrolling interest in Syber .....	–0–	–0–	(92,100)
Retained earnings (above) .....	(816,400)	(360,000)	(816,400)
Total liabilities and equities .....	<u>\$ (1,236,400)</u>	<u>\$(500,000)</u>	<u>\$(1,368,500)</u>

- a. What method does Parson use to account for its investment in Syber?
- b. What is the balance of the intra-entity inventory gross profit deferred at the end of the current period?
- c. What amount was originally allocated to the trademarks?
- d. What is the amount of the current year intra-entity inventory sales?
- e. Were the intra-entity inventory sales made upstream or downstream?
- f. What is the balance of the intra-entity liability at the end of the current year?
- g. What amount of intra-entity gross profit was deferred from the preceding period and recognized in the current period?
- h. How was the ending Noncontrolling Interest in Syber Company computed?
- i. With a tax rate of 40 percent, what income tax journal entry is recorded if the companies prepare a consolidated tax return?
- j. With a tax rate of 40 percent, what income tax journal entry is recorded if these two companies prepare separate tax returns?

## LO 7-1

29. On January 1, 2016, Alpha acquired 80 percent of Delta. Of Delta's total business fair value, \$125,000 was allocated to copyrights with a 20-year remaining life. Subsequently, on January 1, 2017, Delta obtained 70 percent of Omega's outstanding voting shares. In this second acquisition, \$120,000 of Omega's total business fair value was assigned to copyrights that had a remaining life of 12 years. Delta's book value was \$490,000 on January 1, 2016, and Omega reported a book value of \$140,000 on January 1, 2017.

Delta has made numerous inventory transfers to Alpha since the business combination was formed. Intra-entity gross profits of \$15,000 were present in Alpha's inventory as of January 1, 2018. During the year, \$200,000 in additional intra-entity sales were made with \$22,000 in Intra-entity gross profits in inventory remaining at the end of the period.

Both Alpha and Delta utilized the partial equity method to account for their investment balances.

Following are the individual financial statements for the companies for 2018 with consolidated totals. Develop the worksheet entries necessary to derive these reported balances:

	Alpha Company	Delta Company	Omega Company	Consolidated Totals
Sales .....	\$ (900,000)	\$ (500,000)	\$(200,000)	\$(1,400,000)
Cost of goods sold .....	500,000	240,000	80,000	627,000
Operating expenses .....	294,000	129,000	50,000	489,250
Income of subsidiary .....	(144,000)	(49,000)	—0—	—0—
Separate company net income .....	<u>\$ (250,000)</u>	<u>\$ (180,000)</u>	<u>\$ (70,000)</u>	
Consolidated net income .....				\$ (283,750)
Net income attributable to noncontrolling interest (Delta Company) .....				31,950
Net income attributable to noncontrolling interest (Omega Company) .....				18,000
Net income attributable to Alpha Company .....				<u>\$ (233,800)</u>
Retained earnings, 1/1/18 .....	\$ (600,000)	\$ (400,000)	\$(100,000)	\$ (572,400)
Net income (above) .....	(250,000)	(180,000)	(70,000)	(233,800)
Dividends declared .....	50,000	40,000	50,000	50,000
Retained earnings, 12/31/18 .....	<u>\$ (800,000)</u>	<u>\$ (540,000)</u>	<u>\$ (120,000)</u>	<u>\$ (756,200)</u>
Cash and receivables .....	\$ 262,000	\$ 206,000	\$ 70,000	\$ 538,000
Inventory .....	290,000	310,000	160,000	738,000
Investment in Delta Company .....	628,000	—0—	—0—	—0—
Investment in Omega Company .....	—0—	238,000	—0—	—0—
Property, plant, and equipment .....	420,000	316,000	270,000	1,006,000
Copyrights .....	—0—	—0—	—0—	206,250
Total assets .....	<u>\$ 1,600,000</u>	<u>\$ 1,070,000</u>	<u>\$ 500,000</u>	<u>\$ 2,488,250</u>
Liabilities .....	\$ (600,000)	\$ (410,000)	\$(280,000)	\$(1,290,000)
Common stock .....	(200,000)	(120,000)	(100,000)	(200,000)
Retained earnings, 12/31/18 .....	(800,000)	(540,000)	(120,000)	(756,200)
Noncontrolling interest in Delta Company, 12/31/18 .....	—0—	—0—	—0—	(146,050)
Noncontrolling interest in Omega Company, 12/31/18 .....	—0—	—0—	—0—	(96,000)
Total liabilities and equities .....	<u>\$ (1,600,000)</u>	<u>\$ (1,070,000)</u>	<u>\$ (500,000)</u>	<u>\$ (2,488,250)</u>

## Develop Your Skills

### EXCEL CASE: INDIRECT SUBSIDIARY CONTROL



Highpoint owns a 95 percent majority voting interest in Middlebury. In turn, Middlebury owns an 80 percent majority voting interest in Lowton. In the current year, each firm reports the following income and dividends. Separate Company income figures do not include any investment or dividend income.

	Separate Company Income	Dividends Declared
Highpoint	\$425,000	\$200,000
Middlebury	340,000	150,000
Lowton	250,000	75,000

In addition, in computing its income on a full accrual basis, Middlebury's acquisition of Lowton necessitates excess acquisition-date fair value over book value amortizations of \$25,000 per year. Similarly, Highpoint's acquisition of Middlebury requires \$20,000 of excess fair-value amortizations.

#### Required

Prepare an Excel spreadsheet that computes the following:

1. Middlebury's net income including its equity in Lowton earnings.
2. Highpoint's net income including its equity in Middlebury's total earnings.
3. Total entity net income for the three companies.
4. Net income attributable to the noncontrolling interests.
5. Difference between these elements:
  - Highpoint's net income.
  - Total entity net income for the three companies less net income attributable to the noncontrolling interests of the total entity.

(Hint: The difference between these two amounts should be zero.)

### RESEARCH CASE: CONSOLIDATED TAX EXPENSE



Access The Coca-Cola Company's 2015 financial statements ([www.thecoca-colacompany.com](http://www.thecoca-colacompany.com)). Identify and discuss the following aspects of consolidated tax expense disclosed in the financial statements:

1. Loss carryforwards and carrybacks.
2. Components of deferred tax assets and liabilities.
3. Deferred tax impacts of stock sales by equity investees.
4. Deferred tax impacts of sales of interests in investees.
5. Valuation allowances on deferred taxes.





# Segment and Interim Reporting

As one of the largest companies in the United States, The Walt Disney Company reported consolidated revenues of \$52.5 billion in 2015. The Walt Disney Company is well known as a filmmaker and operator of theme parks, but it is perhaps less well known as the owner of the ESPN and ABC television networks. How much of the company's consolidated revenues did these different lines of business generate? Knowing this could be very useful to potential investors as opportunities for future growth and profitability in these different industries could differ significantly.

To comply with U.S. GAAP, Disney disaggregated its 2015 consolidated operating revenues and reported that the company's revenues were generated from five different operating segments: Approximately \$23.3 billion came from Media Networks, \$16.2 billion from Parks and Resorts, \$7.4 billion from Studio Entertainment, \$4.5 billion from Consumer Products, and \$1.2 billion from Interactive. Additional information disclosed by Disney indicated that \$40.3 billion of consolidated revenues were generated in the United States and Canada, \$6.5 billion in Europe, \$4.0 billion in Asia Pacific, and \$1.7 billion in Latin America and other parts of the world. Such information, describing the various components of Disney's operations (both by line of business and by geographic area), can often be more useful to an analyst than the single sales figure reported in the consolidated income statement. "All investors like segment reporting—separate financials for each division—because it enables them to analyze how well each part of a corporation is doing."<sup>1</sup>

In its 2015 Annual Report, the Boeing Company reported net earnings of \$5,176 million for the year ended December 31, 2015. This information was not made available to the public until early in 2016 after the company had closed the books and prepared audited financial statements for the prior year. To provide more timely information on which investors could base their decisions about the company throughout the year, Boeing published separate interim reports for each of the first three quarters of 2015. Net earnings declined from \$1,336 million in the first quarter to \$1,110 million in the second quarter, then rose to \$1,704 million in the third quarter, and then decreased to \$1,026 million in the fourth quarter. Information about the results of operations for time intervals of less than one year can be very useful to an analyst.

The first part of this chapter examines the specific requirements for disaggregating financial statement information as required by authoritative accounting literature. Companies must disclose specific items of information for each reportable operating segment and provide additional enterprisewide

## Learning Objectives

**After studying this chapter, you should be able to:**

- LO 8-1** Understand how an enterprise determines its operating segments and the factors that influence this determination.
- LO 8-2** Apply the three tests that are used to determine which operating segments are of significant size to warrant separate disclosure.
- LO 8-3** List the basic disclosure requirements for operating segments.
- LO 8-4** Determine when and what types of information must be disclosed for geographic areas.
- LO 8-5** Apply the criterion for determining when disclosure of a major customer is required.
- LO 8-6** Understand and apply procedures used in interim financial reports to treat an interim period as an integral part of the annual period.
- LO 8-7** List the minimum disclosure requirements for interim financial reports.

<sup>1</sup>Robert A. Parker, "How Do You Play the New Annual Report Game?" *Communication World*, September 1990, p. 26.

disclosures. The second part of the chapter concentrates on the special rules required to be applied in preparing interim reports. All publicly traded companies in the United States are required to prepare interim reports on a quarterly basis.

### LO 8-1

Understand how an enterprise determines its operating segments and the factors that influence this determination.

## Segment Reporting

According to FASB *Accounting Standards Codification*<sup>®</sup> (ASC) Topic 280, “Segment Reporting,” the objective of segment reporting is to provide information about the different business activities in which an enterprise engages and the different economic environments in which it operates to help users of financial statements

- Better understand the enterprise’s performance.
- Better assess its prospects for future net cash flows.
- Make more informed judgments about the enterprise as a whole.

### The Management Approach

To achieve this objective, U.S. GAAP follows a management approach for determining segments. The management approach is based on the way that management disaggregates the enterprise for making operating decisions. These disaggregated components are *operating segments*, which will be evident from the enterprise’s organization structure. More specifically, an operating segment is a component of an enterprise if

- It engages in business activities from which it recognizes revenues and incurs expenses.
- The chief operating decision maker regularly reviews its operating results to assess performance and make resource allocation decisions.
- Its discrete financial information is available.

An organizational unit can be an operating segment even if all of its revenues or expenses result from transactions with other segments as might be the case in a vertically integrated company. However, not all parts of a company are necessarily included in an operating segment. For example, a research and development unit that incurs expenses but does not recognize revenues would not be an operating segment. Similarly, corporate headquarters might not recognize revenues or might recognize revenues that are only incidental to the enterprise’s activities and therefore would not be considered an operating segment.

For many companies, only one set of organizational units qualifies as operating segments. In some companies, however, business activities are disaggregated in more than one way and the chief operating decision maker uses multiple sets of reports. For example, a company might generate reports by geographic region *and* by product line. In those cases, two additional criteria must be considered to identify operating segments:

1. An operating segment has a segment manager who is directly accountable to the chief operating decision maker for its financial performance. If more than one set of organizational units exist but segment managers are held responsible for only one set, that set constitutes the operating segments.
2. If segment managers exist for two or more overlapping sets of organizational units (as in a matrix form of organization), the nature of the business activities must be considered, and the organizational units based on products and services constitute the operating segments. For example, if certain managers are responsible for different product lines and other managers are responsible for different geographic areas, the enterprise components based on products would constitute the operating segments.

### LO 8-2

Apply the three tests that are used to determine which operating segments are of significant size to warrant separate disclosure.

## Determination of Reportable Operating Segments

After a company has identified its operating segments based on its internal reporting system, management must decide which segments to report separately. Generally, information must be reported separately for each operating segment that meets one or more quantitative

thresholds. *However, if two or more operating segments have essentially the same business activities in essentially the same economic environments, information for those individual segments may be combined.* For example, a retail chain may have five stores, each of which meets the definition of an operating segment, but each store is essentially the same as the others. In that case, the benefit to be derived from separately reporting each operating segment would not justify the cost of disclosure. In determining whether business activities and environments are similar, management must consider these aggregation criteria:

1. The nature of the products and services provided by each operating segment.
2. The nature of the production process.
3. The type or class of customer.
4. The distribution methods.
5. If applicable, the nature of the regulatory environment.

Segments must be similar in each and every one of these areas to be combined. However, aggregation of similar segments is not required.

### Quantitative Thresholds

After determining whether any segments are to be combined, management next must decide which of its operating segments are significant enough to justify separate disclosure. The FASB established three tests for identifying operating segments for which separate disclosure is required:

1. A revenue test.
2. A profit or loss test.
3. An asset test.

*An operating segment needs to satisfy only one of these tests to be considered of significant size to necessitate separate disclosure.*

To apply these three tests, a segment's revenues, profit or loss, and assets (before any intra-entity eliminations) must be determined. Additionally, general corporate (nontraceable) revenues and expenses are not considered in conducting these tests because corporate headquarters is not a separate unit for segment reporting. Authoritative literature does not stipulate a specific measure of profit or loss, such as operating profit or income before taxes, to be used in applying these tests. Instead, the profit measure used by the chief operating decision maker in evaluating operating segments is to be used. An operating segment is considered to be significant if it meets any one of the following tests:

1. *Revenue test.* Segment revenues, both external and intersegment, are 10 percent or more of the combined revenue, internal and external, of all reported operating segments.
2. *Profit or loss test.* Segment profit or loss is 10 percent or more of the larger (in absolute terms) of the combined reported profit of all profitable segments or the combined reported loss of all segments incurring a loss.
3. *Asset test.* Segment assets are 10 percent or more of the combined assets of all operating segments.

Application of the revenue and asset tests appears to pose few challenges. In contrast, the profit or loss test is more complicated and warrants illustration. For this purpose, assume that Durham Company has five separate operating segments with the following profits or losses:

#### ***Durham Company Segments—Profits and Losses***

Soft drinks . . . . .	\$1,700,000
Wine . . . . .	(600,000)
Food products . . . . .	240,000
Paper packaging . . . . .	880,000
Recreation parks . . . . .	<u>(130,000)</u>
Net operating profit . . . . .	<u>\$2,090,000</u>

Three of these industry segments (soft drinks, food products, and paper packaging) report profits that total \$2,820,000. The two remaining segments have losses of \$730,000 for the year.

Profits		Losses	
Soft drinks . . . . .	\$ 1,700,000	Wine . . . . .	\$ 600,000
Food products . . . . .	240,000	Recreation parks . . . . .	<u>130,000</u>
Paper packaging . . . . .	<u>880,000</u>		
Total . . . . .	<u>\$ 2,820,000</u>	Total . . . . .	<u>\$ 730,000</u>

Consequently, \$2,820,000 serves as the basis for the profit or loss test because that amount is larger in absolute terms than \$730,000. Based on the 10 percent threshold, any operating segment with either a profit *or* loss of more than \$282,000 ( $10\% \times \$2,820,000$ ) is considered material and, thus, must be disclosed separately. According to this one test, the soft drinks and paper packaging segments (with operating profits of \$1.7 million and \$880,000, respectively) are both judged to be reportable, as is the wine segment, despite having a loss of \$600,000.

Operating segments that do not meet any of the quantitative thresholds may be combined to produce a reportable segment if they share *a majority* of the aggregation criteria listed earlier. Durham Company's food products and recreation parks operating segments do not meet any of the aggregation criteria. Operating segments that are not individually significant and that cannot be aggregated with other segments are combined and disclosed in an *All Other* category. The sources of the revenues included in the All Other category must be disclosed.

## Testing Procedures—Complete Illustration

To provide a comprehensive example of all three of these testing procedures, assume that Atkinson Company is a large business combination comprising six operating segments: automotive, furniture, textbook, motion picture, appliance, and finance. Complete information about each of these segments, as reported internally to the chief operating decision maker, appears in Exhibit 8.1.

### The Revenue Test

In applying the revenue test to Atkinson Company's operating segments, the combined revenue of all segments must be determined:

Operating Segment	Total Revenues
Automotive . . . . .	\$ 41.6*
Furniture . . . . .	9.0
Textbook . . . . .	6.8
Motion picture . . . . .	22.8
Appliance . . . . .	5.3
Finance . . . . .	<u>12.3</u>
Combined total . . . . .	<u>\$ 97.8</u>

\*All figures are in millions.

Because these six segments have total revenues of \$97.8 million, that amount is used in applying the revenue test. Based on the 10 percent significance level, any segment with revenues of more than \$9.78 million qualifies for required disclosure. Accordingly, the automotive, motion picture, and finance segments have satisfied this particular criterion. Atkinson must present appropriate disaggregated information for each of these three operating segments within its financial statements.

**EXHIBIT 8.1 Reportable Segment Testing**

<b>ATKINSON COMPANY</b>						
	<b>Automotive</b>	<b>Furniture</b>	<b>Textbook</b>	<b>Motion Picture</b>	<b>Appliance</b>	<b>Finance</b>
<b>Revenues:</b>						
Sales to outsiders .....	\$32.6*	\$6.9	\$6.6	\$22.2	\$3.1	\$ -0-
Intersegment transfers .....	6.6	1.2	-0-	-0-	1.9	-0-
Interest revenue—outsiders.....	2.4	0.9	0.2	0.6	0.3	8.7
Interest revenue— intersegment loans .....	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>3.6</u>
<b>Total revenues .....</b>	<b><u>\$41.6</u></b>	<b><u>\$9.0</u></b>	<b><u>\$6.8</u></b>	<b><u>\$22.8</u></b>	<b><u>\$5.3</u></b>	<b><u>\$12.3</u></b>
<b>Expenses:</b>						
Operating expenses— outsiders .....	\$14.7	\$3.3	\$7.2	\$21.0	\$3.4	\$ 1.8
Operating expenses— intersegment transfers .....	4.8	1.0	-0-	-0-	0.8	0.8
Depreciation and amortization .....	2.4	0.3	0.1	3.0	0.2	0.5
Interest expense .....	2.1	1.0	2.2	4.6	-0-	6.1
Income taxes .....	<u>6.6</u>	<u>1.4</u>	<u>(1.5)</u>	<u>(3.1)</u>	<u>0.4</u>	<u>0.1</u>
<b>Total expenses.....</b>	<b><u>\$30.6</u></b>	<b><u>\$7.0</u></b>	<b><u>\$8.0</u></b>	<b><u>\$25.5</u></b>	<b><u>\$4.8</u></b>	<b><u>\$ 9.3</u></b>
<b>Profit (loss).....</b>	<b><u>\$11.0</u></b>	<b><u>\$2.0</u></b>	<b><u>\$(1.2)</u></b>	<b><u>\$(2.7)</u></b>	<b><u>\$0.5</u></b>	<b><u>\$ 3.0</u></b>
<b>Assets:</b>						
Tangible.....	\$ 9.6	\$1.1	\$0.8	\$10.9	\$0.9	\$ 9.2
Intangible.....	1.8	0.2	0.7	3.6	0.1	-0-
Intersegment loans .....	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>-0-</u>	<u>5.4</u>
<b>Total assets.....</b>	<b><u>\$11.4</u></b>	<b><u>\$1.3</u></b>	<b><u>\$ 1.5</u></b>	<b><u>\$14.5</u></b>	<b><u>\$1.0</u></b>	<b><u>\$14.6</u></b>

\*All figures are in millions.

**The Profit or Loss Test**

Subtracting segment expenses from total segment revenues determines the profit or loss of each operating segment. Common costs are not required to be allocated to individual segments to determine segment profit or loss if this is not normally done for internal purposes. For example, an enterprise that accounts for pension expense only on a consolidated basis is not required to allocate pension expense to each operating segment. Any allocations of common costs that are made must be done on a reasonable basis. Moreover, segment profit or loss does not have to be calculated in accordance with generally accepted accounting principles if the measure reported internally is calculated on another basis. To assist the readers of financial statements in understanding segment disclosures, any differences in the basis of measurement between segment and consolidated amounts must be disclosed.

Each operating segment's profit or loss is calculated as follows:

<b>Operating Segment</b>	<b>Total Revenues</b>	<b>Total Expenses</b>	<b>Profit</b>	<b>Loss</b>
Automotive .....	\$41.6*	\$30.6	\$11.0	\$-0-
Furniture .....	9.0	7.0	2.0	-0-
Textbook.....	6.8	8.0	-0-	1.2
Motion picture.....	22.8	25.5	-0-	2.7
Appliance .....	5.3	4.8	0.5	-0-
Finance .....	<u>12.3</u>	<u>9.3</u>	<u>3.0</u>	<u>-0-</u>
<b>Totals .....</b>	<b><u>\$97.8</u></b>	<b><u>\$85.2</u></b>	<b><u>\$16.5</u></b>	<b><u>\$ 3.9</u></b>

\*All figures are in millions.

The \$16.5 million in total profit is larger in an absolute sense than the \$3.9 million in losses. Therefore, this larger balance is the basis for the second quantitative test. As a result of the 10 percent criterion, either a profit or loss of \$1.65 million or more qualifies a segment for disaggregation. According to the profit or loss totals just calculated, Atkinson Company's automotive, furniture, motion picture, and finance segments are large enough to warrant separate disclosure.

### The Asset Test

The final test is based on the operating segments' combined total assets:

Operating Segment	Assets
Automotive .....	\$11.4*
Furniture .....	1.3
Textbook .....	1.5
Motion picture .....	14.5
Appliance .....	1.0
Finance .....	14.6
Combined total .....	<u>\$44.3</u>

\*All figures are in millions.

Because 10 percent of the combined total equals \$4.43 million, any segment holding at least that amount of assets is viewed as a reportable segment. Consequently, according to this final significance test, the automotive, motion picture, and finance segments are all considered of sufficient size to require disaggregation. The three remaining segments do not have sufficient assets to pass this particular test.

### Summary of Test Results

A summary of all three significance tests as applied to Atkinson Company follows:

Operating Segments	Revenue Test	Profit or Loss Test	Asset Test
Automotive .....	✓	✓	✓
Furniture .....		✓	
Textbook .....			
Motion picture .....	✓	✓	✓
Appliance .....			
Finance .....	✓	✓	✓

Four of this company's operating segments meet at least one of the quantitative thresholds (automotive, furniture, motion picture, and finance) and therefore are separately reportable. Because neither the textbook nor the appliance segment has met any of these three tests, disaggregated information describing their *individual* operations is not required. However, the financial data accumulated from these two nonsignificant segments still have to be presented. The amounts for these two segments can be combined and disclosed as aggregate amounts in an All Other category with appropriate disclosure of the source of revenues.

## Other Guidelines

Additional guidelines apply to the disclosure of operating segment information. These rules are designed to ensure that the disaggregated data are consistent from year to year and relevant to the needs of financial statement users. For example, any operating segment that has been reportable in the past and is judged by management to be of continuing significance should be disclosed separately in the current financial statements regardless of the outcome of the testing process. This ensures the ongoing usefulness of segment information, especially for comparison purposes.

In a similar manner, if an operating segment newly qualifies for disclosure in the current year, prior period segment data presented for comparative purposes must be restated to reflect the newly reportable segment as a separate segment. Again, the comparability of information has high priority in setting the standards for disclosure.

Another issue concerns the number of operating segments that should be disclosed. To enhance the value of the disaggregated information, a substantial portion of a company's operations should be presented individually. A sufficient number of segments is presumed to be included only if the combined segment sales to unaffiliated customers are at least 75 percent of total company consolidated sales made to outsiders. If this lower limit is not achieved, additional segments must be disclosed separately despite their failure to satisfy even one of the three quantitative thresholds.

As an illustration, assume that Brendan Corporation identified seven operating segments that generated revenues as follows (in millions):

Operating Segments	Sales to Unaffiliated Customers	Intersegment Transfers	Segment Revenues (and percentage of total)	
Housewares .....	\$ 5.5	\$ 1.6	\$ 7.1	9.3%
Toys .....	6.2	—0—	6.2	8.1
Pottery .....	3.4	7.9	11.3	14.8 ✓
Lumber .....	6.6	10.4	17.0	22.3 ✓
Lawn mowers .....	7.2	—0—	7.2	9.4
Appliances .....	2.1	6.2	8.3	10.9 ✓
Construction .....	19.2	—0—	19.2	25.2 ✓
Totals .....	<u>\$50.2</u>	<u>\$26.1</u>	<u>\$76.3</u>	<u>100</u>

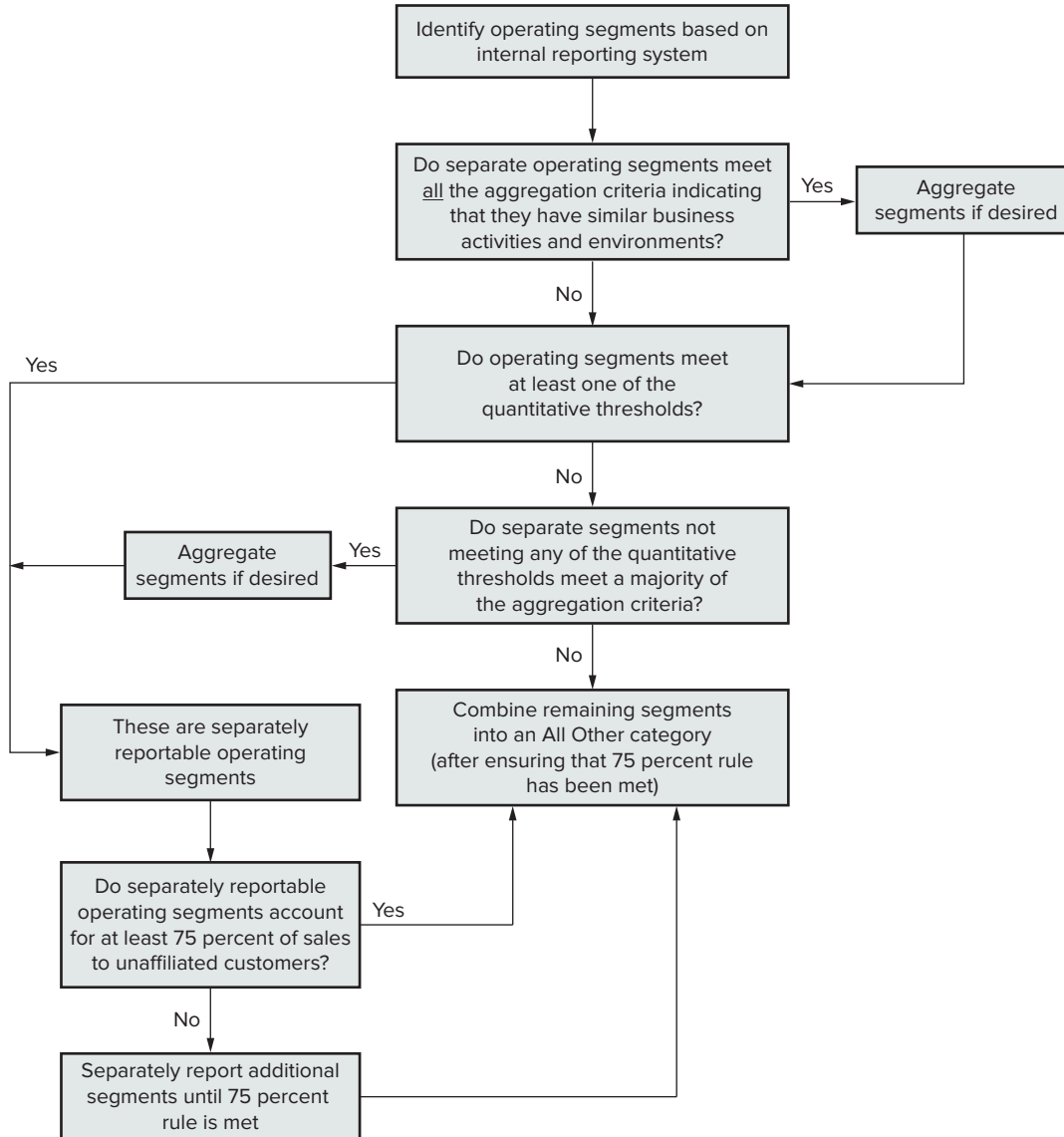
Based on the 10 percent revenue test, four of these segments are reportable (because each has total revenues of more than \$7.63 million): pottery, lumber, appliances, and construction. Assuming that none of the other segments qualifies as significant in either of the two remaining tests, disclosure of disaggregated data is required for only these four segments. However, the 75 percent rule has not been met; the reportable segments generate just 62.4 percent of the company's total sales to unrelated parties (in millions):

Reportable Segments	Sales to Unaffiliated Customers
Pottery .....	\$ 3.4
Lumber .....	6.6
Appliances .....	2.1
Construction .....	19.2
Total .....	<u>\$31.3</u>
Information being disaggregated: \$31.3 million/\$50.2 million = 62.4%	

To satisfy the 75 percent requirement, Brendan Corporation must also include the lawn mowers segment within the disaggregated data. With the addition of this nonsignificant segment, sales of \$38.5 million (\$31.3 + \$7.2) to outside parties now are disclosed. This amounts to 76.7 percent of the company total (\$38.5 million/\$50.2 million). The two remaining segments—housewares and toys—could still be included separately within the disaggregated data; disclosure is not prohibited. However, information for these two segments probably would be combined and reported as aggregate amounts in an All Other category.

One final aspect of these reporting requirements should be mentioned. Some companies might be organized in such a fashion that a relatively large number of operating segments exist. The authoritative guidance suggests that there could be a practical limit to the number of operating segments that should be reported separately. Beyond that limit, the information becomes too detailed to be useful. Although a maximum number is not prescribed, FASB



**EXHIBIT 8.2** Flowchart for Determining Reportable Operating Segments

ASC 280-10-50-18 suggests that 10 separately reported segments might be the practical limit. Exhibit 8.2 provides a flowchart summarizing the procedures for determining separately reportable operating segments.

**LO 8-3**

List the basic disclosure requirements for operating segments.

## Information to Be Disclosed by Reportable Operating Segments

A significant amount of information is required to be disclosed for each operating segment:

1. *General information* about the operating segment:

- Factors used to identify reportable operating segments.
- Types of products and services from which each operating segment reported derives its revenues.

2. *Segment profit or loss* and each of the following if it is regularly provided to or included in the measure of segment profit or loss reviewed by the chief operating decision maker:
  - Revenues from external customers.
  - Revenues from transactions with other operating segments.
  - Interest revenue and interest expense (reported separately); net interest revenue may be reported for finance segments if this measure is used internally for evaluation.
  - Depreciation, depletion, and amortization expenses.
  - Unusual items.
  - Equity in the net income of investees accounted for by the equity method.
  - Income tax expense or benefit.
  - Other significant noncash items included in segment profit or loss.
3. *Total segment assets* and the following related items:
  - Investment in equity method affiliates.
  - Expenditures for additions to long-lived assets.

The measure of segment profit or loss and segment assets disclosed must be the same as the measure reported to the chief operating decision maker for the purpose of assessing performance and allocating resources to segments. If, for example, the chief operating decision maker evaluates segment performance on the basis of earnings before interest, taxes, depreciation, and amortization (EBITDA), then EBITDA must be disclosed for each reportable segment. In that case, interest revenue and interest expense; income tax expense or benefit; and depreciation, depletion, and amortization need not be disclosed by segment, unless these amounts are reported to the chief operating decision maker in addition to EBITDA.

Authoritative guidance does not specifically require cash flow information to be reported for each operating segment because this information often is not generated by segment for internal reporting purposes. The requirement to disclose significant noncash items other than depreciation is an attempt to provide information that might enhance users' ability to estimate cash flow from operations.

Immaterial items need not be disclosed. For example, some segments do not have material amounts of interest revenue and expense, and therefore disclosure of these items of information is not necessary. In addition, if the internal financial reporting system does not generate information for an item on a segment basis, that item need not be disclosed. This is consistent with the rationale that segment reporting should create as little additional cost to an enterprise as possible.

To demonstrate how the operating segment information might be disclosed, we return to the Atkinson Company example earlier in this chapter. Application of the quantitative threshold tests resulted in four separately reportable segments (automotive, furniture, motion picture, and finance). The nonsignificant operating segments (textbook and appliance) are combined in an All Other category. Exhibit 8.3 shows the operating segment disclosures included in Atkinson's financial statements. Depreciation and amortization, interest, and income taxes are disclosed for each segment because these expenses are included in the measure of segment profit or loss reported to the chief operating decision maker.

In addition to the information in Exhibit 8.1, data on other significant noncash items, and expenditures for long-lived segment assets were gathered for each operating segment to comply with the disclosure requirements. Only the automotive segment has other significant noncash items, and none of the segments have equity method investments. Atkinson had no unusual items during the year.

To determine whether a sufficient number of segments is reported separately, the ratio of combined sales to unaffiliated customers for the separately reported operating segments must be compared with total company sales made to outsiders. The combined amount of revenues

**EXHIBIT 8.3** Operating Segment Disclosures

<b>ATKINSON COMPANY</b>					
	<b>Operating Segment</b>				
	<b>Automotive</b>	<b>Furniture</b>	<b>Motion Picture</b>	<b>Finance</b>	<b>All Other</b>
<b>Segment profit (loss)</b> .....	<b>\$11.0*</b>	<b>\$2.0</b>	<b>\$(2.7)</b>	<b>\$ 3.0</b>	<b>\$(0.7)</b>
Revenues from external customers .....	32.6*	6.9	22.2	—	9.7
Intersegment revenues .....	6.6	1.2	—0—	—	1.9
Interest revenue .....	2.4	0.9	0.6	—	0.5
Interest expense .....	2.1	1.0	4.6	—	2.2
Net interest revenue .....	—	—	—	6.2	—
Depreciation and amortization .....	2.4	0.3	3.0	0.5	0.3
Other significant noncash items:					
Cost in excess of billings on long-term contracts .....	0.8	—0—	—0—	—0—	—0—
Income tax expense (benefit) .....	6.6	1.4	(3.1)	0.1	(1.1)
<b>Segment assets</b> .....	<b>11.4</b>	<b>1.3</b>	<b>14.5</b>	<b>14.6</b>	<b>2.5</b>
Expenditures for long-lived segment assets ..	3.5	0.4	3.7	1.7	1.3

\*All figures are in millions.

from external customers disclosed for the automotive, furniture, motion picture, and finance segments is \$61.7 million. Total revenues from external customers are \$71.4 million:

$$\$61.7 \text{ million} / \$71.4 \text{ million} = 86.4\%$$

Because 86.4 percent exceeds the lower limit of 75 percent, Atkinson's level of disaggregation is adequate.

### Reconciliations to Consolidated Totals

As noted earlier, segment information is to be provided as the company's internal reporting system prepares it even if not based on GAAP. Preparing segment information in accordance with authoritative accounting literature used at the consolidated level is difficult in some cases because some GAAP is not intended to apply at the segment level. Examples are accounting for (1) inventory on a LIFO basis when inventory pools include items in more than one segment, (2) companywide pension plans, and (3) litigation obligations. Accordingly, allocation of these items to individual operating segments is not required.

However, the total of the reportable segments' revenues must be reconciled to consolidated revenues, the total of the reportable segments' profit or loss must be reconciled to consolidated income before tax, and the total of the reportable segments' assets must be reconciled to consolidated total assets. To carry out this reconciliation, adjustments and eliminations that have been made to prepare consolidated financial statements in compliance with GAAP must be identified. Examples are the elimination of intersegment revenues and an adjustment for companywide pension expense.

In addition, in reconciling the total of segments' revenues, profit or loss, and assets to the consolidated totals, the aggregate amount of revenues, profit or loss, and assets from immaterial operating segments must be disclosed. The company also must disclose assets, revenues, expenses, gains, losses, interest expense, and depreciation, depletion, and amortization expense for components of the enterprise that are not operating segments. This includes, for example, assets and expenses associated with corporate headquarters. See Exhibit 8.4 for an example of how Atkinson might present these reconciliations.

Atkinson Company must make four types of adjustments in reconciling segment results with consolidated totals. The first type of adjustment is to eliminate intra-entity revenues, profit or loss, and assets that are not included in consolidated totals. The elimination of intersegment revenues includes intersegment transfers amounting to \$9.7 million plus \$3.6 million of intersegment interest revenue generated by the finance segment (total \$13.3 million).

**EXHIBIT 8.4**  
**Reconciliation of Segment**  
**Results to Consolidated**  
**Totals**

<b>ATKINSON COMPANY</b>	
Revenues:	
Total segment revenues . . . . .	\$97.8*
Elimination of intersegment revenues . . . . .	<u>(13.3)</u>
Total consolidated revenues . . . . .	<u>\$84.5</u>
Profit or loss:	
Total segment profit or loss . . . . .	\$12.6
Total segment income taxes . . . . .	<u>3.9</u>
Total segment profit before income taxes . . . . .	\$16.5
Elimination of intersegment profits . . . . .	(5.9)
Unallocated amounts:	
Litigation settlement received . . . . .	3.6
Other corporate expenses . . . . .	(2.7)
Adjustment to pension expense in consolidation . . . . .	<u>(0.8)</u>
Consolidated income before income taxes . . . . .	<u>\$10.7</u>
Assets:	
Total for reported segments . . . . .	\$44.3
Elimination of intersegment loans . . . . .	(5.4)
Other corporate assets . . . . .	<u>5.8</u>
Total consolidated assets . . . . .	<u>\$44.7</u>

\*All figures are in millions.

Likewise, intersegment loans made by the finance segment must be eliminated to reconcile to total consolidated assets. The second adjustment adds total segment income taxes back to total segment profit to be able to reconcile to income before tax for the company as a whole. The third type of adjustment relates to corporate items that have not been allocated to the operating segments, including a litigation settlement received by the company, and corporate headquarters expenses and assets. The fourth adjustment reconciles differences in segment accounting practices from accounting practices used in the consolidated financial statements. The only adjustment of this nature that Atkinson made relates to the accounting for pension expense. Individual operating segments measure pension expense based on cash payments made to the pension plan. Because GAAP requires measuring pension expense on an accrual basis, an adjustment for the amount of pension expense to be recognized in the consolidated statements is necessary.

### Explanation of Measurement

In addition to the operating segment disclosures and reconciliation of segment results to consolidated totals, companies also must explain the measurement of segment profit or loss and segment assets, including a description of any differences in measuring (1) segment profit or loss and consolidated income before tax, (2) segment assets and consolidated assets, and (3) segment profit or loss and segment assets. An example of this last item would be the allocation of depreciation expense to segments in determining segment profit or loss even though the related depreciable assets are not included in segment assets. The basis of accounting for intersegment transactions also must be described.

## Examples of Operating Segment Disclosures

A majority of companies are organized along product and/or service lines. Exhibit 8.5 shows operating segment disclosures for Fluor Corporation. Fluor provides a reconciliation of total segment profit to consolidated earnings before taxes in its segment disclosures. Because Fluor measures segment profit on a before-tax basis, it does not report income tax expense or

**EXHIBIT 8.5 Operating Segment Disclosures in Fluor Corporation's 2014 Annual Report****15. Operations by Business Segment and Geographical Area**

The company provides professional services in the fields of engineering, procurement, construction, fabrication and modularization, commissioning and maintenance, as well as project management, on a global basis and serves a diverse set of industries worldwide. The five principal business segments are: Oil & Gas, Industrial & Infrastructure, Government, Global Services and Power, as discussed further below.

**Operating Information by Segment**

(in millions)	Year Ended December 31,		
	2014	2013	2012
External revenue			
Oil & Gas . . . . .	\$ 11,368.9	\$11,519.8	\$ 9,513.9
Industrial & Infrastructure . . . . .	6,061.7	11,081.7	13,237.8
Government . . . . .	2,511.9	2,749.1	3,304.7
Global Services . . . . .	585.0	611.8	679.6
Power . . . . .	1,004.1	1,389.2	841.1
Total external revenue . . . . .	<u>\$21,531.60</u>	<u>\$27,351.6</u>	<u>\$27,577.1</u>
Segment profit (loss)			
Oil & Gas . . . . .	\$ 673.4	\$ 441.1	\$ 334.7
Industrial & Infrastructure . . . . .	391.2	476.0	176.5
Government . . . . .	92.7	161.4	149.7
Global Services . . . . .	73.8	119.7	125.4
Power . . . . .	31.3	11.7	(16.9)
Total segment profit . . . . .	<u>\$ 1,262.4</u>	<u>\$ 1,209.9</u>	<u>\$ 769.4</u>
Depreciation and amortization of fixed assets			
Oil & Gas . . . . .	\$ —	\$ —	\$ —
Industrial & Infrastructure . . . . .	2.6	1.5	2.4
Government . . . . .	5.4	9.5	12.9
Global Services . . . . .	111.8	117.7	124.6
Power . . . . .	1.6	1.1	0.9
Corporate and other . . . . .	70.3	76.5	69.0
Total depreciation and amortization of fixed assets . . . . .	<u>\$ 191.7</u>	<u>\$ 206.3</u>	<u>\$ 210.4</u>
Capital expenditures			
Oil & Gas . . . . .	\$ —	\$ —	\$ —
Industrial & Infrastructure . . . . .	8.3	2.9	0.5
Government . . . . .	2.2	4.1	5.7
Global Services . . . . .	224.0	145.3	184.5
Power . . . . .	2.1	1.3	3.6
Corporate and other . . . . .	88.1	134.9	60.4
Total capital expenditures . . . . .	<u>\$ 324.7</u>	<u>\$ 288.5</u>	<u>\$ 209.8</u>
Total assets			
Oil & Gas . . . . .	\$ 1,708.2	\$ 1,643.8	
Industrial & Infrastructure . . . . .	871.9	909.7	
Government . . . . .	540.1	580.6	
Global Services . . . . .	795.3	758.9	
Power . . . . .	178.6	154.9	
Corporate and other . . . . .	4,100.3	4,276.0	
Total assets . . . . .	<u>\$ 8,194.4</u>	<u>\$ 8,323.9</u>	

The reportable segments follow the same accounting policies as those described in Major Accounting Policies. Management evaluates a segment's performance based upon segment profit. The company incurs cost and expenses and holds certain assets at the corporate level which relate to its business as a whole. Certain of these amounts have been charged to the company's business segments by various methods, largely on the basis of usage. Total assets not allocated to segments and held in "Corporate and other" primarily include cash, marketable securities, income-tax related assets, pension assets, deferred compensation trust assets and corporate property, plant, and equipment.

(continued)

## EXHIBIT 8.5 (Continued)

(in millions)	Year Ended December 31,		
	2014	2013	2012
Total segment profit .....	\$1,262.4	\$1,209.9	\$769.4
Corporate general and administrative expense.....	(182.7)	(175.1)	(151.0)
Interest expense, net .....	(11.4)	(12.5)	(0.5)
Earnings attributable to noncontrolling interests .....	136.6	155.3	115.6
Earnings before taxes.....	<u>\$1,204.9</u>	<u>\$1,177.6</u>	<u>\$733.5</u>

benefit by operating segment. A significant amount of corporate general and administrative expense is not allocated to individual operating segments. Likewise, net interest expense and noncontrolling interests are treated as corporate level items, and the company thus does not disclose these amounts by operating segment.

Some companies, such as McDonald's, Coca-Cola, and Nike, are organized geographically and define operating segments as regions of the world. McDonald's has four operating segments: United States; Europe; Asia, Pacific, Middle East, Africa (APMEA); and Other Countries and Corporate. Some companies report a combination of products or services and international segments. Walmart has three operating segments: Walmart U.S., Walmart International, and Sam's Club. PepsiCo has six reportable segments: Frito-Lay North America (FLNA); Quaker Foods North America (QFNA); Latin America Foods (LAF); PepsiCo Americas Beverages (PAB); Pepsico Europe; and Pepsico Asia, Middle East, and Africa (AMEA). The nature of these companies' segmentation provides considerable insight into the way upper management views and evaluates the various parts of the consolidated enterprise.

## Entitywide Information

### Information about Products and Services

The authoritative literature recognizes that some enterprises are not organized along product or service lines. For example, some enterprises are organized geographically. Moreover, some enterprises may have only one operating segment yet provide a range of different products and services. To provide some comparability between enterprises, FASB ASC 280-10-50-40 requires *disclosure of revenues derived from transactions with external customers from each product or service* if operating segments have not been determined based on differences in products or services. An enterprise with only one operating segment also must disclose revenues from external customers on the basis of product or service. However, providing this information is not required if impracticable; that is, the information is not available and the cost to develop it would be excessive.

Lowe's Companies, Inc., operates in only one segment; nevertheless, it reported "sales by product category," as required in its 2014 annual report. See Exhibit 8.6 for that information.

#### LO 8-4

Determine when and what types of information must be disclosed for geographic areas.

### Information about Geographic Areas

For those companies with international activities, two items of information—revenues from external customers and long-lived assets—must be reported (1) for the *domestic country* and (2) for *all foreign countries in total* in which the enterprise derives revenues or holds assets. In addition, if revenues from external customers attributed to an *individual foreign country* are material, the specific country and amount of revenues must be disclosed separately as

**EXHIBIT 8.6 Sales by Product Category in Lowe's Companies, Inc., 2014 Annual Report**

(Dollars in millions)	Sales by Product Category					
	2014		2013*		2012*	
	Total Sales	%	Total Sales	%	Total Sales	%
Kitchen & Appliances .....	\$ 8,007	14%	\$ 7,527	14%	\$ 6,973	14%
Lumber & Building Materials .....	6,884	12	6,596	12	6,276	12
Tools & Hardware .....	6,263	11	5,873	11	5,633	11
Fashion Fixtures .....	5,591	10	5,271	10	4,964	10
Rough Plumbing & Electrical .....	4,928	9	4,423	9	4,356	9
Lawn & Garden .....	4,639	8	4,423	8	4,340	9
Seasonal Living .....	3,717	7	3,615	7	3,433	7
Paint .....	3,614	6	3,471	7	3,306	6
Home Fashions, Storage & Cleaning .....	3,263	6	3,176	6	3,050	6
Flooring .....	3,219	6	3,066	6	2,864	6
Millwork .....	3,135	6	2,926	5	2,793	5
Outdoor Power Equipment .....	2,339	4	2,224	4	2,046	4
Other .....	624	1	565	1	487	1
<b>Totals .....</b>	<b>\$56,223</b>	<b>100%</b>	<b>\$53,417</b>	<b>100%</b>	<b>\$50,521</b>	<b>100%</b>

\* Certain prior period amounts have been reclassified to conform to current product category classifications.

must a material amount of long-lived assets located in an individual foreign country. Even if the company has only one operating segment and therefore does not otherwise provide segment information, it must report geographic area information.

Thus, U.S.-based companies are required to disclose the amount of revenues generated and long-lived assets held in (1) the United States, (2) all other countries in total, and (3) each material foreign country. Requiring disclosure at the individual country level is a significant change from previous accounting standards, which required disclosures according to groups of countries in the same region of the world (such as Asia-Pacific). Current U.S. GAAP does not preclude companies from continuing to provide information by region, and for consistency purposes many companies continue to do so even if they determine no single foreign country to be material. The reporting requirement was changed from geographic regions to individual countries because reporting information about individual countries has two benefits. First, it reduces the burden on financial statement preparers because most companies likely have material operations in only a few countries, perhaps only their country of domicile. Second, and more important, country-specific information is easier to interpret and therefore more useful. Individual countries within a region of the world often experience very different rates of economic growth and economic conditions. Disclosures by individual country rather than groups of countries provide investors and other financial statement readers better information for assessing the risk level associated with a company's foreign operations.

Although a 10 percent threshold was considered for determining when a country is material, ultimately the FASB decided to leave this to management's judgment. In determining materiality, management should apply the concept that an item is material if its omission could change a user's decision about the enterprise as a whole. U.S. GAAP does not provide more specific guidance on this issue.

Considerable variation exists with respect to how companies apply the materiality rule for determining separately reportable countries. For example, International Business Machines Corporation (IBM) provides disclosures only for those countries with 10 percent or more of revenues or net plant, property, and equipment. Exhibit 8.7 contains the geographic area information included in IBM's 2014 Annual Report. With respect to revenue, only the United States and Japan meet the company's materiality threshold of 10 percent. As a result, the location of more than 50 percent of IBM's revenues is not disclosed. Only the United States meets the 10 percent threshold for net plant, property, and equipment.



## Discussion Question

### HOW DOES A COMPANY DETERMINE WHETHER A FOREIGN COUNTRY IS MATERIAL?

Segment reporting can provide useful information for investors and competitors. Segment disclosures could result in competitive harm for the company making the disclosures. By analyzing segment information, potential competitors can identify and concentrate on the more successful areas of a disclosing company's business. Indeed, the FASB recognized competitive harm as an issue of concern for companies disclosing segment information. In developing the current segment reporting guidelines, the FASB considered but ultimately decided not to provide companies an exemption from providing segment information if they believed that doing so would result in competitive harm. The FASB believed that such an exemption would be inappropriate because it would provide a means for broad noncompliance with the standard.

The previous segment reporting standard required geographic segments with 10 percent or more of total firm revenues, operating profit, or identifiable assets to be reported separately. In contrast, the current guidelines require disclosures to be provided by country when revenues or long-lived assets in an individual country are material. However, U.S. GAAP does not specify what is material for this purpose but leaves this to management judgment. Some commentators have expressed a concern that firms might use high materiality thresholds to avoid making individual country disclosures, perhaps to avoid potential competitive harm. Anecdotally, the very different levels of disclosure provided in 2014 by IBM and DuPont shown in Exhibits 8.7 and 8.8, respectively, show that companies define materiality differently.

What factors might a company consider in determining whether an individual foreign country is material to its operations? Should U.S. GAAP require a percentage test to determine when an individual country is material?

#### EXHIBIT 8.7 IBM's Geographic Area Disclosures

#### INTERNATIONAL BUSINESS MACHINES CORPORATION GEOGRAPHIC INFORMATION

The following provides information for those countries that are 10 percent or more of the specific category.

Revenue*	2014	2013	2012
(\$ in millions)			
<i>For the year ended December 31:</i>			
United States . . . . .	\$ 32,021	\$33,427	\$ 34,653
Japan . . . . .	8,382	9,070	10,696
Other countries . . . . .	52,390	55,871	57,525
<b>Total IBM consolidated revenue . . .</b>	<b>\$ 92,793</b>	<b>\$98,368</b>	<b>\$102,874</b>
<b>Plant and Other Property—Net</b>			
(\$ in millions) . . . . .			
<i>At December 31:</i>			
United States . . . . .	\$ 4,388	\$ 6,723	\$ 6,555
Other countries . . . . .	5,690	6,257	6,299
<b>Total . . . . .</b>	<b>\$ 10,078</b>	<b>\$12,979</b>	<b>\$ 12,854</b>

\*Revenues are attributed to countries based on the location of the client. There is a difference between the sum of the individual amounts and the "total" amounts reported by IBM for 2013, apparently due to rounding.



Also using a 10 percent materiality threshold, Hewlett Packard (HP) stated in Note 2 of its 2014 annual report: “For each of the fiscal years of 2014, 2013 and 2012, other than the U.S., no country represented more than 10% of HP net revenue.” As a result, for 2014, HP reported \$38,805 million in net revenue in the United States and \$72,649 million in net revenue from Other Countries, with no disclosure of net revenue in any individual foreign country.

In contrast, Exhibit 8.8 provides the net sales by geographic area disclosures made by E.I. du Pont de Nemours and Company in its 2014 Annual Report. In providing this information, DuPont defines materiality at 2 percent. DuPont provided disclosures for 10 individual countries (including the United States) that comprised 73 percent of the company’s total net sales in 2014.

For export sales, companies must choose whether to attribute the sales revenue to the country in which the selling entity is located or to the country in which the customer is located, and the basis for identifying the location of sales must be disclosed. Both IBM and DuPont provide a footnote to the geographic information that indicates revenue is attributed to the country in which the customer (client) is located. In contrast, in Note 25 of its 2014 annual report, Ford Motor Company indicates that revenues are attributed to the “countries where our major subsidiaries are domiciled.”

**LO 8-5**

Apply the criterion for determining when disclosure of a major customer is required.

**Information about Major Customers**

FRS ASC 280-10-50-42 requires one final but important disclosure. A reporting entity must indicate its reliance on any major external customer. *Presentation of this information is required whenever 10 percent or more of a company’s consolidated revenues is derived from a single external customer.* The existence of all major customers must be disclosed along with the related amount of revenues and the identity of the operating segment generating the revenues. Interestingly enough, the company need not reveal the customer’s identity.

**EXHIBIT 8.8**  
**DuPont’s Geographic**  
**Information, Net Sales**

<b>E. I. DU PONT DE NEMOURS AND COMPANY</b>			
	<b>Geographic Information</b>		
	<b>Net Sales*</b>		
<i>(Dollars in millions)</i>	<b>2014</b>	<b>2013</b>	<b>2012</b>
<b>United States</b> . . . . .	<b>\$13,081</b>	\$13,763	\$13,284
<b>Canada</b> . . . . .	<b>\$ 973</b>	\$ 1,025	\$ 921
<b>EMEA<sup>†</sup></b> . . . . .			
France . . . . .	<b>776</b>	749	765
Germany . . . . .	<b>1,510</b>	1,502	1,557
Italy . . . . .	<b>750</b>	728	764
Africa . . . . .	<b>568</b>	597	361
Other . . . . .	<b>4,879</b>	4,803	4,493
Total EMEA . . . . .	<b>\$ 8,483</b>	\$ 8,379	\$ 8,040
<b>Asia Pacific</b>			
China . . . . .	<b>2,835</b>	2,720	2,666
India . . . . .	<b>787</b>	740	745
Japan . . . . .	<b>1,218</b>	1,292	1,577
Other . . . . .	<b>2,863</b>	3,023	3,039
Total Asia Pacific . . . . .	<b>\$ 7,703</b>	\$ 7,775	\$ 8,027
<b>Latin America</b>			
Brazil . . . . .	<b>2,328</b>	2,565	2,363
Mexico . . . . .	<b>1,088</b>	1,070	1,044
Other . . . . .	<b>1,067</b>	1,157	1,133
Total Latin America . . . . .	<b>4,483</b>	\$ 4,792	\$ 4,540
<b>Total</b>	<b>\$34,723</b>	\$35,734	\$34,812

\* Net sales, based on the location of the customer, are generally presented for locations with greater than two percent of total net sales.

<sup>†</sup> Europe, Middle East, and Africa (EMEA).

The 2014 Annual Report of toy manufacturer Hasbro, Inc., provides an example of how this information is disclosed. Although not required to do so, Hasbro has elected to disclose the names of its major customers. In Note 18, Segment Reporting, Hasbro discloses:

Sales to the Company's three largest customers, Wal-Mart Stores, Inc., Toys 'R' Us, Inc. and Target Corporation, amounted to 16%, 9% and 8%, respectively, of consolidated net revenues during 2014, 16%, 10% and 9%, respectively, of consolidated net revenues during 2013, and 17%, 11% and 10%, respectively, of consolidated net revenues during 2012. These sales were primarily within the U.S. and Canada segment.

The authoritative literature requires major customer disclosures even if a company operates in only one segment and therefore does not provide segment information. Also, to avoid any confusion, a group of entities under common control is considered to be a single customer, and federal, state, local, and foreign governments are each considered to be a single customer.

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## **International Financial Reporting Standard 8— Operating Segments**

*IFRS 8*, "Operating Segments," became effective for annual periods beginning on or after January 1, 2009, and substantially converges IFRS with U.S. GAAP. *IFRS 8* requires disclosures to be provided for separately reportable operating segments as well as certain enterprise-wide disclosures. Paragraph 1 establishes the "core principle" of *IFRS 8* to be the following:

An entity shall disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates.

The major differences between *IFRS 8* and U.S. GAAP are:

1. *IFRS 8* requires disclosure of total assets and total liabilities by operating segment, but only if such information is provided to the chief operating decision maker. U.S. GAAP requires disclosure of segment assets in general and is silent with respect to the disclosure of liabilities, even if this information is provided to the chief operating decision maker.
2. *IFRS 8* indicates that intangible assets are to be included in providing disclosure of long-lived assets attributable to geographic segments. In contrast, U.S. GAAP does not define what is intended to be included in long-lived assets. However, FASB ASC 280-10-55-23 indicates long-lived assets "implies hard assets that cannot be readily removed, which would exclude intangibles." Many U.S. companies define long-lived assets as property, plant, and equipment only, which is inconsistent with *IFRS 8*.
3. When a company has a matrix form of organization, *IFRS 8* indicates operating segments are to be determined based on the core principle of the standard. As a result, operating segments can be based on either products and services or geographic areas. U.S. GAAP stipulates that in a matrix form of organization, segments must be based on products and services, not geographic areas.

### **LO 8-6**

Understand and apply procedures used in interim financial reports to treat an interim period as an integral part of the annual period.

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## **Interim Reporting**

To give investors and creditors more timely information than an annual report provides, companies publish financial information for periods of less than one year. The SEC requires publicly traded companies in the United States to provide financial statements on a quarterly basis. Unlike annual financial statements, financial statements included in quarterly reports filed with the SEC need not be audited. This allows companies to disseminate the information to investors and creditors as quickly as possible. FASB ASC Topic 270, "Interim Reporting," provides guidance to companies as to how to prepare interim statements.

Some inherent problems are associated with determining the results of operations for time periods of less than one year, especially with regard to expenses that do not occur evenly throughout the year. Two approaches can be followed in preparing interim reports: (1) Treat the interim period as a **discrete** accounting period, standing on its own, or (2) treat it as an **integral** portion of a longer period. Considering the annual bonus a company pays to key employees in December of each year illustrates the distinction between these two approaches. Under the *discrete* period approach, the company reports the entire bonus as an expense in December, reducing fourth quarter income only. Under the *integral* part of an annual period approach, a company accrues a portion of the bonus to be paid in December as an expense in each of the first three quarters of the year. Application of the integral approach requires estimating the annual bonus early in the year and developing a method for allocating the bonus to the four quarters of the year. The advantage of this approach is that there is less volatility in quarterly earnings as irregularly occurring costs are spread over the entire year.

FASB ASC 270 requires companies to treat interim periods as integral parts of an annual period rather than as discrete accounting periods in their own right. Generally speaking, companies should prepare interim financial statements following the same accounting principles and practices they use in preparing annual statements. However, deviation from this general rule is necessary for several items so that the interim statements better reflect the expected annual amounts. Special rules related to revenues, inventory and cost of goods sold, other costs and expenses, income taxes, accounting changes, and seasonal items are discussed in turn in the following sections.

## Revenues

Companies should recognize revenues in interim periods the same way they recognize revenues on an annual basis. For example, revenues from a long-term construction contract that includes performance obligations that are satisfied by a company over time should be recognized in interim periods on the same basis as such revenues are recognized for the full year. Moreover, a company should recognize projected losses on long-term construction contracts to their full extent in the interim period in which it becomes apparent that a loss will arise.

## Inventory and Cost of Goods Sold

Interim period accounting for inventory and cost of goods sold requires several modifications to procedures used on an annual basis. The modifications relate to (1) a LIFO liquidation, (2) application of the lower-of-cost-or-net realizable value rule, and (3) standard costing.

1. *LIFO liquidation*: Companies using the last-in, first-out (LIFO) cost-flow assumption to value inventory experience a LIFO liquidation at the end of an interim period when the number of units of inventory sold exceeds the number of units added to inventory during the period. When prices are rising, matching beginning inventory cost (carried at low LIFO amounts) against the current period sales revenue results in an unusually high amount of gross profit. If the company expects to replace by year-end the units of beginning inventory sold, there is no LIFO liquidation on an annual basis. In that case, gross profit for the interim period should not reflect the temporary LIFO liquidation, and inventory reported on the interim balance sheet should include the expected cost to replace the beginning inventory sold.

To illustrate, assume that Liquid Products Company began the first quarter with 100 units of inventory that cost \$10 per unit. During the first quarter, it purchased 200 units at a cost of \$15 per unit, and sold 240 units at \$20 per unit. During the first quarter, the company experienced a liquidation of 40 units of beginning inventory. It calculates gross profit as follows:

Sales (240 units @ \$20) .....		\$4,800
Cost of goods sold:		
200 units @ \$15. ....	\$3,000	
40 units @ \$10 (LIFO historical cost) .....	400	3,400
Gross profit .....		<u>\$1,400</u>

However, during the second quarter, the company expects to replace the units of beginning inventory sold at a cost of \$17 per unit and that inventory at year-end will be at least 100 units. Therefore, it calculates gross profit for the first quarter as follows:

Sales (240 units @ \$20) .....		\$4,800
Cost of goods sold:		
200 units @ \$15. ....	\$3,000	
40 units @ \$17 (replacement cost).....	<u>680</u>	<u>3,680</u>
Gross profit .....		<u>\$1,120</u>

The journal entry to record cost of goods sold in the first quarter is:

Cost of Goods Sold .....	3,680
Inventory .....	3,400
Excess of Replacement Cost over Historical Cost of LIFO Liquidation. . .	280
To record cost of goods sold with a historical cost of \$3,400 and an excess of replacement cost over historical cost for beginning inventory liquidated of \$280 [(\$17 – \$10) × 40 units].	

Thus, ending inventory is still reported at the original LIFO cost. The LIFO liquidation account will be removed in the second quarter when new goods are purchased.

2. *Lower-of-cost-or-net realizable value:* If at the end of an interim period, the net realizable value of inventory is less than its cost, the company normally should write down inventory and recognize a loss. However, if the company expects the net realizable value to recover above the inventory’s original cost by year-end, it should not write down inventory and recognize a loss at the interim balance sheet date. Instead, it should continue to carry inventory at cost.

3. *Standard costing:* A company should not reflect in interim financial statements planned price, volume, or capacity variances arising from the use of a standard cost system that are expected to be absorbed by the end of the annual period. However, it should report unplanned variances at the end of the interim period in the same fashion as it would in the annual financial statements.

### Other Costs and Expenses

A company should charge costs and expenses not directly matched with revenues to income in the interim period in which they occur unless they can be identified with activities or benefits of other interim periods. In that case, the cost should be allocated among interim periods on a reasonable basis through the use of accruals and deferrals. For example, assume that a company required to prepare quarterly financial statements pays annual property taxes of \$100,000 on April 10. One-fourth of the estimated property tax should be accrued as expense in the first quarter of the year. When it makes the payment, it should apply one-fourth against the accrued property tax payable from the previous quarter and charge one-fourth to second-quarter income. The company should defer one-half of the payment as a prepaid expense to be allocated to the third and fourth quarters of the year. The following journal entries demonstrate the procedures for ensuring that the company recognizes one-fourth of the annual payment as expense in each quarter of the year.

#### March 31

Property Tax Expense .....	25,000
Accrued Property Tax Payable .....	25,000
To accrue one-fourth of the estimated annual property tax as expense for the quarter ended March 31.	

**April 10**

Accrued Property Tax Payable.....	25,000	
Property Tax Expense.....	25,000	
Prepaid Property Tax (Current Asset).....	50,000	
Cash.....		100,000
To record the payment of the annual property tax, recognize one-fourth as property tax expense for the quarter ending June 30, and defer one-half as a prepaid expense.		

**September 30**

Property Tax Expense.....	25,000	
Prepaid Property Tax.....		25,000
To record property tax expense for the quarter ended September 30.		

**December 31**

Property Tax Expense.....	25,000	
Prepaid Property Tax.....		25,000
To record property tax expense for the quarter ended December 31.		

Other items requiring similar treatment include annual major repairs and advertising. In addition, a number of adjustments such as bad debt expense, executive bonuses, and quantity discounts based on annual sales volume that are normally made at year-end actually relate to the entire year. To the extent that the company can estimate annual amounts, it should make adjustments at the end of each interim period so that the interim periods bear a reasonable portion of the expected annual amount.

**Income Taxes**

Companies should compute income tax related to ordinary income at an estimated *annual* effective tax rate. At the end of each interim period, a company makes its best estimate of the effective tax rate for the entire year. The effective tax rate reflects anticipated tax credits, foreign tax rates, and tax planning activities for the year. It then applies this rate to the pre-tax ordinary income earned to date during the year, resulting in the cumulative income tax expense to recognize to date. The difference between the cumulative income tax recognized to date and income tax recognized in earlier interim periods is the amount of income tax expense recognized in the current interim period.

Assume that Viertel Company estimated its effective annual tax rate at 42 percent in the first quarter of 2017. Pretax income for the first quarter was \$500,000. At the end of the second quarter of 2017, the company expects its effective annual tax rate will be only 40 percent because of the planned usage of foreign tax credits. Pretax income in the second quarter of 2017 is also \$500,000. No items require net-of-tax presentation in either quarter. The income tax expense recognized in each of the first two quarters of 2017 is determined as follows:

**First Quarter**

Pretax income for first quarter of 2017.....	\$500,000
Estimated annual income tax rate.....	42%
Income tax expense.....	<u>\$210,000</u>

**Second Quarter**

Pretax income for first quarter of 2017 . . . . .	\$500,000	
Pretax income for second quarter of 2017. . . . .	<u>500,000</u>	
Year-to-date income statement. . . . .		\$1,000,000
Estimated annual income tax rate. . . . .		<u>40%</u>
Year-to-date income tax expense . . . . .		\$ 400,000
Income tax expense recognized in first quarter. . . . .		<u>210,000</u>
Income tax expense recognized in second quarter . . . .		<u>\$ 190,000</u>

The same process is followed for the third and fourth quarters of the year.

Discontinued operations should be reported in net income on a *net of tax* basis in the interim period in which a business component is discontinued or classified as held-for-sale. The income tax on an interim period discontinued operation is calculated at the margin as the difference between income tax on income including discontinued operations and income tax on income excluding discontinued operations.

### Change in Accounting Principle

Current accounting guidelines require retrospective application of a new accounting principle to prior periods' financial statements. *Retrospective application* means that comparative financial statements will be restated as if the new accounting principle had always been used. Whether an accounting change occurs in the first or in a subsequent interim period has no bearing on the manner in which the change is reflected in the interim financial statements. Changes in accounting principle, regardless of when the accounting change is made, are handled as follows (according to FASB ASC 250-10-45-5):

- The cumulative effect of the change to the new accounting principle on periods prior to those presented is reflected in the carrying amounts of assets and liabilities as of the beginning of the first period presented.
- An offsetting adjustment, if any, is made to the opening balance of retained earnings (or other appropriate components of equity or net assets in the statement of financial position) for that period.
- Financial statements for each individual prior period are adjusted to reflect the period-specific effects of applying the new accounting principle.

When the accounting change takes place in other than the first interim period, current guidelines require information for the interim periods prior to the change to be reported by retrospectively applying the new accounting principle to those prechange interim periods. If retrospective application is impracticable, the accounting change is not allowed to be made in an interim period but may be made at the beginning of the next fiscal year. Situations in which the retrospective application of a new accounting principle to prechange interim periods is not feasible should be rare.

### *Illustration of Accounting Change Made in Other Than First Interim Period*

Modal Company began operations on January 1, 2016. The company's interim income statements as originally reported under the LIFO inventory valuation method follow:

	2016				2017
	1stQ	2ndQ	3rdQ	4thQ	1stQ
Sales. . . . .	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,200
Cost of goods sold (LIFO). . . . .	900	950	1,000	1,000	1,050
Operating expenses . . . . .	<u>500</u>	<u>500</u>	<u>500</u>	<u>500</u>	<u>600</u>
Income before income taxes. . . . .	\$ 600	\$ 550	\$ 500	\$ 500	\$ 550
Income taxes (40%) . . . . .	<u>240</u>	<u>220</u>	<u>200</u>	<u>200</u>	<u>220</u>
Net income . . . . .	<u>\$ 360</u>	<u>\$ 330</u>	<u>\$ 300</u>	<u>\$ 300</u>	<u>\$ 330</u>

Modal has 500 shares of common stock outstanding. The company's interim report for the first quarter of 2017 included the following information:

	Three Months Ended March 31	
	2016	2017
Net income . . . . .	\$ 360	\$ 330
Net income per common share. . . . .	\$0.72	\$0.66

In June 2017, Modal adopts the FIFO method of inventory valuation for both financial reporting and tax purposes. Retrospective application of the FIFO method to previous quarters results in the following amounts of cost of goods sold:

	2016				2017
	1stQ	2ndQ	3rdQ	4thQ	1stQ
Cost of goods sold (FIFO). . . . .	\$800	\$850	\$1,000	\$900	\$950

Retrospective application of the FIFO method results in the following restatements of income:

	2016				2017
	1stQ	2ndQ	3rdQ	4thQ	1stQ
Sales. . . . .	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,200
Cost of goods sold (FIFO). . . . .	800	850	1,000	900	950
Operating expenses . . . . .	500	500	500	500	600
Income before income taxes. . . . .	\$ 700	\$ 650	\$ 500	\$ 600	\$ 650
Income taxes (40%) . . . . .	280	260	200	240	260
Net income . . . . .	<u>\$ 420</u>	<u>\$ 390</u>	<u>\$ 300</u>	<u>\$ 360</u>	<u>\$ 390</u>

Sales for the second quarter of 2017 are \$2,400, cost of goods sold under the FIFO method is \$1,000, and operating expenses are \$600. Income before income taxes in the second quarter of 2017 is \$800, income taxes are \$320, and net income is \$480.

To prepare interim statements for the second quarter of 2017 in accordance with U.S. GAAP, net income as originally reported in the first and second quarters of 2016, as well as in the first quarter of 2017, is restated to reflect the change to FIFO. The manner in which the accounting change is reflected in the second quarter of 2017, with year-to-date information, and comparative information for similar periods in 2016 follow:

	Three Months Ended June 30		Six Months Ended June 30	
	2016	2017	2016	2017
Net income . . . . .	\$390	\$480	\$810	\$870
Net income per common share. . . . .	0.78	0.96	1.62	1.74

### Seasonal Items

The sales volume of some companies experiences significant seasonal variation. Summer sports equipment manufacturers, for example, are likely to have a significant upward spike in sales during the second quarter of the year. To avoid the risk that investors and creditors will be misled into believing that second-quarter earnings indicate earnings for the entire year, FASB ASC 270-10-45 requires companies to disclose the seasonal nature of their business operations. In addition, such companies should consider supplementing their interim reports

with reports on the 12-month period ended at the interim date for both the current and preceding years. An excerpt from the seasonality disclosure provided by Callaway Golf Company in its Form 10-Q for the quarter ended June 30, 2015, is shown here:

**Seasonality.** In most of the regions where the Company does business, the game of golf is played primarily on a seasonal basis. Weather conditions generally restrict golf from being played year-round, except in a few regions, with many of the Company's on-course customers closing for the cold weather months. The Company's business is therefore subject to seasonal fluctuations. . . The Company's fourth-quarter sales are generally less than the other quarters due to the end of the golf season in many of the Company's key regions.

**LO 8-7**

List the minimum disclosure requirements for interim financial reports.

## Minimum Disclosures in Interim Reports

Many companies provide summary financial statements and notes in their interim reports that contain less information than is included in the annual financial statements. Authoritative accounting literature requires companies to provide the following minimum information in their interim reports:

- Sales or gross revenues, provision for income taxes, and net income.
- Earnings per share.
- Seasonal revenues and expenses.
- Significant changes in estimates or provisions for income taxes.
- Disposal of a component of the business and unusual or infrequently occurring items.
- Contingent items.
- Changes in accounting principles or estimates.
- Significant changes in financial position.

Authoritative guidelines also encourage, but do not require, companies to publish balance sheet and cash flow information in interim reports. If they do not include this information, companies must disclose significant changes since the last period in cash and cash equivalents, net working capital, long-term liabilities, and stockholders' equity.

Companies that provide interim reports on a quarterly basis are not required to publish a fourth-quarter report because this coincides with the end of the annual period. When a company does not provide a separate fourth-quarter report, it should disclose special accounting items occurring in the fourth quarter in the notes to financial statements in the annual report. These items include unusual and infrequently occurring items, disposals of a component of the business, and the aggregate effect of year-end adjustments that are material to the results of the fourth quarter.

The SEC requires companies to include selected quarterly financial data in their annual report to shareholders. Southwest Airlines Co. provided quarterly data in its 2014 annual report as shown in Exhibit 8.9.

**EXHIBIT 8.9**  
Quarterly Financial Data  
from Southwest Airlines  
Co.'s 2014 Annual Report

QUARTERLY FINANCIAL DATA (Unaudited)				
(in millions, except per share amounts)	Three Months Ended			
	March 31	June 30	Sept. 30	Dec. 31
<b>2014</b>				
Operating revenues . . . . .	\$4,166	\$5,011	\$4,800	\$4,628
Operating income . . . . .	215	775	614	621
Income before income taxes . . . . .	244	746	525	302
Net income . . . . .	152	465	329	190
Net income per share, basic . . . . .	0.22	0.67	0.48	0.28
Net income per share, diluted . . . . .	0.22	0.67	0.48	0.28



## Segment Information in Interim Reports

The management approach to determining operating segments results in readily available information for disclosure because, by definition, management already collects this data. Because the information is available on a timely basis, segment disclosures also must be included in interim reports. U.S. GAAP requires that the following information be included in interim reports for each operating segment:

- Revenues from external customers.
- Intersegment revenues.
- Segment profit or loss.
- Total assets, if there has been a material change from the last annual report.

In addition, an enterprise must reconcile total segments' profit or loss to the company's total income before taxes and disclose any change from the last annual report in the basis for measuring segment profit or loss. Requiring only a few items of information in interim reports is a compromise between users' desire to have the same information as is provided in annual financial statements and preparers' cost in reporting the information. There is no requirement to provide information about geographic areas or major customers in interim reports.

## International Accounting Standard 34—Interim Financial Reporting

In contrast to U.S. GAAP, which does not require the presentation of financial statements *per se* in an interim report, *IAS 34*, "Interim Financial Reporting," provides guidance with respect to the form and content of interim financial statements, and the recognition and measurement principles to be followed in preparing them.<sup>2</sup> *IAS 34* requires the following minimum components in an interim report:

- A condensed statement of financial position (balance sheet).
- A condensed statement of comprehensive income, presented as:
  - a. A condensed single statement of net income and comprehensive income, or
  - b. Separate condensed statements of net income and comprehensive income.
- A condensed statement of changes in equity.
- A condensed statement of cash flows.
- Selected explanatory notes.

Unlike U.S. GAAP, *IAS 34* requires each interim period to be treated as a discrete period in determining the amounts to be recognized. Thus, expenses that are incurred in one quarter are recognized in full in that quarter, even though the expenditure benefits the entire year. In addition, there is no accrual in earlier quarters for expenses expected to be incurred in a later quarter of the year. The only exception to this rule is the accrual of income tax expense at the end of each interim period.

### Summary

1. The consolidation of information from varied operations into a set of consolidated financial statements tends to camouflage the characteristics of the individual components. FASB ASC 280, "Segment Reporting," requires enterprises to follow a management approach in providing disaggregated information by operating segment.
2. The management approach to disaggregating information bases operating segments on a company's organization structure and internal reporting system. The management approach should enhance the usefulness of segment information because it highlights the risks and opportunities that management

<sup>2</sup>Note that the IASB has no jurisdictional authority to require the preparation of interim reports; it simply provides requirements (through *IAS 34*) for how those reports should be prepared. *IAS 34* must be followed in those jurisdictions that require the use of IFRS and require the preparation of interim reports.

believes are important and allows the analyst to see the company through management's eyes. This approach also has the advantage of reducing the cost of providing segment information because that information already is being produced for internal use.

3. Once operating segments have been identified, a company must determine which segments are of significant magnitude to warrant separate disclosure. Three quantitative threshold tests (revenue, profit or loss, and asset) are used to identify reportable segments. A segment need satisfy only one of these tests to be considered of sufficient size to necessitate disclosure. Each test is based on identifying segments that meet a 10 percent minimum of the related combined total. The profit and loss test has a 10 percent criterion based on the higher (in an absolute sense) of the total profit from all segments with profits or the total loss from all segments with losses.
4. Companies must report several information types for each reportable operating segment, including selected revenues, profit or loss, selected expenses, assets, capital expenditures, and equity method investment and income. Companies must report revenues from external customers separately from intersegment revenues. In addition, the types of products and services from which each segment derives its revenues must be disclosed.
5. A set of parameters determines the number of segments an enterprise reports. As a minimum, the separately disclosed units must generate at least 75 percent of the total sales made to unaffiliated parties. For an upper limit, authoritative literature suggests that the disclosure of more than 10 operating segments reduces the usefulness of the information.
6. Companies must reconcile the total of all segments' revenues, profit or loss, and assets to the consolidated totals. The major reconciliation adjustments relate to intra-entity revenues, profit or loss, and assets eliminated in consolidation; revenues, profit or loss, and assets that have not been allocated to individual operating segments; and differences in accounting methods used by segments and in preparing consolidated financial statements.
7. U.S. GAAP requires several entitywide disclosures. If an enterprise does not define operating segments internally on a product line basis or has only one operating segment, disclosure of revenues derived from each product or service is required.
8. In addition, companies must report revenues from external customers and long-lived assets for the domestic country, for each foreign country that generates a material amount of revenues or holds assets, and for all foreign countries in total. Current guidelines do not provide any threshold tests for determining when operations in a foreign country are material. Instead, determining materiality is left to management's judgment.
9. Authoritative accounting literature requires disclosure of one other type of information. The reporting entity must indicate the existence of major customers when 10 percent or more of consolidated revenues are derived from a single unaffiliated party. However, the identity of the major customer need not be disclosed.
10. To converge with U.S. GAAP, the IASB issued *IFRS 8*, "Operating Segments." The major differences between *IFRS* and U.S. GAAP are that *IFRS 8* (1) requires the disclosure of liabilities by operating segment if this information is reported to the chief operating decision maker, (2) requires the inclusion of intangible assets in the disclosure of long-lived assets by geographic area, and (3) allows companies with matrix organizations to define operating segments on the basis of either products and services or geographic areas.
11. For interim reporting purposes, U.S. GAAP requires time intervals of less than one year to be treated as an integral part of the annual period.
12. Costs and expenses not directly matched with revenues should be charged to income in the interim period in which they occur unless they can be identified with activities or benefits of other interim periods. In that case, the cost should be allocated among interim periods on a reasonable basis by using accruals and deferrals. Items related to the whole year but recorded as an adjustment only at year-end should be estimated and accrued in each interim period of the year.
13. Companies determine interim period income tax expense by applying the estimated annual effective income tax rate to year-to-date pretax ordinary income, resulting in the cumulative income tax expense to be recognized to date. The cumulative income tax to be recognized to date less income tax recognized in earlier interim periods is the amount of income tax expense recognized in the current interim period.
14. When an accounting change is made in other than the first interim period, information for the prechange interim periods should be reported based on retrospective application of the new accounting principle to those periods. An accounting change may be made only at the beginning of a fiscal year if retrospective application of the new accounting principle to prechange interim periods is not practicable.

15. The minimum information to disclose in interim reports includes sales, income taxes, net income, earnings per share, seasonal revenues and expenses, and significant changes in financial position. Publication of balance sheet and cash flow information in interim reports is not required. However, if this information is not included, any significant changes since the last period in cash and cash equivalents, net working capital, long-term liabilities, and stockholders' equity must be disclosed.
16. Certain segment information items need to be disclosed in interim reports. Specifically, companies must disclose revenues from outside customers, intersegment revenues, and segment profit or loss in interim reports for each operating segment. In addition, companies must report total assets by segment if a material change occurred since the last annual report.
17. Unlike U.S. GAAP, the IASB's *IAS 34*, "Interim Financial Reporting," requires the presentation of condensed financial statements in an interim report. Also, each interim period should be treated as a discrete period rather than as an integral part of an annual period in determining amounts to be recognized. The exception to this rule is the accrual of income tax expense to determine net income for each interim period.

## Comprehensive Illustration

(Estimated Time: 25 to 40 Minutes) Battey Corporation manufactures several products: natural fibers, synthetic fibers, leather, plastics, and wood. It is organized into five operating divisions based on these different products. The company has a number of subsidiaries that perform operations throughout the world. At the end of 2017 as part of the internal reporting process, Battey reported the revenues, profits, and assets (in millions) to the chief operating decision maker:

### Problem

Revenues by Operating Segment	United States	Canada	Mexico	France	Italy	Brazil
Natural fibers:						
Sales to external customers.....	\$1,739	\$-0-	\$342	\$606	\$-0-	\$1,171
Intersegment sales .....	-0-	-0-	-0-	-0-	-0-	146
Synthetic fibers:						
Sales to external customers.....	290	116	-0-	-0-	-0-	37
Intersegment sales .....	12	5	-0-	-0-	-0-	-0-
Leather:						
Sales to external customers.....	230	-0-	57	-0-	278	55
Intersegment sales .....	22	-0-	9	-0-	34	9
Plastics:						
Sales to external customers.....	748	286	-0-	83	92	528
Intersegment sales .....	21	12	-0-	-0-	-0-	72
Wood:						
Sales to external customers.....	116	22	-0-	-0-	-0-	149
Intersegment sales .....	17	3	-0-	-0-	-0-	28
Operating Profit or Loss by Operating Segment	United States	Canada	Mexico	France	Italy	Brazil
Natural fibers.....	\$ 526	\$-0-	\$ 92	\$146	\$-0-	\$ 404
Synthetic fibers.....	21	8	-0-	-0-	-0-	10
Leather.....	70	-0-	27	-0-	94	24
Plastics.....	182	74	-0-	18	24	68
Wood.....	18	5	-0-	-0-	-0-	37
Assets by Operating Segment	United States	Canada	Mexico	France	Italy	Brazil
Natural fibers.....	\$1,005	\$-0-	\$223	\$296	\$-0-	\$ 817
Synthetic fibers.....	163	50	-0-	-0-	-0-	74
Leather.....	146	-0-	41	-0-	150	38
Plastics.....	425	173	-0-	54	58	327
Wood.....	66	19	-0-	-0-	-0-	143

## Required

- Determine the operating segments that should be reported separately in Battey's 2017 financial statements.
- Determine the countries for which Battey should report revenues separately in its 2017 financial statements. Assume that Battey has elected to define a material country as one in which sales to external customers are 10 percent or more of consolidated sales.
- Determine the volume of revenues that a single customer must generate to necessitate disclosure of a major customer.

## Solution

- Battey Corporation determines its reportable operating segments by following a three-step process. First, it identifies operating segments. Second, it examines aggregation criteria to determine whether any operating segments may be combined. Third, it determines reportable operating segments by applying the three quantitative threshold tests.

*Identification of Operating Segments* Battey's internal reporting system provides information to the chief operating decision maker by operating division and by country. Either of these components conceivably could be identified as operating segments for segment reporting purposes. However, U.S. GAAP stipulates that, in this situation, the components based on products and services constitute the operating segments. Thus, the five operating divisions are identified as Battey's operating segments.

*Aggregation Criteria* Aggregation criteria are examined next to determine whether any operating segments can be combined. Management determines that the economic characteristics of the natural fibers and synthetic fibers operating divisions are very similar. In addition, they are considerably similar with regard to the nature of the product, production process, customers, and distribution methods. Because each aggregation criterion is met, Battey elects to combine these two segments into a single fibers category.

*Quantitative Threshold Tests* Determining Battey's reportable operating segments depends on the three materiality tests described in this chapter. The revenue test can be performed directly from the information provided. Any operating segment with total revenues (including intersegment sales) equal to 10 percent or more of combined revenue (internal and external) must be reported separately:

### Revenue Test (in millions)

Operating Segments	Total Revenues (including intersegment)	
Fibers .....	\$4,464	60.8%
Leather .....	694	9.5
Plastics .....	1,842	25.1
Wood .....	335	4.6
Total combined revenues .....	<u>\$7,335</u>	<u>100.0%</u>

Reportable segments are fibers and plastics.

The profit or loss test is performed next. Battey must separately report any operating segment with profit or loss equal to 10 percent or more of the larger, in absolute amount, of combined segment profit (for those segments with a profit) or combined segment loss (for those segments with a loss). Because each of Battey's operating segments generated a profit in 2015, this test can be applied by determining the total combined profit:

### Profit or Loss Test (in millions)

Operating Segments	Total Profit or Loss	
Fibers .....	\$1,207	65.3%
Leather .....	215	11.6
Plastics .....	366	19.8
Wood .....	60	3.3
Total combined segment profit .....	<u>\$1,848</u>	<u>100.0%</u>

Reportable segments are fibers, leather, and plastics.

Finally, Battey performs the asset test:

*Asset Test (in millions)*

Operating Segments	Total Assets	
Fibers .....	\$2,628	61.6%
Leather .....	375	8.8
Plastics .....	1,037	24.3
Wood .....	228	5.3
Total combined segment assets .....	<u>\$4,268</u>	<u>100.0%</u>

Reportable segments are fibers and plastics.

Based on these three tests, data about the fibers, leather, and plastics operating segments must be reported separately. Information on the immaterial wood segment need not be reported. However, the revenues, profit, and assets of this segment are included in reconciliations to consolidated totals.

- b. Battey must report sales to external customers for the U.S., for each individual foreign country in which the company generates a material amount of revenues, and for all foreign countries in total. Authoritative accounting literature does not provide quantitative tests for determining when a foreign country is material but leaves this to management's judgment. Battey has decided to define *materiality* as sales to external customers equal to 10 percent or more of consolidated revenues.

*Revenue Test (in millions)*

Country	Sales to External Customers	
United States .....	\$3,123	45.0%
Canada .....	424	6.1
Mexico .....	399	5.8
France .....	689	9.9
Italy .....	370	5.3
Brazil .....	1,940	27.9
Total consolidated revenues .....	<u>\$6,945</u>	<u>100.0%</u>

Using this criterion, Battey reports results for the United States and Brazil separately and combines the remaining countries into an All Other category. Alternatively, if Battey had established a materiality threshold of 5 percent, it would report separately each of the foreign countries in which it generates revenues. Again, determination of materiality is left to management's judgment.

- c. The significance test for disclosure of a major customer is 10 percent of consolidated revenues. Battey must report the existence of any major customer from which it generated \$694.5 million or more in revenues during 2017.

## Questions

1. How does the consolidation process tend to disguise information needed to analyze the financial operations of a diversified organization?
2. What is disaggregated financial information?
3. According to the FASB, what is the major objective of segment reporting?
4. The management approach requires a firm to define segments on the basis of its internal organizational structure. What are the advantages in defining segments on this basis?
5. What is an operating segment?
6. How should a company determine operating segments when it organizes business activities in more than one way and the chief operating decision maker uses multiple sets of reports?
7. Describe the three tests to identify reportable operating segments.

8. What information must an enterprise provide for each of its separately reportable operating segments?
9. Under what conditions must an enterprise provide information about products and services?
10. Under what conditions must an enterprise provide information about geographic areas?
11. What information must an enterprise report by geographic area?
12. To satisfy geographic area disclosure requirements, what are the minimum and maximum numbers of countries for which information should be reported separately?
13. Under what conditions should a company disclose the amount of sales from a major customer?
14. What are the major differences between U.S. GAAP and *IFRS 8* with respect to the disclosures that are required to be provided for each separately reportable operating segment?
15. Why are publicly traded companies in the United States required to prepare interim reports on a quarterly basis?
16. What approach are companies required to follow in preparing interim financial statements?
17. How should a company handle a LIFO liquidation in an interim period when the liquidated inventory is expected to be replaced by year-end?
18. How does a company determine the amount of income tax expense to report in an interim period?
19. What procedures must companies follow to account for a change in accounting principle made in other than the first interim period of the year?
20. What minimum information must an enterprise provide in an interim report?
21. What type of segment information must companies provide in interim financial statements?
22. How would an annual bonus paid at year-end be treated under *IAS 34* and how does this treatment differ from what is required under U.S. GAAP?

## Problems

### LO 8-1

1. Which of the following does U.S. GAAP *not* consider to be an objective of segment reporting?
  - a. It helps users better understand the enterprise's performance.
  - b. It helps users better assess the enterprise's prospects for future cash flows.
  - c. It helps users make more informed judgments about the enterprise as a whole.
  - d. It helps users make comparisons between a segment of one enterprise and a similar segment of another enterprise.

### LO 8-3

2. Under current U.S. accounting guidelines, which of the following items of information is a company *not* required to disclose, even if it were material in amount?
  - a. Revenues generated from sales of its consumer products line of goods.
  - b. Revenues generated by its Japanese subsidiary.
  - c. Revenues generated from export sales.
  - d. Revenues generated from sales to Walmart.

### LO 8-3

3. Which of the following operating segment disclosures is *not* required under current U.S. accounting guidelines?
  - a. Liabilities
  - b. Interest expense
  - c. Intersegment sales
  - d. Unusual items

### LO 8-2

4. In determining whether a particular operating segment is of significant size to warrant disclosure, which of the following is true?
  - a. Three tests are applied, and all three must be met.
  - b. Four tests are applied, and only one must be met.
  - c. Three tests are applied, and only one must be met.
  - d. Four tests are applied, and all four must be met.

### LO 8-1, 8-3, 8-4

5. Which of the following statements is *not* true under U.S. GAAP?
  - a. Operating segments can be determined by looking at a company's organization chart.
  - b. Companies must combine individual foreign countries into geographic areas to comply with the geographic area disclosure requirements.

- c. Companies that define their operating segments by product lines must provide revenue and asset information for the domestic country, for all foreign countries in total, and for each material foreign country.
- d. Companies must disclose total assets, investment in equity method affiliates, and total expenditures for long-lived assets by operating segment.

**LO 8-1**

6. Which of the following is *not* necessarily true for an operating segment?
- a. An operating segment earns revenues and incurs expenses.
  - b. The chief operating decision maker regularly reviews an operating segment to assess performance and make resource allocation decisions.
  - c. Discrete financial information generated by the internal accounting system is available for an operating segment.
  - d. An operating segment regularly generates a profit from its normal ongoing operations.

**LO 8-2**

7. Which of the following is a criterion for determining whether an operating segment is separately reportable?
- a. Segment liabilities are 10 percent or more of consolidated liabilities.
  - b. Segment profit or loss is 10 percent or more of consolidated net income.
  - c. Segment assets are 10 percent or more of combined segment assets.
  - d. Segment revenues from external sales are 5 percent or more of combined segment revenues from external sales.

**LO 8-1, 8-3, 8-4, 8-5**

8. Which of the following statements concerning U.S. GAAP is true?
- a. Does not require segment information to be reported in accordance with generally accepted accounting principles.
  - b. Does not require a reconciliation of segment assets to consolidated assets.
  - c. Requires geographic area information to be disclosed in interim financial statements.
  - d. Requires disclosure of a major customer's identity.

**LO 8-3**

9. Plume Company has a paper products operating segment. Which of the following items does it *not* have to report for this segment?
- a. Interest expense.
  - b. Research and development expense.
  - c. Depreciation and amortization expense.
  - d. Interest income.

**LO 8-4**

10. Which of the following items is required to be disclosed by geographic area?
- a. Total assets.
  - b. Revenues from external customers.
  - c. Profit or loss.
  - d. Capital expenditures.

**LO 8-4**

11. For a U.S.-based company, which of the following would be an acceptable presentation of countries for providing information by geographic area?
- a. United States, Mexico, Japan, Spain, All Other Countries.
  - b. United States, Canada and Mexico, Germany, Italy.
  - c. Europe, Asia, Africa.
  - d. Canada, Germany, France, All Other Countries.

**LO 8-4**

12. What information about revenues by geographic area should a company present?
- a. Disclose separately the amount of sales to unaffiliated customers and the amount of intra-entity sales between geographic areas.
  - b. Disclose as a combined amount sales to unaffiliated customers and intra-entity sales between geographic areas.
  - c. Disclose separately the amount of sales to unaffiliated customers but not the amount of intra-entity sales between geographic areas.
  - d. No disclosure of revenues from foreign operations need be reported.

**LO 8-5**

13. Which of the following information items with regard to a major customer must be disclosed?
- a. The identity of the major customer.
  - b. The percentage of total sales derived from the major customer.

LO 8-6

- c. The operating segment making sales to the major customer.  
 d. The geographic area in which sales to the major customer are made.
14. Which of the following statements is true for a company that has managers responsible for product and service lines of business and managers responsible for geographic areas (matrix form of organization)?
- Under U.S. GAAP, the company must base operating segments on geographic areas.
  - Under IFRS, the company must base operating segments on product and service lines of business.
  - Under U.S. GAAP, the company may choose to define operating segments on the basis of either products and services or geographic areas.
  - Under IFRS, the company must refer to the core principle of *IFRS 8* to determine operating segments.

LO 8-6

15. In considering interim financial reporting, how does current U.S. GAAP require that such reporting be viewed?
- As a special type of reporting that need not follow generally accepted accounting principles.
  - As useful only if activity is evenly spread throughout the year making estimates unnecessary.
  - As reporting for a basic accounting period.
  - As reporting for an integral part of an annual period.

LO 8-6

16. How should material seasonal variations in revenue be reflected in interim financial statements?
- The seasonal nature should be disclosed, and the interim report should be supplemented with a report on the 12-month period ended at the interim date for both the current and preceding years.
  - The seasonal nature should be disclosed, but no attempt should be made to reflect the effect of past seasonality on financial statements.
  - The seasonal nature should be reflected by providing pro forma financial statements for the current interim period.
  - No attempt should be made to reflect seasonality in interim financial statements.

LO 8-6

17. For interim financial reporting, a gain from the sale of land occurring in the second quarter should be
- Recognized ratably over the last three quarters.
  - Recognized ratably over all four quarters, with the first quarter being restated.
  - Recognized in the second quarter.
  - Disclosed by footnote only in the second quarter.

LO 8-7

18. Which of the following items must be disclosed in interim reports?
- Total assets.
  - Total liabilities.
  - Cash flow from operating activities.
  - Gross revenues.

LO 8-7

19. Which of the following items is *not* required to be reported in interim financial statements for each material operating segment?
- Revenues from external customers.
  - Intersegment revenues.
  - Segment assets.
  - Segment profit or loss.

LO 8-6

20. Niceville Company pays property taxes of \$100,000 in the second quarter of the year. Which of the following statements is true with respect to the recognition of property tax expense in interim financial statements?
- Under U.S. GAAP, the company would report property tax expense of \$100,000 in the second quarter of the year.
  - Under IFRS, the company would report property tax expense of \$100,000 in the second quarter of the year.
  - Under U.S. GAAP, the company would report property tax expense of \$33,333 in each of the second, third, and fourth quarters of the year.
  - Under IFRS, the company would report property tax expense of \$25,000 in the first quarter of the year.



**LO 8-2**

21. Livro Company has three operating segments with the following information:

	<b>Books</b>	<b>Calendars</b>	<b>Bags</b>
Sales to outsiders . . . . .	\$12,000	\$9,000	\$8,000
Intersegment transfers . . . . .	1,000	500	1,500

In addition, corporate headquarters generates revenues of \$2,000.

What is the minimum amount of revenue that each of these segments must generate to be considered separately reportable?

- a. \$2,900
- b. \$3,200
- c. \$3,300
- d. \$3,400

**LO 8-5**

22. Nottage Company has four separate operating segments:

	<b>East</b>	<b>West</b>	<b>North</b>	<b>South</b>
Sales to outsiders . . . . .	\$188,000	\$126,000	\$65,000	\$43,000
Intersegment transfers . . . . .	16,000	6,000	13,000	8,000

What revenue amount must one customer generate before it must be identified as a major customer?

- a. \$39,600
- b. \$42,200
- c. \$46,500
- d. \$49,200

**LO 8-2**

23. Howard Corporation has six different operating segments reporting the following operating profit and loss figures:

A	\$ 80,000 profit	D	\$440,000 loss
B	140,000 loss	E	50,000 profit
C	100,000 profit	F	170,000 profit

With respect to the profit or loss test, which of the following statements is *not* true?

- a. A is a reportable segment based on this one test.
- b. C is not a reportable segment based on this one test.
- c. E is not a reportable segment based on this one test.
- d. F is a reportable segment based on this one test.

**LO 8-2**

24. Hyams Corp. engages solely in manufacturing operations. The following data pertain to the operating segments for the current year:

<b>Operating Segment</b>	<b>Total Revenues</b>	<b>Profit (Loss)</b>	<b>Assets at 12/31</b>
U . . . . .	\$13,000,000	\$2,000,000	\$15,000,000
V . . . . .	9,500,000	1,200,000	11,000,000
W . . . . .	5,500,000	(1,000,000)	3,000,000
X . . . . .	3,000,000	600,000	7,500,000
Y . . . . .	2,000,000	400,000	4,500,000
Z . . . . .	2,000,000	300,000	2,000,000
Total . . . . .	<u>\$35,000,000</u>	<u>\$3,500,000</u>	<u>\$43,000,000</u>

In its segment information for the current year, how many reportable segments does Hyams have?

- a. Three
- b. Four
- c. Five
- d. Six

LO 8-2

25. What is the minimum number of operating segments that must be separately reported?
- Ten.
  - Segments with at least 75 percent of revenues as measured by the revenue test.
  - At least 75 percent of the segments must be separately reported.
  - Segments with at least 75 percent of the revenues generated from outside parties.

LO 8-2

26. Chambers Company has seven operating segments but only four (One, Two, Three, and Four) are of significant size to warrant separate disclosure. As a whole, the segments generated revenues of \$1,010,000 (\$780,000 + \$230,000) from sales to outside customers. In addition, the segments had \$300,000 in intersegment sales (\$250,000 + \$50,000).

	Outside Sales	Intersegment Sales
One .....	\$270,000	\$110,000
Two .....	200,000	70,000
Three.....	160,000	40,000
Four.....	150,000	30,000
Totals.....	<u>\$780,000</u>	<u>\$250,000</u>
Five .....	\$100,000	\$ 20,000
Six .....	80,000	10,000
Seven .....	50,000	20,000
Totals .....	<u>\$230,000</u>	<u>\$ 50,000</u>

Which of the following statements is true?

- A sufficient number of segments is being reported because those segments have \$1,030,000 in total sales of a total of \$1,310,000 for the company as a whole.
  - Not enough segments are being reported because those segments have \$780,000 in outside sales of a total of \$1,010,000 for the company as a whole.
  - Not enough segments are being reported because those segments have \$1,030,000 in total revenues of a total of \$1,310,000 for the company as a whole.
  - A sufficient number of segments is being reported because those segments have \$780,000 in outside sales of a total of \$1,010,000 for the company as a whole.
27. Baton Company estimates that the amounts for total depreciation expense for the year ending December 31 will be \$120,000 and for year-end bonuses to employees will be \$200,000. What total amount of expense relating to these two items should Baton report in its quarterly income statement for the three months ended March 31?
- \$0
  - \$30,000
  - \$50,000
  - \$80,000

LO 8-6

28. Rouge Company's \$250,000 net income for the quarter ended September 30 included the following after-tax items:

- A \$20,000 cumulative effect loss resulting from a change in inventory valuation method made on September 1.
- \$0 of the \$60,000 annual property taxes paid on February 1.

For the quarter ended September 30, the amount of net income that Rouge should report is

- \$235,000
  - \$250,000
  - \$255,000
  - \$270,000
29. In March of the current year, Mooney Company estimated its year-end executive bonuses to be \$800,000. The executive bonus paid in the previous year was \$950,000. What amount of bonus expense, if any, should Mooney recognize in determining net income for the first quarter of the current calendar year?
- 0—
  - \$200,000
  - \$237,500
  - \$800,000

LO 8-6

**Use the following information for Problems 30 and 31.**

On March 15, Calloway, Inc., paid property taxes of \$480,000 for the calendar year.

**LO 8-6**

30. How much of this expense should Calloway’s income statement reflect for the quarter ending March 31?

- a. –0–
- b. \$40,000
- c. \$120,000
- d. \$480,000

**LO 8-6**

31. The journal entry at March 15 to record the payment of property taxes would include which of the following?

- a. A debit to Property Tax Expense of \$480,000.
- b. A credit to Cash of \$120,000.
- c. A debit to Prepaid Property Taxes of \$360,000.
- d. A credit to Prepaid Property Taxes of \$40,000.

**Use the following information for Problems 32 and 33.**

Tristan, Inc., uses the LIFO cost-flow assumption to value inventory. It began the current year with 2,000 units of inventory carried at LIFO cost of \$20 per unit. During the first quarter, it purchased 8,000 units at an average cost of \$40 per unit and sold 9,500 units at \$60 per unit.

**LO 8-6**

32. Assume the company does not expect to replace the units of beginning inventory sold; it plans to reduce inventory by year-end to 500 units. What amount of cost of goods sold should be recorded for the quarter ended March 31?

- a. \$335,000
- b. \$350,000
- c. \$380,000
- d. \$387,500

**LO 8-6**

33. Assume the company expects to replace the units of beginning inventory sold in April at a cost of \$45 per unit and expects inventory at year-end to be between 2,100 and 2,500 units. What amount of cost of goods sold should be recorded for the quarter ended March 31?

- a. \$335,000
- b. \$350,000
- c. \$380,000
- d. \$387,500

**LO 8-2**

34. Vehicle Corporation is organized into four operating segments. The internal reporting system generated the following segment information:

	Revenues from Outsiders	Intersegment Transfers	Operating Expenses
Autos . . . . .	\$4,000,000	\$100,000	\$3,600,000
Trucks . . . . .	3,500,000	200,000	4,000,000
SUVs . . . . .	2,600,000	–0–	2,000,000
Motorcycles . . . . .	900,000	50,000	1,020,000

The company incurred additional operating expenses (of a general nature) of \$1,200,000.

Perform the profit or loss test to determine which of these segments is separately reportable.

**LO 8-2**

35. Ecrú Company has identified five industry segments: plastics, metals, lumber, paper, and finance. It appropriately consolidated each of these segments in producing its annual financial statements. Information describing each segment (in thousands) follows:

	Plastics	Metals	Lumber	Paper	Finance
Sales to outside parties . . .	\$6,694	\$2,354	\$ 711	\$422	\$–0–
Intersegment transfers . . . .	148	173	138	150	–0–
Interest income from outside parties . . . . .	–0–	34	21	–0–	42

(continued)

(continued)

	Plastics	Metals	Lumber	Paper	Finance
Interest income from intersegment loans . . . . .	–0–	–0–	–0–	–0–	201
Operating expenses . . . . .	4,214	1,762	1,066	654	31
Interest expense . . . . .	76	31	66	28	102
Tangible assets . . . . .	1,501	3,196	524	771	179
Intangible assets . . . . .	87	403	–0–	63	–0–
Intersegment loans (debt) . .	–0–	–0–	–0–	–0–	706

Ecu does not allocate its \$1,460,000 in common expenses to the various segments.

Perform testing procedures to determine Ecu's reportable operating segments.

**LO 8-2, 8-5**

36. Following is financial information describing the six operating segments that make up Fairfield, Inc. (in thousands):

	Segments					
	Red	Blue	Green	Pink	Black	White
Sales to outside parties . . .	\$1,811	\$812	\$514	\$309	\$121	\$99
Intersegment revenues . . .	16	91	109	–0–	16	302
Salary expense . . . . .	614	379	402	312	317	62
Rent expense . . . . .	139	166	81	92	42	31
Interest expense . . . . .	65	59	82	49	14	5
Income tax expense (savings) . . . . .	141	87	61	(86)	(64)	–0–

Consider the following questions independently. None of the six segments has a primarily financial nature.

- What minimum revenue amount must any one segment generate to be of significant size to require disaggregated disclosure?
- If only Red, Blue, and Green necessitate separate disclosure, is Fairfield disclosing disaggregated data for enough segments?
- What volume of revenues must a single customer generate to necessitate disclosing the existence of a major customer?
- If each of these six segments has a profit or loss (in thousands) as follows, which warrants separate disclosure?

Red . . . . .	\$1,074	Pink . . . . .	\$(94)
Blue . . . . .	449	Black . . . . .	(222)
Green . . . . .	140	White . . . . .	308

**LO 8-2**

37. Mason Company has prepared consolidated financial statements for the current year and is now gathering information in connection with the following five operating segments it has identified.

Determine the reportable segments by performing each applicable test. Also describe the procedure utilized to ensure that a sufficient number of segments are being separately disclosed. (Figures are in thousands.)

	Company					
	Total	Books	Computers	Maps	Travel	Finance
Sales to outside parties . . . . .	\$ 1,547	\$ 121	\$ 696	\$ 416	\$ 314	\$ –0–
Intersegment sales . . . . .	421	24	240	39	118	–0–
Interest income—external . . .	97	60	–0–	–0–	–0–	37
Interest income—intersegment loans . . . . .	147	–0–	–0–	–0–	–0–	147
Assets . . . . .	3,398	206	1,378	248	326	1,240
Operating expenses . . . . .	1,460	115	818	304	190	33

(continued)

(continued)

	Company					
	Total	Books	Computers	Maps	Travel	Finance
Expenses—intersegment						
sales . . . . .	198	70	51	31	46	–0–
Interest expense—external . . .	107	–0–	–0–	–0–	–0–	107
Interest expense—						
intersegment loans . . . . .	147	21	71	38	17	–0–
Income tax expense (savings) . .	21	12	(41)	27	31	(8)
General corporate expenses . . .	55					
Unallocated operating costs . . .	80					

## LO 8-4

38. Taft Corporation operates primarily in the United States. However, a few years ago it opened a plant in Spain to produce merchandise to sell there. This foreign operation has been so successful that during the past 24 months the company started a manufacturing plant in Italy and another in Greece. Financial information for each of these facilities follows:

	Spain	Italy	Greece
Sales . . . . .	\$175,000	\$600,000	\$450,000
Intersegment transfers . . . . .	–0–	100,000	60,000
Operating expenses . . . . .	172,000	206,000	190,000
Interest expense . . . . .	16,000	29,000	19,000
Income taxes . . . . .	67,000	19,000	34,000
Long-lived assets . . . . .	91,000	150,000	100,000

The company's domestic (U.S.) operations reported the following information for the current year:

Sales to unaffiliated customers . . . . .	\$ 4,500,000
Intersegment transfers . . . . .	427,000
Operating expenses . . . . .	2,410,000
Interest expense . . . . .	136,000
Income taxes . . . . .	819,000
Long-lived assets . . . . .	2,200,000

Taft has adopted the following criteria for determining the materiality of an individual foreign country: (1) Sales to unaffiliated customers within a country are 10 percent or more of consolidated sales or (2) long-lived assets within a country are 10 percent or more of consolidated long-lived assets.

Apply Taft's materiality tests to identify the countries to report separately with respect to (a) revenues and (b) long-lived assets.

## LO 8-6

39. Noventis Corporation prepared the following estimates for the four quarters of the current year:

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Sales . . . . .	\$1,300,000	\$1,560,000	\$1,820,000	\$2,080,000
Cost of goods sold . . . . .	430,000	510,000	580,000	630,000
Administrative costs . . . . .	310,000	185,000	190,000	200,000
Advertising costs . . . . .	–0–	100,000	–0–	–0–
Executive bonuses . . . . .	–0–	–0–	–0–	76,000
Provision for bad debts . . . . .	–0–	–0–	–0–	64,000
Annual maintenance costs . . . . .	72,000	–0–	–0–	–0–

**Additional Information**

- First-quarter administrative costs include the \$160,000 annual insurance premium.
- Advertising costs paid in the second quarter relate to television advertisements that will be broadcast throughout the entire year.

## LO 8-6

- No special items affect income during the year.
  - Novartis estimates an effective income tax rate for the year of 40 percent.
    - a. Assuming that actual results do *not* vary from the estimates provided, determine the amount of net income to be reported each quarter of the current year.
    - b. Assume that actual results do *not* vary from the estimates provided except for that in the third quarter, the estimated annual effective income tax rate is revised downward to 38 percent. Determine the amount of net income to be reported each quarter of the current year.
40. Cambi Company began operations on January 1, 2016. In the second quarter of 2017, it adopted the FIFO method of inventory valuation. In the past, it used the LIFO method. The company's interim income statements as originally reported under the LIFO method follow:

	2016				2017
	1stQ	2ndQ	3rdQ	4thQ	1stQ
Sales.....	\$10,000	\$12,000	\$14,000	\$16,000	\$18,000
Cost of goods sold (LIFO).....	4,000	5,000	5,800	7,000	8,500
Operating expenses...	<u>2,000</u>	<u>2,200</u>	<u>2,600</u>	<u>3,000</u>	<u>3,200</u>
Income before income taxes.....	\$ 4,000	\$ 4,800	\$ 5,600	\$ 6,000	\$ 6,300
Income taxes (40%)...	<u>1,600</u>	<u>1,920</u>	<u>2,240</u>	<u>2,400</u>	<u>2,520</u>
Net income.....	<u>\$ 2,400</u>	<u>\$ 2,880</u>	<u>\$ 3,360</u>	<u>\$ 3,600</u>	<u>\$ 3,780</u>

If the FIFO method had been used since the company began operations, cost of goods sold in each of the previous quarters would have been as follows:

	2016				2017
	1stQ	2ndQ	3rdQ	4thQ	1stQ
Cost of goods sold (FIFO)...	\$ 3,800	\$ 4,600	\$ 5,200	\$ 6,000	\$ 7,400

Sales for the second quarter of 2017 are \$20,000, cost of goods sold under the FIFO method is \$9,000, and operating expenses are \$3,400. The effective tax rate remains 40 percent. Cambi Company has 1,000 shares of common stock outstanding.

Prepare a schedule showing the calculation of net income and earnings per share that Cambi reports for the three-month period and the six-month period ended June 30, 2017.

## LO 8-6

41. The following information for Dorado Corporation relates to the three-month period ending September 30.

	Units	Price per Unit
Sales.....	425,000	\$36
Beginning inventory.....	35,000	18
Purchases.....	400,000	24
Ending inventory.....	10,000	?

Dorado expects to purchase 150,000 units of inventory in the fourth quarter of the current calendar year at a cost of \$25 per unit, and to have on hand 40,000 units of inventory at year-end. Dorado uses the last-in, first-out (LIFO) method to account for inventory costs.

Determine the cost of goods sold and gross profit amounts Dorado should record for the three months ending September 30. Prepare journal entries to reflect these amounts.

## Develop Your Skills

### RESEARCH CASE 1—SEGMENT REPORTING



Many companies make annual reports available on their corporate web page, often under an Investors tab. Annual reports also can be accessed through the SEC's EDGAR system at [www.sec.gov](http://www.sec.gov) (under Filings, click Company Filings Search, type in Company Name, and under Filing Type, search for 10-K).

Access the most recent annual report for a company with which you are familiar to complete the following requirements.

#### Required

Prepare a one-page report describing your findings for the following:

1. The company's reported operating segments and whether they are based on product lines, geographic areas, or some other basis.
2. The importance of each operating segment for the company as a whole in terms of revenues, income, and assets.
3. Whether the company provides any enterprisewide disclosures in addition to disclosures related to its operating segments.
4. Whether the company provides disclosures about major customers.

### RESEARCH CASE 2—INTERIM REPORTING



Many companies make quarterly reports available on their corporate web page. Quarterly reports also can be accessed through the SEC's EDGAR system at [www.sec.gov](http://www.sec.gov) (under Filings, click Company Filings Search, type in Company Name, and under Filing Type, search for 10-Q).

Access the most recent quarterly report for a company with which you are familiar to complete the following requirements.

#### Required

Prepare a one-page report describing your findings for the following:

1. Whether the company provides the minimum disclosures required for interim reports.
2. Any disclosures the company provides that exceed the minimum disclosures required.
3. The various year-to-year comparisons that can be made using the disclosures provided in the quarterly report.

### RESEARCH CASE 3—OPERATING SEGMENTS



Many companies make annual reports available on their corporate Internet home page. Annual reports also can be accessed through the SEC's EDGAR system at [www.sec.gov](http://www.sec.gov) (under Filings, click Company Filings Search, type in Company Name, and under Filing Type, search for 10-K). Access the most recent annual report for each of the following companies to complete the requirements:

Abbott Laboratories

Eaton

General Electric

United Technologies

#### Required

Prepare a one-page report summarizing your findings for the following:

1. The two most important operating segments in terms of percentage of total revenues.
2. The two operating segments with the largest growth in revenues.
3. The two most profitable operating segments in terms of profit margin.

## RESEARCH CASE 4—COMPARABILITY OF GEOGRAPHIC AREA INFORMATION



Many companies make annual reports available on their corporate Internet home page. Annual reports also can be accessed through the SEC's EDGAR system at [www.sec.gov](http://www.sec.gov) (under Filings, click Company Filings Search, type in Company Name, and under Filing Type, search for 10-K). Access the most recent annual report for each of the following companies:

Bristol-Myers Squibb  
Eli Lilly  
Merck  
Pfizer

### Required

Prepare a one-page report describing the extent to which direct comparisons can be made of the geographic area information provided by these companies.

## EVALUATION CASE—OPERATING SEGMENT DISCLOSURES



Corcoran Heavy Industries Company (CHIC) is organized into four divisions, each of which operates in a different industry. The types of customer served and the method used to distribute products differ across all four of these industries. In addition, each division must comply with its own unique set of industry regulations related to issues such as safety and recyclability of materials.

Operating profit before depreciation and amortization is the measure of profit regularly used by the chief operating decision maker for evaluating the performance of each of these divisions. In addition, information for each division on capital expenditures and depreciation and amortization is routinely provided by corporate headquarters to the chief operating decision maker. A summary of the information provided to the chief operating decision maker at the end of the current year is as follows:

(\$ in thousands)	Division				Total
	Automobiles	Trucks	Helicopters	Ships	
Sales to outside parties . . . . .	<b>\$4,007,304</b>	<b>\$3,796,432</b>	<b>\$1,411,235</b>	<b>\$1,003,809</b>	<b>\$10,218,780</b>
Intersegment sales . . . . .	644,243	307,982	—	—	952,225
Total sales . . . . .	\$ 4,651,547	\$ 4,104,414	\$ 1,411,235	\$ 1,003,809	\$ 11,171,005
Operating expenses—external . . . . .	3,480,666	3,147,086	1,004,464	958,743	8,590,959
Operating expense—internal . . . . .	289,589	500,798	57,893	103,945	952,225
Operating profit before depreciation and amortization . . . . .	\$ 881,292	\$ 456,530	\$ 348,878	\$ (58,879)	\$ 1,627,821
Depreciation and amortization . . . . .	180,345	170,976	97,638	58,617	507,576
Interest expense . . . . .					130,655
Income before tax . . . . .					\$ 989,590
Income taxes . . . . .					376,044
Profit (loss) . . . . .					\$ 613,546
Segment assets . . . . .	<b>\$3,987,776</b>	<b>\$3,209,078</b>	<b>\$1,587,006</b>	<b>\$1,209,970</b>	<b>\$ 9,993,830</b>
Corporate headquarters assets . . . . .					1,008,988
Total assets . . . . .					\$ 11,002,818
Capital expenditures . . . . .	\$ 349,776	\$ 365,543	\$ 276,655	\$ 23,695	\$ 1,015,669

In compiling notes to the financial statements, CHIC's accountants prepared the following Note to comply with the operating segment disclosure requirements of ASC Topic 280, "Segment Reporting."

### Note X. Operating Segments

(\$ in thousands)	Automobiles	Trucks	Other
Revenues	\$4,651,547	\$4,104,414	\$2,415,044
Segment Profit (Loss)	\$ 881,292	\$ 456,530	\$ 289,999
Assets	\$3,987,776	\$3,209,078	\$2,796,976



**Required**

1. Prepare a report for CHIC's management evaluating whether the operating segments disclosures prepared by CHIC's accountants comply with ASC 280.
2. Prepare a revised operating segments note to comply with ASC 280. CHIC does not have any unusual or extraordinary items, significant noncash items other than depreciation and amortization, or equity method affiliates.

**ACCOUNTING STANDARDS CASE 1—SEGMENT REPORTING**

Nuland International Corporation recently acquired 40 percent of Scott Trading Company and appropriately accounts for this investment under the equity method. Nuland's corporate controller is in the process of determining the company's operating segments for purposes of preparing financial statements for the current year. He has determined that the investment in Scott meets the definition of an operating segment (i.e., Scott earns revenues and incurs expenses, Nuland's chief operating officer regularly reviews Scott's operating results, and Scott provides Nuland with a complete set of financial statements). However, because Nuland does not control Scott, the controller is not sure whether the investment in Scott can be considered a separate operating segment.

**Required**

Search current U.S. authoritative accounting literature to determine whether an equity method investment can be treated as an operating segment for financial reporting purposes. If so, explain the conditions under which this would be possible. Identify the source of guidance for answering this question.

**ACCOUNTING STANDARDS CASE 2—INTERIM REPORTING**

Caplan Pharma, Inc., recently was sued by a competitor for possible infringement of the competitor's patent on a top-selling flu vaccine. The plaintiff is suing for damages of \$15 million. Caplan's CFO has discussed the case with legal counsel, who believes it is possible that Caplan will not be able to successfully defend the lawsuit. The CFO knows that current U.S. accounting guidelines require that contingencies (such as lawsuits) must be disclosed in the annual report when a loss is possible. However, she is unsure whether this rule must be applied in the preparation of interim financial statements. She also knows that disclosure is necessary only if the amount is material, but she is unsure whether materiality should be assessed in relation to results for the interim period or for the entire year.

**Required**

Search current U.S. accounting standards to determine whether contingencies are required to be disclosed in interim reports, and, if so, how materiality is to be determined. Identify the source of guidance for answering these questions.

**ANALYSIS CASE 1—WALMART INTERIM AND SEGMENT REPORTING**

The following information was extracted from quarterly reports for Wal-Mart Stores, Inc. (amounts in millions):

Segment Operating Income	Three Months Ended April 30		Three Months Ended July 31		Three Months Ended October 31	
	2014	2013	2014	2013	2014	2013
Walmart U.S. . . . .	\$4,975	\$5,197	\$5,252	\$5,383	\$4,932	\$4,991
Walmart International. . . . .	1,202	1,163	1,489	1,379	1,430	1,379
Sam's Club . . . . .	479	490	494	518	493	440

The following information was extracted from the notes to the financial statements in the Wal-Mart Stores, Inc., Annual Report (for the fiscal year ended January 31, 2015, amounts in millions):

<b>14 Segments Fiscal Year Ended January 31, 2015</b>					
	<b>Walmart U.S.</b>	<b>Walmart International</b>	<b>Sam's Club</b>	<b>Corporate and Support</b>	<b>Consolidated</b>
Net sales . . . . .	\$288,049	\$136,160	\$58,020	—	\$482,229
Operating income (loss) . . . . .	21,336	6,171	1,976	(2,336)	27,147
Total assets.	101,381	80,505	13,995	7,825	203,706

<b>16 Quarterly Financial Data (Unaudited) (amounts in millions except per share data)</b>					
	<b>Fiscal Year Ended January 31, 2015</b>				
	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	
Net sales . . . . .	\$114,167	\$119,336	\$118,076	\$130,650	
Cost of sales . . . . .	86,714	90,010	89,247	99,115	
Income from continuing operations . . . . .	3,711	4,089	3,826	5,188	

### Required

1. Assess the seasonal nature of Walmart's sales and income for the company as a whole and by operating segment.
2. Assess Walmart's profitability by quarter and by operating segment.

## ANALYSIS CASE 2—COCA-COLA OPERATING SEGMENT INFORMATION



The Coca-Cola Company is organized geographically and defines reportable operating segments as regions of the world. The following information was extracted from Note 19 Operating Segments in the Coca-Cola Company 2014 Annual Report:

**Information about our Company's operations by operating segment for the years ended December 31, 2014, 2013, and 2012, is as follows (in millions):**

	<b>Eurasia &amp; Africa</b>	<b>Europe</b>	<b>Latin America</b>	<b>North America</b>	<b>Asia Pacific</b>	<b>Bottling Investments</b>	<b>Corporate</b>	<b>Eliminations</b>	<b>Consolidated</b>
<b>2014</b>									
Net operating revenues:									
Third party.....	\$2,730	\$4,844	\$4,597	\$21,462	\$5,257	\$6,972	\$ 136	\$ —	\$45,998
Intersegment.....	—	692	60	17	489	67	—	(1,325)	—
Total net revenues.....	2,730	5,536	4,657	21,479	5,746	7,039	136	(1,325)	45,998
Operating income (loss).....	1,084	2,852	2,316	2,447	2,448	9	(1,448)	—	9,708
Interest income.....	—	—	—	—	—	—	594	—	594
Interest expense.....	—	—	—	—	—	—	483	—	483
Depreciation and amortization.....	47	75	56	1,195	96	315	192	—	1,976
Equity income (loss)—net.....	35	31	10	(16)	12	691	6	—	769
Income (loss) before income taxes.....	1,125	2,892	2,319	1,633	2,464	715	(1,823)	—	9,325
Identifiable operating assets.....	1,298	3,358	2,426	33,066	1,793	6,975	29,482	—	78,398
Investments.....	1,081	90	757	48	157	8,781	2,711	—	13,625
Capital expenditures.....	30	54	55	1,293	76	628	270	—	2,406
<b>2013</b>									
Net operating revenues:									
Third party.....	\$2,763	\$4,645	\$4,748	\$21,574	\$5,372	\$7,598	\$ 154	\$ —	\$46,854
Intersegment.....	—	689	191	16	497	78	—	(1,471)	—
Total net revenues.....	2,763	5,334	4,939	21,590	5,869	7,676	154	(1,471)	46,854
Operating income (loss).....	1,087	2,859	2,908	2,432	2,478	115	(1,651)	—	10,228
Interest income.....	—	—	—	—	—	—	534	—	534
Interest expense.....	—	—	—	—	—	—	463	—	463
Depreciation and amortization.....	42	86	58	1,192	130	335	134	—	1,977
Equity income (loss)—net.....	22	24	13	2	19	524	(2)	—	602
Income (loss) before income taxes.....	1,109	2,923	2,920	2,434	2,494	679	(1,082)	—	11,477
Identifiable operating assets.....	1,273	3,713	2,918	33,964	1,922	7,011	27,742	—	78,543
Investments.....	1,157	106	545	49	143	9,424	88	—	11,512
Capital expenditures.....	40	34	63	1,374	117	643	279	—	2,550
<b>2012</b>									
Net operating revenues:									
Third party.....	\$2,697	\$4,481	\$4,560	\$21,665	\$5,680	\$8,807	\$ 127	\$ —	\$48,017
Intersegment.....	—	642	271	15	628	88	—	(1,644)	—
Total net revenues.....	2,697	5,123	4,831	21,680	6,308	8,895	127	(1,644)	48,017
Operating income (loss).....	1,078	2,960	2,879	2,597	2,516	140	(1,391)	—	10,779
Interest income.....	—	—	—	—	—	—	471	—	471
Interest expense.....	—	—	—	—	—	—	397	—	397
Depreciation and amortization.....	33	100	70	1,083	119	406	171	—	1,982
Equity income (loss)—net.....	20	45	4	13	2	732	3	—	819
Income (loss) before income taxes.....	1,101	3,015	2,882	2,624	2,523	904	(1,240)	—	11,809
Identifiable operating assets.....	1,299	2,976	2,759	34,114	2,163	9,648	22,767	—	75,726
Investments.....	1,155	271	539	39	127	8,253	64	—	10,448
Capital expenditures.....	51	30	88	1,447	107	867	190	—	2,780

### Required

1. Calculate the following measures for each of Coca-Cola's operating segments (excluding Bottling Investments and Corporate):
  - Percentage of total net revenues, 2013 and 2014.
  - Percentage change in total net revenues, 2012 to 2013 and 2013 to 2014.
  - Operating income as a percentage of total net revenues (profit margin), 2013 and 2014.
2. Determine whether you believe Coca-Cola should attempt to expand its operations in a particular region of the world to increase operating revenues and operating income.
3. List any additional information you would like to have to conduct your analysis.



# Foreign Currency Transactions and Hedging Foreign Exchange Risk

Today, international business transactions are a regular occurrence. In its 2015 annual report, Lockheed Martin Corporation reported export sales of \$9.5 billion, representing 21 percent of total sales. Some businesses are very significantly involved in transactions occurring throughout the world as evidenced by this excerpt from Cirrus Logic, Inc.'s fiscal year 2015 annual report: "Export sales, principally to Asia, including sales to U.S.-based customers that manufacture at plants overseas, were approximately \$869.9 million in fiscal year 2015, \$673.7 million in fiscal year 2014, and \$764.9 million in fiscal year 2013. Export sales to customers located in Asia were 92 percent of net sales in fiscal years 2015 and 2014 and 91 percent in fiscal year 2013. All other export sales represented 3 percent of net sales in each of fiscal years 2015, 2014, and 2013."

Collections from export sales or payments for imported items might be made not in U.S. dollars but in pesos, pounds, yen, and the like depending on the negotiated terms of the transaction. As foreign currency exchange rates fluctuate, so does the U.S. dollar value of these export sales and import purchases. Companies often find it necessary to engage in some form of hedging activity to reduce losses arising from fluctuating exchange rates. At the end of fiscal year 2015, in conjunction with its foreign currency hedging activities, Apple, Inc., reported having outstanding foreign exchange contracts with a notional value of \$119.2 billion.

This chapter covers accounting issues related to foreign currency transactions and foreign currency hedging activities. To provide background for subsequent discussions of the accounting issues, the chapter begins by describing foreign exchange markets. The chapter then discusses accounting for import and export transactions, followed by coverage of various hedging techniques. Because they are most popular, the discussion concentrates on foreign currency forward contracts and options. Understanding how to account for these items is important for any company engaged in international transactions.

## Learning Objectives

After studying this chapter, you should be able to:

- LO 9-1** Understand concepts related to foreign currency, exchange rates, and foreign exchange risk.
- LO 9-2** Account for foreign currency transactions using the two-transaction perspective, accrual approach.
- LO 9-3** Account for foreign currency borrowings.
- LO 9-4** Understand the different types of foreign exchange risk that can be hedged and how foreign currency forward contracts and foreign currency options can be used to hedge those risks.
- LO 9-5** Understand the accounting guidelines for derivative financial instruments.
- LO 9-6** Understand the basic concepts of hedge accounting.
- LO 9-7** Account for forward contracts and options used as hedges of foreign currency denominated assets and liabilities.
- LO 9-8** Account for forward contracts and options used as hedges of foreign currency firm commitments.
- LO 9-9** Account for forward contracts and options used as hedges of forecasted foreign currency transactions.

## LO 9-1

Understand concepts related to foreign currency, exchange rates, and foreign exchange risk.

## Foreign Exchange Markets

Each country (or group of countries) uses its own currency as the unit of value for the purchase and sale of goods and services. The currency used in the United States is the U.S. dollar, the currency used in Mexico is the Mexican peso, the currency used by a subset of European Union countries is the euro, and so on. If a U.S. citizen travels to Mexico and wishes to purchase local goods, Mexican merchants require payment to be made in Mexican pesos. To make a purchase in Mexico, a U.S. citizen would need to acquire pesos using U.S. dollars. The foreign currency *exchange rate* is the price at which the foreign currency can be acquired (or sold). A variety of factors determine the exchange rate between two currencies; unfortunately for those engaged in international business, the exchange rate can fluctuate over time.<sup>1</sup>

### Exchange Rate Mechanisms

Exchange rates have not always fluctuated. During the period 1945–1973, countries fixed the value of their currency in terms of the U.S. dollar, and the value of the U.S. dollar was fixed in terms of gold. In March 1973, most countries allowed their currencies to float in value. Today, several different currency arrangements exist. Some of the more important ones and the countries affected follow:

1. *Independent float*: The value of the currency is allowed to fluctuate freely according to market forces with little or no intervention from the central bank (example countries include Australia, Brazil, Canada, Japan, Sweden, Switzerland, the United Kingdom, and the United States).
2. *Pegged to another currency*: The value of the currency is fixed (pegged) in terms of a particular foreign currency and the central bank intervenes as necessary to maintain the fixed value. For example, Bahrain, Panama, and Saudi Arabia peg their currency to the U.S. dollar. China has pegged its currency, the yuan (or Renminbi), to the U.S. dollar since 1994, while allowing a revaluation in 2005 and again in 2015. By managing the value of its currency (downward) rather than allowing it to float freely, the Chinese government has made it easier for Chinese companies to export their products overseas.
3. *European Monetary System (euro)*: In 1998, the countries comprising the European Monetary System adopted a common currency called the *euro* and established a European Central Bank.<sup>2</sup> Until 2002, local currencies such as the German mark and French franc continued to exist but were fixed in value in terms of the euro. On January 1, 2002, local currencies disappeared, and the euro became the currency in 12 European countries. Today, 19 countries are part of the euro zone. The value of the euro floats against other currencies such as the Swiss franc, British pound, and U.S. dollar.

### Foreign Exchange Rates

Exchange rates between the U.S. dollar and many foreign currencies are published on a daily basis in *The Wall Street Journal* and major U.S. newspapers. Exchange rates also are available online at websites such as [www.oanda.com](http://www.oanda.com) and [www.x-rates.com](http://www.x-rates.com). To illustrate exchange rates and the foreign currency market, next we examine exchange rates for selected currencies reported for December 1–2, 2015, as shown in Exhibit 9.1.

The exchange rates shown in Exhibit 9.1 are for trades between banks; that is, these are interbank or wholesale prices. Prices charged by banks to retail customers, such as companies engaged in international business, are higher. These are selling rates at which banks will sell currency to one another. The prices that banks are willing to pay to buy foreign currency are

<sup>1</sup>Several theories attempt to explain exchange rate fluctuations but with little success, at least in the short term. An understanding of the causes of exchange rate changes is not necessary to comprehend the concepts underlying the accounting for changes in exchange rates.

<sup>2</sup>Most longtime members of the European Union (EU) are “euro zone” countries. The major exception is the United Kingdom, which elected not to participate. Switzerland is another important European country not part of the euro zone because it is not a member of the EU.

**EXHIBIT 9.1**  
**Exchange Rates for**  
**Selected Currencies**  
**(December 1-2, 2015)**

Country/Currency	December 1, 2015		December 2, 2015	
	Direct*	Indirect†	Direct*	Indirect†
Euro zone euro.....	1.0607	0.9428	1.0685	0.9359
UK pound .....	1.5078	0.6632	1.5027	0.6655
Canada dollar.....	0.7491	1.3349	0.7480	1.3369
Brazil real.....	0.2584	3.8700	0.2595	3.8536
China yuan .....	0.1560	6.4103	0.1560	6.4103

Source: <http://www.oanda.com/currency/historical-rates>.

\*[www.oanda.com/currency/historical-rates](http://www.oanda.com/currency/historical-rates).

†Indirect quotes have been calculated by the author.

somewhat less than the selling rates. The difference between the buying and selling rates is the spread through which the banks earn a profit on foreign exchange trades. For example, the December 1, 2015, selling rate for the euro was \$1.0607, while the the buying rate was \$1.0596. On that date, banks were willing to buy euros for \$1.0596 and sell them for \$1.0607, earning a profit of \$0.0011 per euro.

Two columns of information are shown for each day's exchange rates. The first column reports *direct quotes*, which indicate the number of U.S. dollars needed to purchase one unit of foreign currency. The direct quote for the Brazilian real on December 1 was \$0.2584; in other words, 1.0 Brazilian real (BRL) could be purchased for \$0.2584. The second column reports *indirect quotes*, which indicate the number of foreign currency units that could be purchased with one U.S. dollar. These rates are simply the inverse of direct quotes (indirect quote =  $1 \div$  direct quote). If one BRL can be purchased with \$0.2584, then 3.87 BRL can be purchased with \$1.00. To avoid confusion, *direct quotes are used exclusively in this chapter*.

The third and fourth columns in Exhibit 9.1 show exchange rates for December 2, 2015. Two of the currencies shown increased in U.S. dollar price (appreciated) from December 1 to December 2, namely the euro and Brazilian real. For example, the euro increased in price by \$0.0078 from one day to the next. As a result, the purchase of 100,000 euros on December 2, 2015, would have cost \$780 more than on the previous day. In contrast, the U.S. dollar price for two currencies decreased (depreciated) from one day to the next, namely the British pound and Canadian dollar. The Chinese yuan did not change in U.S. dollar value because this currency was effectively pegged to the U.S. dollar.

### Foreign Currency Forward Contracts

Foreign currency trades can be executed on a spot or forward basis. The *spot rate* is the price at which a foreign currency can be purchased or sold today. In contrast, the *forward rate* is the price available today at which foreign currency can be purchased or sold sometime in the future. Because many international business transactions take some time to be completed, the ability to lock in a price today at which foreign currency can be purchased or sold at some future date has definite advantages.

A *foreign currency forward contract* can be negotiated by a firm with its bank to exchange foreign currency for U.S. dollars, or vice versa, on a specified future date at a predetermined exchange rate. A forward contract can be written for whatever currency and for whatever future date is required. Entering into a forward contract has no up-front cost; the firm and its bank simply agree today to exchange foreign currency for U.S. dollars at the forward rate on a future date. Similar to how banks make a profit in the spot market, there is a spread between the buying and selling rates in the forward market. For example, on February 1 a bank might agree to buy 500,000 British pounds in three months from one customer at a forward rate of \$1.50 and simultaneously agree to sell 500,000 British pounds (GBP) in three months to another customer at a rate of \$1.51. In this way, the bank generates a profit of \$5,000 ( $500,000 \text{ GBP} \times \$0.01$ ) from entering into these two forward contracts.

The forward rate can exceed the spot rate on a given date, in which case the foreign currency is said to be selling at a *premium* in the forward market, or the forward rate can be less than the spot rate, in which case the currency is selling at a *discount*. Currencies sell at a premium or a discount because of differences in interest rates between two countries. When the interest rate in the foreign country exceeds the domestic interest rate, the foreign currency



sells at a discount in the forward market. Conversely, if the foreign interest rate is less than the domestic rate, the foreign currency sells at a premium.<sup>3</sup>

The forward exchange rate for a specific future settlement date will change over time due to changes in the spot exchange rate and/or changes in the differential interest rates between two countries. For example, assume on April 15 the U.S. dollar (USD) per Mexican peso (MXN) spot rate is \$0.11 and the forward rate for a forward contract to be settled on June 15 is \$0.105. The peso is selling at a discount of \$0.005 in the two-month forward market due to a higher interest rate in Mexico than in the United States. If the USD/MXN spot rate decreases to \$0.08 on May 15, the forward rate for a June 15 settlement-date forward contract also will decrease, to an amount less than \$0.08. The peso will continue to sell at a discount in the one-month forward market because of the higher interest rate in Mexico.

Until December 2014, *The Wall Street Journal* published forward rates offered by New York banks for several major currencies on a daily basis. Since then, it has been difficult for third parties to obtain data on foreign currency forward rates. The spot rate for Swiss francs (CHF) on December 8, 2014, was reported to be \$1.0245. On the same day, the one-month forward rate was reported as \$1.0250, so the CHF was selling at a premium in the forward market. By entering into a forward contract on December 8, 2014, it would have been possible for a firm to guarantee that CHF could be purchased on January 8, 2015, at a price of \$1.0250, regardless of what the spot rate turned out to be on January 8. Entering into the forward contract to purchase CHF would have been beneficial if the spot rate on January 8 was more than \$1.0250. On the other hand, such a forward contract would have been detrimental if the spot rate was less than \$1.0250. In either case, the firm must execute the forward contract and purchase CHF on January 8 at \$1.0250.

As it turned out, the spot rate for CHF on January 8, 2015, was \$0.9819, so entering into a one-month forward contract on December 8, 2014, to purchase CHF at \$1.0250 on January 8, 2015, would have resulted in a loss because CHF could have been purchased at a lower price using the spot rate on that date.

## Foreign Currency Options

To provide companies more flexibility than exists with a forward contract, a market for *foreign currency options* has developed. A foreign currency option gives the holder of the option *the right but not the obligation* to trade foreign currency in the future. A *put* option is for the sale of foreign currency by the holder of the option; a *call* option is for the purchase of foreign currency by the holder of the option. The *strike price* is the exchange rate at which the option will be executed if the option holder decides to exercise the option. The strike price is similar to a forward rate. There are generally several strike prices to choose from at any particular time. Foreign currency options can be purchased on the Philadelphia Stock Exchange or the Chicago Mercantile Exchange, but most foreign currency options are purchased directly from a bank in the so-called over-the-counter (OTC) market. Options purchased in the OTC market usually have a strike price that is equal to the spot rate on that date. These options are said to be “at-the-money.”

Unlike a forward contract, for which banks earn their profit through the spread between buying and selling rates, options must actually be purchased by paying an *option premium*, which is a function of two components: intrinsic value and time value. An option’s *intrinsic value* is equal to the gain that could be realized by exercising the option immediately. For example, if the spot rate for the euro is \$1.00, a *call* option (to purchase euros) with a strike price of \$0.97 has an intrinsic value of \$0.03 per euro. Euros can be purchased for \$0.97 and sold for \$1.00, generating a gain of \$0.03 per euro. On the other hand, when the spot rate for the euro is \$1.00, a *put* option (to sell euros) with a strike price of \$0.97 has an intrinsic

<sup>3</sup> This relationship is based on the theory of interest rate parity that indicates the difference in national interest rates should be equal to, but opposite in sign to, the forward rate discount or premium. This topic is covered in detail in international finance textbooks.

value of zero. An option with a positive intrinsic value is said to be “in-the-money.” The *time value* of an option relates to the fact that the spot rate can change over time and cause the option’s intrinsic value to increase. Even though a call option with a strike price of \$1.00 has zero intrinsic value when the spot rate is \$1.00, it will have a positive time value because there is a chance that the spot rate could increase over the next 90 days and bring the option into the money. As time passes, the time value of an option decreases because there is less time remaining for the option to increase in intrinsic value. The fair value of a foreign currency option on a specific date is the sum of its intrinsic and time values on that date.

The fair value of a foreign currency option can be determined by applying an adaptation of the Black-Scholes option pricing formula. This formula is discussed in detail in international finance books. In very general terms, the value of an option is a function of the difference between the current spot rate and strike price, the difference between domestic and foreign interest rates, the length of time to expiration, and the potential volatility of changes in the spot rate. For purposes of this book, the premium originally paid for a foreign currency option and its subsequent fair value up to the date of expiration derived from applying the pricing formula will be given.

On December 17, 2015, when the USD spot rate for euros was \$1.09, the Chicago Mercantile Exchange indicated that a January 2016 call option in euros with a strike price of \$1.09 could have been purchased by paying a premium of \$0.0068 per euro. Thus, the right to purchase a standard contract of 125,000 euros in December 2016 at a price of \$1.09 per euro could have been acquired by paying \$850 ( $\$0.0068 \times 125,000$  euros). Because the spot rate and the strike price were both \$1.09, the euro call option had zero intrinsic value and a time value of \$850. If the spot rate for euros on January 17, 2016, is more than \$1.09, the option will be exercised and euros purchased at the strike price of \$1.09. If, on the other hand, the January 17, 2016, spot rate is less than \$1.09, the option will not be exercised; instead, euros will be purchased at the lower spot rate. The call option establishes the maximum amount that would have to be paid for euros but does not lock in a disadvantageous price should the spot rate fall below the option strike price. The actual spot rate for euros on January 17, 2016, turned out to be \$1.091, so the option would have been exercised and euros purchased for \$1.09.

### LO 9-2

Account for foreign currency transactions using the two-transaction perspective, accrual approach.

## Foreign Currency Transactions

Export sales and import purchases are international transactions; they are components of what is called *trade*. When two parties from different countries enter into a transaction, they must decide which of the two countries’ currencies to use to settle the transaction. For example, if a U.S. computer manufacturer sells to a customer in Japan, the parties must decide whether the transaction will be denominated (payment will be made) in U.S. dollars or in Japanese yen.

Assume that a U.S. exporter (Amerco) sells goods to a German importer that will pay in euros (€). In this situation, Amerco has entered into a foreign currency transaction. It must restate the euro amount that it actually will receive into U.S. dollars to account for this transaction. This happens because Amerco keeps its books and prepares financial statements in U.S. dollars. Although the German importer has entered into an international transaction, it does not have a foreign currency transaction (payment will be made in its currency) and no restatement is necessary.

Assume that, as is customary in its industry, Amerco does not require immediate payment and allows its German customer 30 days to pay for its purchases. By doing this, Amerco runs the risk that the euro might depreciate against the U.S. dollar between the sale date and the date of payment. If so, the sale would generate fewer U.S. dollars than it would have had the euro not decreased in value, and the sale is less profitable because it was made on a credit basis. In this situation Amerco is said to have an *exposure to foreign*

*exchange risk*. Specifically, Amerco has a transaction exposure that can be summarized as follows:

- *Export sale*: A transaction exposure exists when the exporter *allows the buyer to pay in a foreign currency and allows the buyer to pay sometime after the sale has been made*. The exporter is exposed to the risk that the foreign currency might depreciate (decrease in value) between the date of sale and the date payment is received, thereby decreasing the U.S. dollars ultimately collected.
  - Note that there is no exposure to foreign exchange risk if the exporter requires the foreign customer to make payment on the date of sale. In that case, the exporter would receive foreign currency and immediately convert it into U.S. dollars at the spot rate on the date of sale.
- *Import purchase*: A transaction exposure exists when the importer *is required to pay in foreign currency and is allowed to pay sometime after the purchase has been made*. The importer is exposed to the risk that the foreign currency might appreciate (increase in price) between the date of purchase and the date of payment, thereby increasing the U.S. dollars that have to be paid for the imported goods.
  - Note that there is no exposure to foreign exchange risk if the importer makes payment in foreign currency on the date of purchase. In that case, the importer converts U.S. dollars into foreign currency at the spot rate on the date of purchase and immediately makes payment.

### Accounting Issue

The major issue in accounting for foreign currency transactions is how to deal with the change in U.S. dollar value of the sales revenue and account receivable resulting from the export when the foreign currency changes in value. (The corollary issue is how to deal with the change in the U.S. dollar value of the account payable and goods being acquired in an import purchase.) For example, assume that Amerco, a U.S. company, sells goods to a German customer at the price of 1 million euros when the spot exchange rate is \$1.32 per euro. If payment were received at the sale date, Amerco could have converted 1 million euros into \$1,320,000; this amount clearly would be the amount at which the sales revenue would be recognized. Instead, Amerco allows the German customer 30 days to pay for its purchase. At the end of 30 days, the euro has depreciated to \$1.30 and Amerco is able to convert the 1 million euros received on that date into only \$1,300,000. How should Amerco account for this \$20,000 decrease in value?

FASB ASC 830-20 Foreign Currency Matters—Foreign Currency Transactions requires companies to use what can be referred to as a *two-transaction perspective* in accounting for foreign currency transactions. This perspective treats the export sale and the subsequent collection of cash as two separate transactions. Because management has made two decisions—(1) to make the export sale and (2) to extend credit in foreign currency to the customer—the company should report the income effect from each of these decisions separately. The U.S. dollar value of the sale is recorded at the date the sale occurs. At that point, the sale has been completed; there are no subsequent adjustments to the Sales account. Any difference between the number of U.S. dollars that could have been received at the date of sale and the number of U.S. dollars actually received at the date of collection due to fluctuations in the exchange rate is a result of the decision to extend foreign currency credit to the customer. This difference is treated as a foreign exchange gain or loss that is reported separately from Sales in the income statement.

Similarly, an import purchase denominated in a foreign currency and the subsequent payment of cash must be accounted for separately. The U.S. dollar value of the goods purchased is recorded at the date of purchase, with no subsequent adjustments to the cost of the goods. Any difference between the number of U.S. dollars that could have been paid on the date of purchase and the actual number of U.S. dollars that is paid on the payment date due to a change in the exchange rate is treated as a foreign exchange gain or loss.

Using the two-transaction perspective to account for its export sale to the German customer, Amerco would make the following journal entries:

Date of Sale:	Accounts Receivable (€) . . . . .	1,320,000	
	Sales . . . . .		1,320,000
	To record the sale and euro receivable at the spot rate of \$1.32.		
Date of Collection:	Foreign Exchange Loss . . . . .	20,000	
	Accounts Receivable (€) . . . . .		20,000
	To adjust the value of the euro receivable to the new spot rate of \$1.30 and record a foreign exchange loss resulting from the depreciation in the euro.		
	Cash . . . . .	1,300,000	
	Accounts Receivable (€) . . . . .		1,300,000
	To record the receipt of 1 million euros and conversion into U.S. dollars at the spot rate of \$1.30.		

Sales are reported in income at the amount that would have been received if the customer had not been given 30 days to pay the 1 million euros—that is, \$1,320,000. A separate Foreign Exchange Loss of \$20,000 is reported in net income to indicate that because of the decision to extend foreign currency credit to the German customer and because the euro decreased in value, Amerco actually received fewer U.S. dollars.<sup>4</sup>

Note that Amerco keeps its Account Receivable (€) account separate from its U.S. dollar receivables. Companies engaged in international trade need to keep separate receivable and payable accounts in each of the currencies in which they have transactions. Each foreign currency receivable and payable should have a separate account number in the company's chart of accounts.

We can summarize the relationship between fluctuations in exchange rates and foreign exchange gains and losses as follows:

Transaction	Type of Exposure	Foreign Currency (FC)	
		Appreciates	Depreciates
Export sale	Asset (receivable)	Gain	Loss
Import purchase	Liability (payable)	Loss	Gain

A foreign currency receivable arising from an export sale creates an *asset exposure* to foreign exchange risk. If the foreign currency appreciates, the foreign currency asset increases in U.S. dollar value and a foreign exchange gain arises; depreciation of the foreign currency causes a foreign exchange loss. A foreign currency payable arising from an import purchase creates a *liability exposure* to foreign exchange risk. If the foreign currency appreciates, the foreign currency liability increases in U.S. dollar value and a foreign exchange loss results; depreciation of the currency results in a foreign exchange gain.

### Balance Sheet Date before Date of Payment

The question arises as to what adjustments should be made if a balance sheet date falls between the date of sale (or purchase) and the date of collection (or payment). For example, assume that Amerco shipped goods to its German customer on December 1, 2017, with payment to be received on March 1, 2018. Assume that at December 1, the spot rate for the euro was \$1.32, but by December 31, the euro has appreciated to \$1.33. Is any adjustment needed at December 31, 2017, when the books are closed to account for the fact that the foreign currency receivable has changed in U.S. dollar value since December 1?

Authoritative accounting literature requires foreign currency balances such as a foreign currency receivable or a foreign currency payable to be revalued at the balance sheet date to account for the change in exchange rates. Under the two-transaction perspective, this means that a foreign exchange gain or loss arises at the balance sheet date. The next question then is

<sup>4</sup>Note that the foreign exchange loss results because the customer is allowed to pay in euros and is given 30 days to pay. If the transaction were denominated in U.S. dollars, no loss would result, nor would there be a loss if the euros had been received at the date the sale was made.

what should be done with these foreign exchange gains and losses that have not yet been realized in cash. Should they be included in net income?

U.S. GAAP requires unrealized foreign exchange gains and losses to be reported in net income in the period in which the exchange rate changes. This is consistent with accrual accounting as it results in reporting the effect of a rate change that will have an impact on cash flow in the period when the event causing the impact takes place. Thus, any change in the exchange rate from the date of sale to the balance sheet date results in a foreign exchange gain or loss to be reported in net income in that period. Any change in the exchange rate from the balance sheet date to the date of collection results in a second foreign exchange gain or loss that is reported in net income in the second accounting period. Amerco makes the following journal entries under this approach:

12/1/17	Accounts Receivable (€) . . . . .	1,320,000	
	Sales . . . . .		1,320,000
	To record the sale and euro receivable at the spot rate of \$1.32.		
12/31/17	Accounts Receivable (€) . . . . .	10,000	
	Foreign Exchange Gain . . . . .		10,000
	To adjust the value of the euro receivable to the new spot rate of \$1.33 and record a foreign exchange gain in 2017 net income resulting from the appreciation in the euro since December 1.		
3/1/18	Foreign Exchange Loss . . . . .	30,000	
	Accounts Receivable (€) . . . . .		30,000
	To adjust the value of the euro receivable to the new spot rate of \$1.30 and record a foreign exchange loss in 2018 net income resulting from the depreciation in the euro since December 31.		
	Cash . . . . .	1,300,000	
	Accounts Receivable (€) . . . . .		1,300,000
	To record the receipt of 1 million euros and conversion at the spot rate of \$1.30.		

The net impact on income in 2017 is a sale of \$1,320,000 and a foreign exchange gain of \$10,000; in 2018, Amerco records a foreign exchange loss of \$30,000. This results in a net increase of \$1,300,000 in Retained Earnings that is balanced by an equal increase in Cash over the two-year period. Over the two-year period Amerco recognizes a net foreign exchange loss of \$20,000.

One criticism of the accrual approach is that it leads to a violation of conservatism when an unrealized foreign exchange gain arises at the balance sheet date. In fact, this is one of only a few situations in U.S. GAAP in which it is acceptable to recognize an unrealized gain in net income. (This treatment is similar to how changes in the fair value of equity investments are recognized.)

Restatement at the balance sheet date is required for all foreign currency assets and liabilities carried on a company's books. In addition to foreign currency payables and receivables arising from import and export transactions, companies might have dividends receivable from foreign subsidiaries, loans payable to foreign lenders, or lease payments receivable from foreign customers that are denominated in a foreign currency and therefore must be restated at the balance sheet date. Each of these foreign currency denominated assets and liabilities is exposed to foreign exchange risk; therefore, fluctuation in exchange rates result in foreign exchange gains and losses on all foreign currency denominated assets and liabilities.

Many U.S. companies report foreign exchange gains and losses on the income statement in a line item often titled Other income (expense). Companies include other incidental gains and losses such as gains and losses on sales of assets in this line item as well. Companies

are required to disclose the magnitude of foreign exchange gains and losses if material. For example, in the Notes to Financial Statements in its 2014 annual report, Merck indicated that the income statement item Other (Income) Expense, Net, included exchange losses of \$180 million in 2014, \$290 million in 2013, and \$185 million in 2012.

## International Accounting Standard 21—The Effects of Changes in Foreign Exchange Rates

Similar to U.S. GAAP, *IAS 21*, “The Effects of Changes in Foreign Exchange Rates,” also requires the use of a two-transaction perspective in accounting for foreign currency transactions with unrealized foreign exchange gains and losses accrued in net income in the period of exchange rate change. There are no substantive differences between IFRS and U.S. GAAP in the accounting for foreign currency transactions.

### LO 9-3

Account for foreign currency borrowings.

## Foreign Currency Borrowing

In addition to the receivables and payables that arise from import and export activities, companies often must account for foreign currency borrowings, another type of foreign currency transaction. Companies borrow foreign currency from foreign lenders either to finance foreign operations or perhaps to take advantage of more favorable interest rates. The facts that both the principal and interest are denominated in foreign currency and both create an exposure to foreign exchange risk complicate accounting for a foreign currency borrowing.

To demonstrate the accounting for foreign currency debt, assume that on July 1, 2017, Multicorp International borrowed 1 billion Japanese yen (¥) on a one-year note at a per annum interest rate of 5 percent. Interest is payable and the note comes due on July 1, 2018. The following exchange rates apply:

Date	U.S. Dollars per Japanese Yen Spot Rate
July 1, 2017	\$0.00921
December 31, 2017	0.00932
July 1, 2018	0.00937

On July 1, 2017, Multicorp borrows ¥1 billion and converts it into \$9,210,000 in the spot market. On December 31, 2017, Multicorp must revalue the Japanese yen note payable with an offsetting foreign exchange gain or loss reported in income and must accrue interest expense and interest payable. Interest is calculated by multiplying the loan principal in yen by the relevant interest rate. The amount of interest payable in yen is then translated to U.S. dollars at the spot rate to record the accrual journal entry. On July 1, 2018, any difference between the amount of interest accrued at year-end and the actual U.S. dollar amount that must be spent to pay the accrued interest is recognized as a foreign exchange gain or loss. These journal entries account for this foreign currency borrowing:

7/1/17	Cash . . . . .	9,210,000	
	Note Payable (¥) . . . . .		9,210,000
	To record the ¥ note payable at the spot rate of \$0.00921 and the conversion of ¥1 billion into U.S. dollars.		
12/31/17	Interest Expense . . . . .	233,000	
	Accrued Interest Payable (¥) . . . . .		233,000
	To accrue interest for the period July 1–December 31, 2017: ¥1 billion × 5% × ½ year = ¥25 million × \$0.00932 = \$233,000.		

(continued)

*(continued)*

	Foreign Exchange Loss .....	110,000	
	Note Payable (¥) .....		110,000
	To revalue the ¥ note payable at the spot rate of \$0.00932 and record a foreign exchange loss of \$110,000 [¥1 billion × (\$0.00932 – \$0.00921)].		
7/1/18	Interest Expense .....	234,250	
	Accrued Interest Payable (¥) .....		234,250
	To accrue interest for the period January 1–July 1, 2018: ¥1 billion × 5% × ½ year = ¥25 million × \$0.00937 = \$234,250.		
	Foreign Exchange Loss .....	1,250	
	Accrued Interest Payable (¥) .....		1,250
	To revalue the ¥ interest payable that was accrued on December 31, 2017, at the spot rate of \$0.00937 and record a foreign exchange loss of \$1,250 [¥25 million × (\$0.00937 – \$0.00932)].		
	Accrued Interest Payable (¥) .....	468,500	
	Cash .....		468,500
	To record the cash interest payment of \$468,500 [¥50 million × the spot rate of \$0.00937] and remove the ¥ accrued interest payable from the books.		
	Foreign Exchange Loss .....	50,000	
	Note Payable (¥) .....		50,000
	To revalue the ¥ note payable at the spot rate of \$0.00937 and record a foreign exchange loss of \$50,000 [¥1 billion × (\$0.00937 – \$0.00932)].		
	Note Payable (¥) .....	9,370,000	
	Cash .....		9,370,000
	To record repayment of the ¥1 billion note through purchase of ¥1 billion at the spot rate of \$0.00937 and remove the ¥ note payable from the books..		

The total U.S. dollar borrowing cost on the 1 billion Japanese yen note payable is equal to the difference between the U.S. dollar cash outflows and cash inflow: \$9,370,000 + \$468,500 – \$9,210,000 = \$628,500. This borrowing cost is reflected in Multicorp’s financial statements as a combination of interest expense (\$467,250) and foreign exchange loss (\$161,250). Taking the exchange rate effect on the cost of borrowing into consideration results in an “effective” interest rate of 6.8% (\$628,500/\$9,210,000), even though the stated interest rate is only 5%.

### Foreign Currency Loan

At times companies lend foreign currency to related parties, creating the opposite situation from a foreign currency borrowing. The accounting involves keeping track of a note receivable and related interest receivable, both of which are denominated in foreign currency. Fluctuations in the U.S. dollar value of the principal and interest generally give rise to foreign exchange gains and losses that would be included in net income. An exception arises when the foreign currency loan is made on a long-term basis to a foreign branch, subsidiary, or equity method affiliate. Foreign exchange gains and losses on “intra-entity foreign currency transactions that are of a long-term investment nature (that is, settlement is not planned or anticipated in the foreseeable future)” are deferred in accumulated other comprehensive income until the

loan is repaid.<sup>5</sup> Only the foreign exchange gains and losses related to the interest receivable are recorded currently in net income.

#### LO 9-4

Understand the different types of foreign exchange risk that can be hedged and how foreign currency forward contracts and foreign currency options can be used to hedge those risks.

## Hedges of Foreign Exchange Risk

In the example provided in the earlier section on foreign currency transactions, Amerco has an asset exposure in euros when it sells goods to the German customer and allows the customer three months to pay for its purchase. If the euro depreciates over the next three months, Amerco will incur a net foreign exchange loss. For many companies, the uncertainty of not knowing exactly how many U.S. dollars an export sale will generate is of great concern. To avoid this uncertainty, companies often use derivative financial instruments to hedge against the effect of unfavorable changes in the value of foreign currencies. A derivative financial instrument, or simply derivative, derives its value from some “underlying.” In the case of foreign currency derivatives, the underlying is the currency exchange rate. The two most common derivatives used to hedge foreign exchange risk are *foreign currency forward contracts* and *foreign currency options*. In our example, Amerco will receive euros in three months when it collects the receivable and it will need to sell those euros at that time. Through a forward contract, Amerco can lock in the price at which it will sell the euros it receives in three months. An option establishes a price at which Amerco will be able, but is not required, to sell the euros it receives in three months. If Amerco enters into a forward contract or purchases a put option on the date the sale is made, the derivative is being used as a *hedge of a recognized foreign currency denominated asset* (the euro account receivable).

Companies engaged in foreign currency activities often enter into hedging arrangements as soon as they receive a noncancelable sales order or place a noncancelable purchase order. A noncancelable order that specifies the foreign currency price and date of delivery is known as a *foreign currency firm commitment*. Assume that on June 1, Amerco accepts an order to sell parts to a customer in South Korea at a price of 5 million Korean won. The parts will be delivered and payment will be received on August 15. On June 1, before the sale has been made, Amerco enters into a forward contract to sell 5 million Korean won on August 15. In this case, Amerco is using a foreign currency derivative as a *hedge of an unrecognized foreign currency firm commitment*.

Some companies have foreign currency transactions that occur on a regular basis and can be reliably forecasted. For example, Amerco regularly purchases materials from a supplier in Hong Kong for which it pays in Hong Kong dollars. Even if Amerco has no contract to make future purchases, it has an exposure to foreign currency risk if it plans to continue making purchases from the Hong Kong supplier. Assume that on October 1, Amerco forecasts that it will make a purchase from the Hong Kong supplier in one month. To hedge against a possible increase in the price of the Hong Kong dollar, Amerco acquires a call option on October 1 to purchase Hong Kong dollars in one month. The foreign currency option represents a *hedge of a forecasted foreign currency denominated transaction*.

#### LO 9-5

Understand the accounting guidelines for derivative financial instruments.

## Derivatives Accounting

FASB ASC Topic 815, “Derivatives and Hedging,” governs the accounting for derivatives, including those used to hedge foreign exchange risk. This authoritative literature provides guidance for hedges of the following sources of foreign exchange risk:

1. Recognized foreign currency denominated assets and liabilities.
2. Unrecognized foreign currency firm commitments.
3. Forecasted foreign currency denominated transactions.
4. Net investments in foreign operations.

Different accounting applies to each type of foreign currency hedge. This chapter demonstrates the accounting for the first three types of hedges. The next chapter covers hedges of net investments in foreign operations.

<sup>5</sup>FASB ASC (para. 830-20-35-3b).



## Fundamental Requirement of Derivatives Accounting

The fundamental requirement of FASB ASC 815 is that companies carry all derivatives on the balance sheet at their fair value. Derivatives are reported on the balance sheet as assets when they have a positive fair value and as liabilities when they have a negative fair value. The first issue in accounting for derivatives is the determination of fair value.

The fair value of derivatives can change over time, causing adjustments to be made to the carrying values of the assets and liabilities. The second issue in accounting for derivatives is the treatment of the gains and losses that arise from these fair value changes.

## Determination of Fair Value of Derivatives

The *fair value of a foreign currency forward contract* is determined by reference to changes in the forward rate over the life of the contract, discounted to the present value. Three pieces of information are needed to determine the fair value of a forward contract at any point in time:

1. The forward rate when the forward contract was entered into.
2. The current forward rate for a contract that matures on the same date as the forward contract entered into.
3. A discount rate—typically, the company's incremental borrowing rate.

Assume that Exim Company enters into a forward contract with its bank on December 1 to sell 1 million Mexican pesos on March 1 at a forward rate of \$0.085 per peso, or a total of \$85,000. Exim incurs no cost to enter into the forward contract, which has no value on December 1. On December 31, when Exim closes its books to prepare financial statements, the forward rate to sell Mexican pesos on March 1 has changed to \$0.082. On that date, a forward contract for the delivery of 1 million pesos could be negotiated, resulting in a cash inflow of only \$82,000 on March 1. This represents a favorable change in the value of Exim's forward contract of \$3,000 (\$85,000 – \$82,000). The undiscounted fair value of the forward contract on December 31 is \$3,000. Assuming that the company's incremental borrowing rate is 12 percent per annum, the undiscounted fair value of the forward contract must be discounted at the rate of 1 percent per month for two months (from the current date of December 31 to the settlement date of March 1). The fair value of the forward contract at December 31 is \$2,940.90 ( $\$3,000 \times 0.9803$ ).<sup>6</sup>

The manner in which the *fair value of a foreign currency option* is determined depends on whether the option is traded on an exchange or has been acquired in the over-the-counter market. The fair value of an exchange-traded foreign currency option is its current market price quoted on the exchange. For over-the-counter options, fair value can be determined by obtaining a price quote from an option dealer (such as a bank). If dealer price quotes are unavailable, the company can estimate the value of an option using the modified Black-Scholes option pricing model (briefly mentioned earlier). Regardless of who does the calculation, principles similar to those of the Black-Scholes pricing model can be used to determine the fair value of the option.

## Accounting for Changes in the Fair Value of Derivatives

Changes in the fair value of derivatives must be included in *comprehensive income*, which consists of two components: *net income* and *other comprehensive income*. Other comprehensive income consists of income items that current authoritative accounting literature require to be deferred in stockholders' equity such as unrealized gains and losses on available-for-sale debt securities. Other comprehensive income is accumulated and reported as a separate line in the stockholders' equity section of the balance sheet. This book uses the account title *Accumulated Other Comprehensive Income* to describe this stockholders' equity line item.

In accordance with U.S. GAAP, gains and losses arising from changes in the fair value of derivatives are recognized initially either (1) in net income or (2) in other comprehensive income (reflected on the balance sheet in accumulated other comprehensive income).

<sup>6</sup> The present value factor for two months at 1 percent per month is calculated as  $1/1.01^2$ , or 0.9803.

Recognition treatment depends partly on whether the company uses derivatives for hedging purposes or for speculation.

Although using derivatives for speculation is not commonly done by nonfinancial institutions, financial entities might acquire derivative financial instruments as investments for speculative purposes. For example, assume that the three-month forward rate for British pounds is \$2.00, and a speculator believes the British pound spot rate in three months will be \$1.97. In that case, the speculator would enter into a three-month forward contract to sell British pounds. At the future date, the speculator purchases pounds at the spot rate of \$1.97 and sells them at the contracted forward rate of \$2.00, reaping a gain of \$0.03 per British pound. Of course, such an investment might as easily generate a loss if the spot rate does not move as expected. For speculative derivatives, the change in the fair value of the derivative must be recognized immediately as a gain or loss in net income.<sup>7</sup>

The accounting for changes in the fair value of derivatives used for hedging depends on the nature of the foreign exchange risk being hedged and on whether the derivative qualifies for *hedge accounting*.

### LO 9-6

Understand the basic concepts of hedge accounting.

## Hedge Accounting

Companies enter into hedging relationships to minimize the adverse effect that changes in exchange rates have on cash flows and net income. As such, companies would like to account for hedges in a way that recognizes the gain or loss from the hedge in net income in the same period as the loss or gain on the risk being hedged. This approach is known as *hedge accounting*. U.S. GAAP allows hedge accounting for foreign currency derivatives only if three conditions are satisfied:

1. The derivative is used to hedge either a cash flow exposure or a fair value exposure to foreign exchange risk.
2. The derivative is highly effective in offsetting changes in the cash flows or fair value related to the hedged item.
3. The derivative is properly documented as a hedge.

Each of these conditions is discussed in turn.

### Nature of the Hedged Risk

Derivatives for which companies wish to use hedge accounting must be designated as either a *cash flow hedge* or a *fair value hedge*. For hedges of recognized foreign currency assets and liabilities and hedges of foreign currency firm commitments, companies must choose between the two types of designation. Hedges of forecasted foreign currency transactions can qualify only as cash flow hedges. Accounting procedures differ for the two types of hedges. In general, gains and losses on cash flow hedges are included in other comprehensive income (and therefore deferred on the balance sheet in accumulated other comprehensive income), and gains and losses on fair value hedges are recognized immediately in net income.

A *fair value exposure* exists if changes in exchange rates can affect the fair value of an asset or liability reported on the balance sheet. To qualify for hedge accounting, the fair value risk must have the potential to affect net income if it is not hedged. For example, a fair value risk is associated with a foreign currency account receivable. If the foreign currency depreciates, the receivable must be written down with an offsetting loss recognized in net income. The authoritative literature has determined that a fair value exposure also exists for foreign currency firm commitments.

A *cash flow exposure* exists if changes in exchange rates can affect the amount of cash flow to be realized from a foreign currency transaction with changes in cash flow reflected in net income. A foreign currency account receivable, for example, has both a fair value exposure and a cash flow exposure. A cash flow exposure exists for (1) recognized foreign currency

<sup>7</sup>In the next section we will see that the change in fair value of a derivative designated as the fair value hedge of a foreign currency denominated asset or liability also is recognized immediately in net income.

assets and liabilities, (2) foreign currency firm commitments, and (3) forecasted foreign currency transactions.

### Hedge Effectiveness

For hedge accounting to be used initially, the hedge must be expected to be highly effective in generating gains and losses that offset losses and gains on the item being hedged. The hedge actually must be effective in generating offsetting gains and losses for hedge accounting to continue to be applied over the life of the hedge.

At inception, a foreign currency derivative can be considered an effective hedge if the critical terms of the hedging instrument match those of the hedged item. Critical terms include the currency type, currency amount, and settlement date. For example, a forward contract to purchase 100,000 Canadian dollars in 30 days would be an effective hedge of a 100,000 Canadian dollar liability that is payable in 30 days.

### Hedge Documentation

For hedge accounting to be applied, U.S. GAAP requires formal documentation of the hedging relationship at the inception of the hedge (i.e., on the date a foreign currency forward contract is entered into or a foreign currency option is acquired). The hedging company must prepare a document that identifies the hedged item (for example, a 100,000 Canadian dollar liability), the hedging instrument (a forward contract to purchase 100,000 Canadian dollars), the nature of the risk being hedged (a cash flow exposure), how the hedging instrument's effectiveness will be assessed (through reference to changes in the forward rate), and the risk management objective and strategy for undertaking the hedge (to minimize risk associated with a possible Canadian dollar appreciation).

### Hedging Combinations

The specific accounting procedures followed and journal entries needed to account for a foreign currency hedging relationship are determined by a combination of the following factors:

1. The type of foreign currency item being hedged:
  - a. Foreign currency denominated asset or liability.
  - b. Foreign currency firm commitment.
  - c. Forecasted foreign currency transaction.
2. The type of hedging instrument used:
  - a. Forward contract.
  - b. Option.
3. The nature of the hedged risk:
  - a. Cash flow exposure.
  - b. Fair value exposure.
4. The nature of the foreign currency item being hedged:
  - a. Asset (existing or future).
  - b. Liability (existing or future).

In the next three sections in this chapter we discuss the accounting for hedges of (1) foreign currency denominated assets/liabilities, (2) foreign currency firm commitments, and (3) forecasted foreign currency transactions. We demonstrate through examples the use of both forward contracts and options to hedge these items, and we selectively demonstrate the accounting for both cash flow and fair value hedges. We focus on hedges entered into by an exporter that has a current or future foreign currency asset that is exposed to foreign exchange risk. The comprehensive example at the end of this chapter demonstrates the accounting for hedges entered into by an importer that has an existing or future foreign currency liability. Exhibit 9.2 provides an overall summary of the procedures followed in accounting for hedges of foreign exchange risk for those combinations presented in this chapter. By examining this exhibit, the similarities and differences in the procedures followed and accounting entries prepared to account for each hedge combination can be discerned.

**EXHIBIT 9.2 Summary of Accounting for Hedges of Foreign Exchange Risk**

Date	Hedge of a Foreign Currency Denominated Asset or Liability		Hedge of a Foreign Currency Firm Commitment		Hedge of a Forecasted Foreign Currency Transaction	
	Cash Flow Hedge		Fair Value Hedge		Cash Flow Hedge	
	Forward Contract	Option	Forward Contract	Option	Forward Contract	Option
<b>A. Initiation Date</b>	1. Recognize the transaction (sale or purchase) and foreign currency denominated asset or liability to forward contract (zero fair value)	1. Recognize the transaction (sale or purchase) and foreign currency denominated asset or liability option as an asset (purchase price is fair value) 2. Recognize option as an asset (purchase price is fair value)	1. No entry related to the firm commitment (zero value)	1. No entry related to the firm commitment 2. Recognize option as an asset (purchase price is fair value)	1. No entry related to the forecasted transaction 2. No entry related to forward contract (zero fair value)	1. No entry related to the forecasted transaction 2. Recognize option as an asset (purchase price is fair value)
<b>B. Balance Sheet Date</b>	1. Adjust hedged asset or liability to fair value, with counterpart (change in fair value) reported as foreign exchange gain or loss in net income	1. Adjust hedged asset or liability to fair value, with counterpart (change in fair value) reported as foreign exchange gain or loss in net income 2. Adjust forward contract to fair value (either an asset or a liability), with counterpart (change in fair value) reported in AOCI	1. Adjust hedged asset or liability to fair value, with counterpart (change in fair value) reported as gain or loss in net income 2. Adjust firm commitment to fair value (based on change in spot rate), with counterpart (change in fair value) reported as gain or loss in net income	1. Adjust hedged asset or liability to fair value, with counterpart (change in fair value) reported as foreign exchange gain or loss in net income 2. Adjust forward contract to fair value (either an asset or a liability), with counterpart (change in fair value) reported as gain or loss in net income	1. Adjust hedged asset or liability to fair value, with counterpart (change in fair value) reported as gain or loss in net income 2. Adjust firm commitment to fair value (based on change in spot rate), with counterpart (change in fair value) reported as gain or loss in net income	1. Adjust hedged asset or liability to fair value, with counterpart (change in fair value) reported as foreign exchange gain or loss in net income 2. Adjust forward contract to fair value (either an asset or a liability), with counterpart (change in fair value) reported as gain or loss in net income

(continued)

**EXHIBIT 9.2 (Continued)**

Hedge of a Foreign Currency Denominated Asset or Liability		Hedge of a Foreign Currency Firm Commitment		Hedge of a Forecasted Foreign Currency Transaction	
Cash Flow Hedge		Fair Value Hedge		Cash Flow Hedge	
Date	Forward Contract	Option	Forward Contract	Option	Forward Contract
	3. Transfer an amount from AOCI to net income to offset the foreign exchange gain or loss on the hedged asset or liability recognized in B.1	3. Transfer an amount from AOCI to net income to offset the foreign exchange gain or loss on the hedged asset or liability recognized in B.1	3. N/A	3. N/A	3. N/A
	4. Transfer from AOCI to net income (as discount expense or premium revenue) the current period's amortization of discount or premium	4. Transfer from AOCI to net income (as discount expense or premium revenue) the current period's amortization of discount or premium	4. N/A	4. N/A	4. Transfer from AOCI to net income (as discount expense or premium revenue) the current period's amortization of discount or premium
<b>C. Settlement Date</b>	1.-4. Repeat steps B. 1.-B.4	1.-4. Repeat steps B. 1.-B.4	1.-2. Repeat steps B. 1. and B.2	1.-2. Repeat steps B. 1. and B.2	1.-2. Repeat steps B.2. and B.4
	5. Recognize settlement of the foreign currency denominated asset or liability	5. Recognize settlement of the foreign currency denominated asset or liability	3. Recognize settlement of the foreign currency denominated asset or liability	3. Recognize the transaction (sale or purchase)	3. Recognize the transaction (sale or purchase)
	6. Recognize settlement of the forward contract*	6. Recognize exercise (or expiration) of the option*	4. Recognize settlement of the forward contract <sup>‡</sup>	4. Recognize exercise (or expiration) of the option <sup>‡</sup>	4. Recognize exercise (or expiration) of the option <sup>#</sup>
			5. Close the balance in the firm commitment account as an adjustment to net income	5. Close the balance in the firm commitment account as an adjustment to net income	5. Close the balance in AOCI related to the forward contract as an adjustment to net income

\*Step 6 precedes step 5 in the case of a foreign currency denominated liability.

‡Step 4 precedes step 3 in the case of a foreign currency denominated liability.

#Step 4 precedes step 3 in the case of a foreign currency purchase transaction.

**LO 9-7**

Account for forward contracts and options used as hedges of foreign currency denominated assets and liabilities.

## Hedges of Foreign Currency Denominated Assets and Liabilities

Hedges of foreign currency denominated assets and liabilities, such as accounts receivable and accounts payable, can qualify as either *cash flow hedges* or *fair value hedges*. To qualify as a cash flow hedge, the hedging instrument must completely offset the variability in the cash flows associated with the foreign currency receivable or payable. If the hedging instrument does not qualify as a cash flow hedge or if the company elects not to designate the hedging instrument as a cash flow hedge, the hedge is designated as a fair value hedge. The following summarizes the basic accounting for the two types of hedges of foreign currency denominated assets and liabilities.

### Cash Flow Hedge

At each balance sheet date, the following procedures are required:

1. The hedged asset (foreign currency account receivable) or liability (foreign currency account payable) is adjusted to fair value based on changes in the spot exchange rate, and a foreign exchange gain or loss is recognized in net income (Cash Flow Hedge Step B.1. in Exhibit 9.2).
2. To comply with the fundamental requirement of derivatives accounting, the derivative hedging instrument (forward contract or option) is adjusted to fair value (resulting in an asset or liability reported on the balance sheet) with the counterpart recognized as a change in Accumulated Other Comprehensive Income (AOCI) (Cash Flow Hedge Step B.2. in Exhibit 9.2).
3. An amount equal to the foreign exchange gain or loss on the hedged asset or liability is then transferred from AOCI to net income; the net effect is to offset any gain or loss on the hedged asset or liability (Cash Flow Hedge Step B.3. in Exhibit 9.2).
4. An additional amount is removed from AOCI and recognized in net income to reflect (a) the current period's amortization of the original discount or premium on the forward contract (if a forward contract is the hedging instrument) or (b) the change in the *time value* of the option (if an option is the hedging instrument) (Cash Flow Hedge Step B.4. in Exhibit 9.2).

### Fair Value Hedge

At each balance sheet date, the following procedures are required:

1. Adjust the hedged asset or liability to fair value based on changes in the spot exchange rate and recognize a foreign exchange gain or loss in net income (Fair Value Hedge Step B.1. in Exhibit 9.2).
2. Adjust the derivative hedging instrument to fair value (resulting in an asset or liability reported on the balance sheet) and recognize the counterpart as a gain or loss in net income (Fair Value Hedge Step B.2. in Exhibit 9.2).

## Forward Contract Used to Hedge a Foreign Currency Denominated Asset

We now return to the Amerco example in which the company has a foreign currency account receivable to demonstrate the accounting for a hedge of a recognized foreign currency denominated asset.<sup>8</sup> In the preceding example, Amerco has an asset exposure in euros when it sells goods to the German customer and allows the customer three months to pay for its purchase. To hedge its exposure to a possible decline in the U.S. dollar value of the euro, Amerco enters into a forward contract.

<sup>8</sup> The comprehensive illustration at the end of this chapter demonstrates the accounting for the hedge of a foreign currency denominated liability.

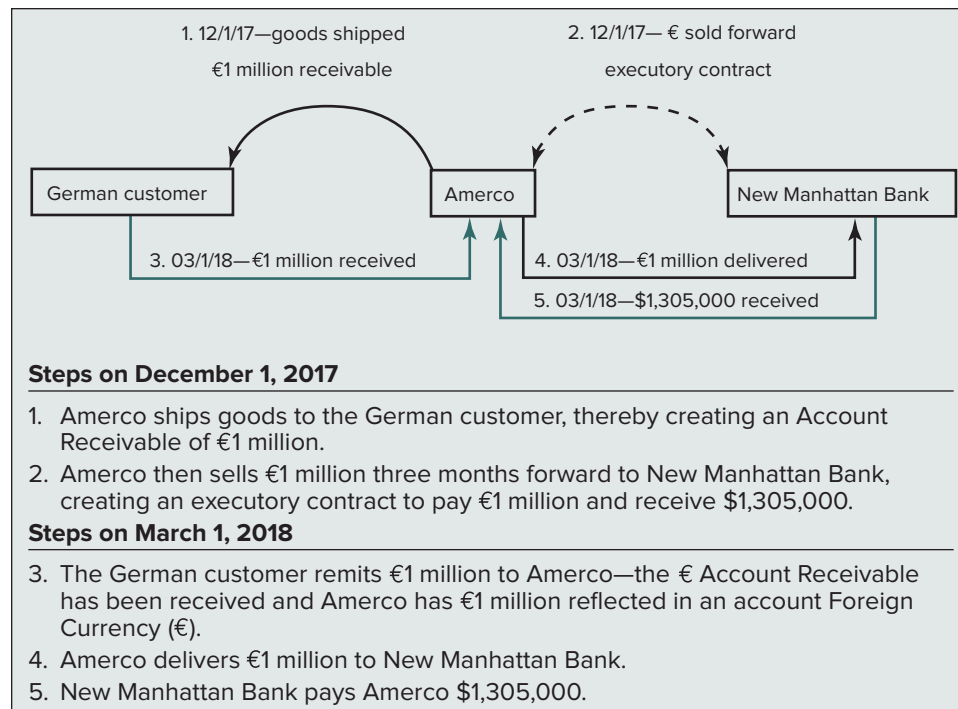
Assume that on December 1, 2017, the three-month forward rate for euros is \$1.305 and Amerco signs a contract with New Manhattan Bank to deliver 1 million euros in three months in exchange for \$1,305,000. No cash changes hands on December 1, 2017. Because the spot rate on December 1 is \$1.32, the euro (€) is selling at a discount in the three-month forward market (the forward rate is less than the spot rate). Because the euro is selling at a discount of \$0.015 (\$1.305 - \$1.320) per euro, Amerco receives \$15,000 less than it would had payment been received at the date the goods are delivered (\$1,305,000 versus \$1,320,000). This \$15,000 reduction in cash flow can be considered as an expense; it is the cost of extending foreign currency credit to the foreign customer.<sup>9</sup> Conceptually, this expense is similar to the transaction loss that arises on the export sale. It exists only because the transaction is denominated in a foreign currency. The major difference is that Amerco knows the exact amount of the discount expense at the date of sale, whereas when it is left unhedged, Amerco does not know the size of the transaction loss until three months pass. (In fact, it is possible that the unhedged receivable could result in a transaction gain rather than a transaction loss.)

Because the future spot rate turns out to be only \$1.30, selling euros at a forward rate of \$1.305 is obviously better than leaving the euro receivable unhedged: Amerco will receive \$5,000 more as a result of the hedge. This can be viewed as a gain resulting from the use of the forward contract. Unlike the discount expense, the exact size of this gain is not known until three months pass. (In fact, it is possible that use of the forward contract could result in an additional loss. This would occur if the spot rate on March 1, 2018, is more than the forward rate of \$1.305.)

Amerco must account for its foreign currency transaction and the related forward contract simultaneously but separately. The process can be better understood by referring to the steps involving the three parties—Amerco, the German customer, and New Manhattan Bank—shown in Exhibit 9.3.

Because the settlement date, currency type, and currency amount of the forward contract match the corresponding terms of the account receivable, the hedge is expected to be highly effective. If Amerco properly designates the forward contract as a hedge of its euro account receivable position, it may apply hedge accounting. Because it completely offsets the variability in the cash flows related to the account receivable, Amerco may designate the forward

**EXHIBIT 9.3**  
**Hedge of a Foreign**  
**Currency Account**  
**Receivable with a Forward**  
**Contract**



<sup>9</sup> This should not be confused with the cost associated with normal credit risk—that is, the risk that the customer will not pay for its purchase. That is a separate issue unrelated to the currency in which the transaction is denominated.

contract as a cash flow hedge. Alternatively, because changes in the spot rate affect not only the cash flows but also the fair value of the foreign currency receivable, Amerco may elect to account for this forward contract as a fair value hedge.

In either case, Amerco determines the fair value of the forward contract by referring to the change in the forward rate for a contract maturing on March 1, 2018. The relevant exchange rates, U.S. dollar value of the euro receivable, and fair value of the forward contract are determined as follows:

Date	Spot Rate	Account Receivable (€)		Forward Rate to 3/1/18	Forward Contract	
		U.S. Dollar Value	Change in U.S. Dollar Value		Fair Value	Change in Fair Value
12/1/17	\$1.32	\$1,320,000	—	\$1.305	\$ —0—	—
12/31/17	1.33	1,330,000	+\$10,000	1.316	(10,783)*	-\$10,783
3/1/18	1.30	1,300,000	– 30,000	1.30	5,000†	+ 15,783

\* $\$1,305,000 - \$1,316,000 = \$(11,000) \times 0.9803 = \$(10,783)$ , where 0.9803 is the present value factor for two months at an annual interest rate of 12 percent (1 percent per month) calculated as  $1/1.01^2$ .

† $\$1,305,000 - \$1,300,000 = \$5,000$ . This is the difference between the dollars that will be received when the forward contract is executed (based on the original forward rate) and the dollars that would have been received if no forward contract had been entered into (based on the spot rate on the date the euros are received).

Amerco pays nothing to enter into the forward contract at December 1, 2017, and the forward contract has a fair value of zero on that date. The original discount on the forward contract is \$15,000, determined by the difference in the euro spot rate and three-month forward rate on December 1, 2017 [ $(\$1.305 - \$1.32) \times \text{€1 million}$ ]. At December 31, 2017, the forward rate for a contract to deliver euros on March 1, 2018, is \$1.316. Amerco could enter into a forward contract on December 31, 2017, to sell 1 million euros for \$1,316,000 on March 1, 2018. Because Amerco is committed to sell 1 million euros for \$1,305,000, the nominal value of the forward contract is \$(11,000). The fair value of the forward contract is the present value of this amount. Assuming that Amerco has an incremental borrowing rate of 12 percent per year (1 percent per month) and discounting for two months (from December 31, 2017, to March 1, 2018), the fair value of the forward contract at December 31, 2017, is \$(10,783). Because the fair value is negative, the forward contract is a liability on December 31, 2017. On March 1, 2018, the forward rate to sell euros on that date is, by definition, the spot rate of \$1.30. At that rate, Amerco could sell 1 million euros for \$1,300,000. Because Amerco has a contract to sell euros for \$1,305,000, the fair value of the forward contract on March 1, 2018, is \$5,000. At this point, the forward contract is an asset because it has a positive fair value. From December 31, 2017, to March 1, 2018, the fair value of the forward contract has increased by \$15,783.

### Forward Contract Designated as Cash Flow Hedge

Assume that Amerco designates the forward contract as a *cash flow hedge* of a foreign currency denominated asset. In this case, it allocates the original forward discount or premium to net income over the life of the forward contract using an effective interest method. The company prepares the following journal entries to account for the foreign currency transaction and the related forward contract:

#### 2017 Journal Entries—Forward Contract Designated as a Cash Flow Hedge

12/1/17	Accounts Receivable (€).....	1,320,000	
	Sales .....		1,320,000
	To record the sale and €1 million account receivable at the spot rate of \$1.32 (Cash Flow Hedge Step A.1. in Exhibit 9.2).		
	Amerco makes no formal entry for the forward contract because it is an executory contract (no cash changes hands) and has a fair value of zero (Cash Flow Hedge Step A.2. in Exhibit 9.2).		



Amerco prepares a memorandum designating the forward contract as a hedge of the risk of changes in the cash flow to be received on the foreign currency account receivable resulting from changes in the U.S. dollar–euro exchange rate. Following steps B.1.-B.4. in accounting for a cash flow hedge presented in Exhibit 9.2, the company prepares the following journal entries on December 31:

12/31/17	Accounts Receivable (€) . . . . .	10,000	
	Foreign Exchange Gain . . . . .		10,000
	To adjust the value of the € receivable to the new spot rate of \$1.33 and record a foreign exchange gain resulting from the appreciation of the € since December 1 (Cash Flow Hedge Step B.1. in Exhibit 9.2).		
	Accumulated Other Comprehensive Income (AOCI) . . . . .	10,783	
	Forward Contract . . . . .		10,783
	To record the forward contract as a liability at its fair value of \$10,783 with a corresponding debit to AOCI (Cash Flow Hedge Step B.2. in Exhibit 9.2).		
	Loss on Forward Contract . . . . .	10,000	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		10,000
	To record a loss on forward contract to offset the foreign exchange gain on account receivable with a corresponding credit to AOCI (Cash Flow Hedge Step B.3. in Exhibit 9.2).		
	Discount Expense . . . . .	5,019	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		5,019
	To allocate the forward contract discount to net income over the life of the contract using the effective interest method with a corresponding credit to AOCI (Cash Flow Hedge Step B.4. in Exhibit 9.2).		

The first entry at December 31, 2017, serves to revalue the foreign currency account receivable and recognize a foreign exchange gain of \$10,000 in net income. Because the forward contract has a negative fair value of \$(10,783), GAAP requires it to be reported on the balance sheet as a liability. Thus, the second entry makes a credit of \$10,783 to Forward Contract. Under cash flow hedge accounting, the change in the fair value of the forward contract, which has gone from \$0 to \$(10,783) is not recognized immediately in income, but is instead deferred in stockholders’ equity. Thus, the debit of \$10,783 in the second entry is made to AOCI. The third entry achieves the objective of hedge accounting by transferring \$10,000 from AOCI to a loss on forward contract. As a result of this entry, the loss on forward contract of \$10,000 and the foreign exchange gain on the account receivable of \$10,000 exactly offset one another, and the net impact on income is zero. As a result of the second and third entries, the forward contract is reported on the balance sheet as a liability at fair value of \$(10,783); a loss on forward contract is recognized in the amount of \$10,000 to offset the foreign exchange gain; and AOCI has a negative (debit) balance of \$783. The second and third entries could be combined into one entry as follows:

Loss on Forward Contract . . . . .	10,000	
Accumulated Other Comprehensive Income (AOCI) . . . . .	783	
Forward Contract . . . . .		10,783

The negative balance in AOCI of \$783 can be viewed as that portion of the loss on the forward contract (decrease in fair value of the forward contract) that is not recognized in net income but instead is deferred in stockholders’ equity. Under cash flow hedge accounting, a loss on the hedging instrument (forward contract) is recognized only to the extent that it offsets a gain on the item being hedged (account receivable).

The last entry uses the effective interest method to allocate a portion of the \$15,000 forward contract discount as an expense to net income. The company calculates the implicit interest rate

associated with the forward contract by considering the fact that the forward contract will generate cash flow of \$1,305,000 from a foreign currency asset with an initial value of \$1,320,000. Because the discount of \$15,000 accrues over a three-month period, the effective interest rate is calculated as  $1 - \sqrt[3]{[1,305,000/1,320,000]} = .0038023$ . The amount of discount to be allocated to net income for the month of December 2017 is  $1,320,000 \times .0038023 = \$5,019$ . A debit of \$5,019 is made to Discount Expense in the last journal entry on December 31, 2017. By making the credit in this journal entry to AOCI, the theoretically correct amounts are reported in net income and on the balance sheet, and the balance sheet remains in balance.

The impact on net income for the year 2017 follows:

Sales . . . . .		\$1,320,000
Foreign exchange gain . . . . .	\$10,000	
Loss on forward contract . . . . .	<u>(10,000)</u>	
Net gain (loss) . . . . .		-0-
Discount expense . . . . .		<u>(5,019)</u>
Impact on net income . . . . .		<u>\$1,314,981</u>

Assets		Liabilities and Stockholders' Equity	
Accounts receivable (€) . . . . .	<u>\$1,330,000</u>	Forward contract . . . . .	\$ 10,783
		Retained earnings . . . . .	1,314,981
		AOCI . . . . .	<u>4,236</u>
			<u>\$1,330,000</u>

### 2018 Journal Entries—Forward Contract Designated as Cash Flow Hedge

From December 31, 2017, to March 1, 2018, the euro account receivable decreases in value by \$30,000 and the forward contract increases in value by \$15,873. In addition, on March 1, 2018, the remaining discount on forward contract must be amortized to expense. The company prepares the following journal entries on March 1 to reflect these changes:

3/1/18	Foreign Exchange Loss . . . . .	30,000	
	Accounts Receivable (€) . . . . .		30,000
	To adjust the value of the € receivable to the new spot rate of \$1.30 and record a foreign exchange loss resulting from the depreciation of the € since December 31 (Cash Flow Hedge Step C.1. in Exhibit 9.2).		
	Forward Contract . . . . .	15,783	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		15,783
	To adjust the carrying value of the forward contract to its current fair value of \$5,000 with a corresponding credit to AOCI (Cash Flow Hedge Step C.2. in Exhibit 9.2).		
	Accumulated Other Comprehensive Income (AOCI) . . . . .	30,000	
	Gain on Forward Contract . . . . .		30,000
	To record a gain on forward contract to offset the foreign exchange loss on account receivable with a corresponding debit to AOCI (Cash Flow Hedge Step C.3. in Exhibit 9.2).		
	Discount Expense . . . . .	9,981	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		9,981
	To allocate the remaining forward contract discount to net income (\$15,000 – 5,019 = \$9,981) with a corresponding credit to AOCI (Cash Flow Hedge Step C.4. in Exhibit 9.2).		

As a result of these entries, the balance in AOCI is zero:  $\$4,236 + \$15,783 - \$30,000 + \$9,981 = \$0$ .

The next two journal entries recognize the receipt of euros from the customer, close out the euro account receivable, and record the settlement of the forward contract.

3/1/18	Foreign Currency (€) . . . . .	1,300,000	
	Accounts Receivable (€) . . . . .		1,300,000
	To record receipt of €1 million from the German customer as an asset (Foreign Currency) at the spot rate of \$1.30 (Cash Flow Hedge Step C.5. in Exhibit 9.2).		
	Cash . . . . .	1,305,000	
	Foreign Currency (€) . . . . .		1,300,000
	Forward Contract . . . . .		5,000
	To record settlement of the forward contract (i.e., record receipt of \$1,305,000 in exchange for delivery of €1 million) and remove the forward contract from the accounts (Cash Flow Hedge Step C.6. in Exhibit 9.2).		

The impact on net income for the year 2018 follows:

Foreign exchange loss . . . . .	\$ (30,000)	
Gain on forward contract . . . . .	<u>30,000</u>	
Net gain (loss) . . . . .		–0–
Discount expense . . . . .		<u>\$ (9,981)</u>
Impact on net income . . . . .		<u>\$ (9,981)</u>

The net effect on the balance sheet over the two years is a \$1,305,000 increase in Cash with a corresponding increase in Retained Earnings of \$1,305,000 (\$1,314,981 – \$9,981). The cumulative amount recognized as Discount Expense of \$15,000 reflects the cost of extending credit to the German customer.

The net benefit from entering into the forward contract is \$5,000. This “gain” is not directly reflected in net income. However, it can be calculated as the difference between the net gain on the forward contract (\$10,000 loss in 2017 plus \$30,000 gain in 2018 = \$20,000 net gain) and the cumulative amount of discount expense (\$15,000) recognized over the two periods: \$20,000 – \$15,000 = \$5,000.

### ***Effective Interest versus Straight-Line Methods***

Use of the effective interest method results in allocating the forward contract discount \$5,019 at the end of the first month and \$9,981 at the end of the next two months. Straight-line allocation of the \$15,000 discount on a monthly basis results in a reasonable approximation of these amounts:

12/31/17	$\$15,000 \times \frac{1}{3} = \$5,000$
3/1/18	$\$15,000 \times \frac{2}{3} = \$10,000$

Determining the effective interest rate is complex and provides no conceptual insights. For the remainder of this chapter, we use straight-line allocation of forward contract discounts and premiums. The important thing to keep in mind in this example is that with a cash flow hedge, an expense equal to the original forward contract discount is recognized in net income over the life of the contract.

What if the forward rate on December 1, 2017, had been \$1.326 (i.e., the euro was selling at a premium in the forward market)? In that case, Amerco would receive \$6,000 more through the forward sale of euros (\$1,326,000) than had it received the euros at the date of sale (\$1,320,000). Amerco would allocate the forward contract premium as an increase in net income at the rate of \$2,000 per month: \$2,000 at December 31, 2017, and \$4,000 at March 1, 2018.

### **Forward Contract Designated as Fair Value Hedge**

Assume that Amerco decides to designate the forward contract not as a cash flow hedge but as a fair value hedge. In that case, it takes the gain or loss on the forward contract

directly to net income and does not separately amortize the original discount on the forward contract.

### 2017 Journal Entries—Forward Contract Designated as a Fair Value Hedge

12/1/17	Accounts Receivable (€) ..... Sales ..... To record the sale and €1 million account receivable at the spot rate of \$1.32 (Fair Value Hedge Step A.1. in Exhibit 9.2).	1,320,000	
			1,320,000

The forward contract requires no formal entry (Fair Value Hedge Step A.2. in Exhibit 9.2). A memorandum designates the forward contract as a hedge of the risk of changes in the fair value of the foreign currency account receivable resulting from changes in the U.S. dollar–euro exchange rate.

Following the two steps in accounting for a fair value hedge presented in Exhibit 9.2, the company prepares the following entries on December 31:

12/31/17	Accounts Receivable (€) ..... Foreign Exchange Gain ..... To adjust the value of the € receivable to the new spot rate of \$1.33 and record a foreign exchange gain resulting from the appreciation of the € since Decem- ber 1 (Fair Value Hedge Step B.1. in Exhibit 9.2). Loss on Forward Contract ..... Forward Contract ..... To record the forward contract as a liability at its fair value of \$10,783 and record a forward contract loss for the change in the fair value of the forward contract since December 1 (Fair Value Hedge Step B.2. in Exhibit 9.2).	10,000	
			10,000
		10,783	
			10,783

The first entry at December 31, 2017, serves to revalue the foreign currency account receivable and recognize a foreign exchange gain of \$10,000. The second entry recognizes the forward contract as a liability of \$10,783 on the balance sheet. Because the forward contract has been designated as a fair value hedge, the debit in the second entry recognizes the entire change in fair value of the forward contract as a loss in net income; there is no deferral of loss in stockholders' equity. A net loss of \$783 is reported in net income as a result of these two entries.

The impact on net income for the year 2017 is as follows:

Sales .....		\$1,320,000
Foreign exchange gain .....	\$10,000	
Loss on forward contract .....	<u>(10,783)</u>	
Net gain (loss) .....		(783)
Impact on net income .....		<u>\$1,319,217</u>

The effect on the December 31, 2017, balance sheet follows:

<b>Assets</b>		<b>Liabilities and Stockholders' Equity</b>	
Accounts receivable (€) .....	<u>\$1,330,000</u>	Forward contract .....	\$ 10,783
		Retained earnings .....	<u>1,319,217</u>
			<u>\$1,330,000</u>



## Discussion Question

### DO WE HAVE A GAIN OR WHAT?

Ahnuld Corporation, a health juice producer, recently expanded its sales through exports to foreign markets. Earlier this year, the company negotiated the sale of several thousand cases of turnip juice to a retailer in the country of Tcheckia. The customer is unwilling to assume the risk of having to pay in U.S. dollars. Desperate to enter the Tcheckian market, the vice president for international sales agrees to denominate the sale in tchecks, the national currency of Tcheckia. The current exchange rate for 1 tcheck is \$2.00. In addition, the customer indicates that it cannot pay until it sells all of the juice. Payment of 100,000 tchecks is scheduled for six months from the date of sale.

Fearful that the tcheck might depreciate in value over the next six months, the head of the risk management department at Ahnuld Corporation enters into a forward contract to sell tchecks in six months at a forward rate of \$1.80. The forward contract is designated as a fair value hedge of the tcheck receivable. Six months later, when Ahnuld receives payment from the Tcheckian customer, the exchange rate for the tcheck is \$1.70. The corporate treasurer calls the head of the risk management department into her office.

**Treasurer:** I see that your decision to hedge our foreign currency position on that sale to Tcheckia was a bad one.

**Department head:** What do you mean? We have a gain on that forward contract. We're \$10,000 better off from having entered into that hedge.

**Treasurer:** That's not what the books say. The accountants have recorded a net loss of \$20,000 on that particular deal. I'm afraid I'm not going to be able to pay you a bonus this year. Another bad deal like this one and I'm going to have to demote you back to the interest rate swap department.

**Department head:** Those bean counters have messed up again. I told those guys in international sales that selling to customers in Tcheckia was risky, but at least by hedging our exposure, we managed to receive a reasonable amount of cash on that deal. In fact, we ended up with a gain of \$10,000 on the hedge. Tell the accountants to check their debits and credits again. I'm sure they just put a debit in the wrong place or some accounting thing like that.

Have the accountants made a mistake? Does the company have a loss, a gain, or both from this forward contract?

### 2018 Journal Entries—Forward Contract Designated as a Fair Value Hedge

The company prepares the following entries on March 1:

3/1/18	Foreign Exchange Loss .....	30,000	
	Accounts Receivable (€) .....		30,000
	To adjust the value of the € receivable to the new spot rate of \$1.30 and record a foreign exchange loss resulting from the depreciation of the € since December 31 (Fair Value Hedge Step C.1. in Exhibit 9.2).		
	Forward Contract .....	15,783	
	Gain on Forward Contract .....		15,783
	To adjust the carrying value of the forward contract to its current fair value of \$5,000 and record a forward contract gain for the change in the fair value since December 31 (Fair Value Hedge Step C.2. in Exhibit 9.2).		

(continued)

(continued)

3/1/18	Foreign Currency (€) . . . . .	1,300,000	
	Accounts Receivable (€) . . . . .		1,300,000
	To record receipt of €1 million from the German customer as an asset at the spot rate of \$1.30 (Fair Value Hedge Step C.3. in Exhibit 9.2).		
	Cash . . . . .	1,305,000	
	Foreign Currency (€) . . . . .		1,300,000
	Forward Contract . . . . .		5,000
	To record settlement of the forward contract (i.e., record receipt of \$1,305,000 in exchange for delivery of €1 million) and remove the forward contract from the accounts (Fair Value Hedge Step C.4. in Exhibit 9.2).		

The impact on net income for the year 2018 follows:

Foreign exchange loss . . . . .	\$ (30,000)
Gain on forward contract . . . . .	<u>15,783</u>
Impact on net income . . . . .	<u>\$ (14,217)</u>

The net effect on the balance sheet for the two periods is an increase of \$1,305,000 in Cash with a corresponding increase in Retained Earnings of \$1,305,000 (\$1,319,217 – \$14,217).

Under fair value hedge accounting, the company does not amortize the original forward contract discount systematically over the life of the contract. Instead, it recognizes the discount in income as the difference between the foreign exchange Gain (Loss) on the account receivable and the Gain (Loss) on the forward contract—that is, \$(783) in 2017 and \$(14,217) in 2018. The net impact on net income over the two years is \$(15,000), which reflects the cost of extending credit to the German customer. The net gain on the forward contract of \$5,000 (\$10,783 loss in 2017 and \$15,783 gain in 2018) reflects the net benefit (i.e., increase in cash inflow) from Amerco's decision to hedge the euro receivable.

Companies often cannot or do not bother to designate as hedges the forward contracts they use to hedge foreign currency denominated assets and liabilities. In those cases, the company accounts for the forward contract as if it were a speculative investment. The company reports an undesignated forward contract on the balance sheet at fair value as an asset or liability and immediately recognizes changes in the fair value of the forward contract in net income. This accounting treatment is exactly the same as if the forward contract had been designated as a fair value hedge. The only difference between a forward contract designated as a fair value hedge of a foreign currency denominated asset or liability and an undesignated (speculative) forward contract is the manner in which the company discloses it in the notes to the financial statements. E.I. du Pont de Nemours and Company provided the following disclosure related to this in its 2014 Form 10-K (page F-43):

#### Derivatives Not Designated in Hedging Relationships

##### *Foreign Currency Contracts*

The company routinely uses forward exchange contracts to reduce its net exposure, by currency, related to foreign currency-denominated monetary assets and liabilities of its operations so that exchange gains and losses resulting from exchange rate changes are minimized. The netting of such exposures precludes the use of hedge accounting; however, the required revaluation of the forward contracts and the associated foreign currency-denominated monetary assets and liabilities intends to achieve a minimal earnings impact, after taxes.

## Cash Flow Hedge versus Fair Value Hedge

A forward contract used to hedge a foreign currency denominated asset or liability can be designated as either a cash flow hedge or a fair value hedge when it completely offsets the variability in cash flows associated with the hedged item. The total impact on income is the same regardless of whether the forward contract is designated as a fair value hedge or as a cash flow hedge. In our example, Amerco recognized an expense (or loss) of \$15,000 in both cases, and the company knew what the total expense was going to be as soon as the contract was signed.

A benefit to designating a forward contract as a cash flow hedge is that the company knows the forward contract's effect on net income *each year* as soon as the contract is signed. The net impact on income is the periodic amortization of the forward contract discount or premium. In our example, Amerco knew on December 1, 2017, that it would recognize a discount expense of \$5,000 in 2017 and \$10,000 in 2018. The impact on each year's income is not as systematic when the forward contract is designated as a fair value hedge—loss of \$783 in 2017 and \$14,217 in 2018. Moreover, the company does not know what the net impact on 2017 income will be until December 31, 2017, when the euro account receivable and the forward contract are revalued. Because of the potential for greater volatility in periodic net income that results from a fair value hedge, companies may prefer to designate forward contracts used to hedge a foreign currency denominated asset or liability as cash flow hedges.

## Foreign Currency Option Used to Hedge a Foreign Currency Denominated Asset

As an alternative to a forward contract, Amerco could hedge its exposure to foreign exchange risk arising from the euro account receivable by purchasing a foreign currency put option. A put option would give Amerco the right but not the obligation to sell 1 million euros on March 1, 2018, at a predetermined strike price. Assume that on December 1, 2017, Amerco purchases an over-the-counter option from its bank with a strike price of \$1.32 when the spot rate is \$1.32 and pays a premium of \$0.009 per euro.<sup>10</sup> Thus, the purchase price for the option is \$9,000 (€1 million × \$0.009).

Because the strike price and spot rate are the same, no intrinsic value is associated with this option. The premium is based solely on time value; that is, it is possible that the euro will depreciate and the spot rate on March 1, 2018, will be less than \$1.32, in which case the option will be “in the money.” If the spot rate for euros on March 1, 2018, is less than the strike price of \$1.32, Amerco will exercise its option and sell its 1 million euros at the strike price of \$1.32. If the spot rate for euros in three months is more than the strike price of \$1.32, Amerco will not exercise its option but will sell euros at the higher spot rate. By purchasing this option, Amerco is guaranteed a minimum cash flow from the export sale of \$1,311,000 (\$1,320,000 from exercising the option less the \$9,000 cost of the option). There is no limit to the maximum number of U.S. dollars that Amerco could receive.

As is true for other derivative financial instruments, authoritative accounting literature requires foreign currency options to be reported on the balance sheet at fair value. The fair value of a foreign currency option at the balance sheet date is determined by reference to the premium quoted by banks on that date for an option with a similar expiration date. Banks (and other sellers of options) determine the current premium by incorporating relevant variables at the balance sheet date into the modified Black-Scholes option pricing model. Changes in value for the euro account receivable and the foreign currency option are summarized as follows:

Date	Spot Rate	Account Receivable (€)		Option	Foreign Currency Option	
		U.S. Dollar Value	Change in U.S. Dollar Value	Premium for 3/1/18	Fair Value	Change in Fair Value
12/1/17	\$1.32	\$1,320,000	\$ -0-	\$0.009	\$9,000	\$ -0-
12/31/17	1.33	1,330,000	+ 10,000	0.006	6,000	- 3,000
3/1/18	1.30	1,300,000	- 30,000	0.020	20,000	+ 14,000

The fair value of the foreign currency put option at December 1 is its cost of \$9,000. The spot rate for the euro increases during December, which causes a decrease in the fair value of the put

<sup>10</sup> The seller of the option determined the price of the option (the premium) by using a variation of the Black-Scholes option pricing formula.

option; the right to sell euros at \$1.32 is of even less value when the spot rate is \$1.33 (on December 31) than when the spot rate was \$1.32 (on December 1). The bank determines the fair value of the option at December 31 to be \$6,000. By March 1, the euro spot rate has decreased to \$1.30. By exercising its option on March 1 at the strike price of \$1.32, Amerco will receive \$1,320,000 from its export sale, rather than only \$1,300,000 if it were required to sell euros in the spot market on March 1. Thus, the option has a fair value of \$20,000 on March 1.

We can decompose the fair value of the foreign currency option into its intrinsic value and time value components as follows:

Date	Fair Value	Intrinsic Value	Time Value	Change in Time Value
12/1/17	\$ 9,000	\$ –0–	\$9,000	\$ –0–
12/31/17	6,000	–0–	6,000	–3,000
3/1/18	20,000	20,000	–0–	–6,000

Because the option strike price is less than or equal to the spot rate at both December 1 and December 31, the option has no intrinsic value at those dates. The entire fair value is attributable to time value only. On March 1, the date of expiration, no time value remains, and the entire amount of fair value is attributable to intrinsic value.

### Option Designated as Cash Flow Hedge

Assume that Amerco designates the foreign currency option as a *cash flow hedge* of a foreign currency denominated asset. In this case, Amerco recognizes the change in the option's time value immediately in net income. The company prepares the following journal entries to account for the foreign currency transaction and the related foreign currency option:

#### 2017 Journal Entries—Option Designated as a Cash Flow Hedge

12/1/17	Accounts Receivable (€) . . . . .	1,320,000	
	Sales . . . . .		1,320,000
	To record the sale and €1 million account receivable at the spot rate of \$1.32 (Cash Flow Hedge Step A.1. in Exhibit 9.2).		
	Foreign Currency Option . . . . .	9,000	
	Cash . . . . .		9,000
	To record the purchase of the foreign currency option as an asset at its fair value of \$9,000 (Cash Flow Hedge Step A.2. in Exhibit 9.2).		

From December 1 to December 31, the euro account receivable increases in value by \$10,000 and the option decreases in value by \$3,000. The company prepares the following journal entries on December 31 to reflect these changes:

12/31/17	Accounts Receivable (€) . . . . .	10,000	
	Foreign Exchange Gain . . . . .		10,000
	To adjust the value of the € receivable to the new spot rate of \$1.33 and record a foreign exchange gain resulting from the appreciation of the € since December 1 (Cash Flow Hedge Step B.1. in Exhibit 9.2).		
	Accumulated Other Comprehensive Income (AOCI) . . . . .	3,000	
	Foreign Currency Option . . . . .		3,000
	To adjust the fair value of the option from \$9,000 to \$6,000 with a corresponding debit to AOCI (Cash Flow Hedge Step B.2. in Exhibit 9.2).		
	Loss on Foreign Currency Option . . . . .	10,000	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		10,000

(continued)



*(continued)*

	To record a loss on foreign currency option to offset the foreign exchange gain on the account receivable with a corresponding credit to AOCI (Cash Flow Hedge Step B.3. in Exhibit 9.2).		
	Option Expense . . . . .	3,000	
	Accumulated Other Comprehensive Income (AOCI) . . .		3,000
	To recognize the change in the time value of the option as a decrease in net income with a corresponding credit to AOCI (Cash Flow Hedge Step B.4. in Exhibit 9.2).		

The first three journal entries prepared on December 31 result in the euro account receivable and the foreign currency option being reported on the balance sheet at fair value with a net gain (loss) of zero reflected in net income, which is consistent with the concept of hedge accounting. The final entry serves to amortize a portion of the option cost to expense in net income. On March 1, the remaining \$6,000 of option cost will be expensed.

The impact on net income for the year 2017 follows:

Sales . . . . .		\$1,320,000
Foreign exchange gain . . . . .	\$ 10,000	
Loss on foreign currency option . . . . .	<u>(10,000)</u>	
Net gain (loss) . . . . .		-0-
Option expense . . . . .		<u>(3,000)</u>
Impact on net income . . . . .		<u>\$1,317,000</u>

The effect on the December 31, 2017, balance sheet is as follows:

<b>Assets</b>		<b>Liabilities and Stockholders' Equity</b>	
Cash . . . . .	\$ (9,000)	Retained earnings . . . . .	\$1,317,000
Accounts receivable (€) . . . . .	1,330,000	AOCI . . . . .	<u>10,000</u>
Foreign currency option . . . . .	<u>6,000</u>		<u>\$1,327,000</u>
	<u>\$1,327,000</u>		

At March 1, 2018, the option has increased in fair value by \$14,000—time value decreases by \$6,000 and intrinsic value increases by \$20,000. The accounting entries made in 2018 are presented next:

### **2018 Journal Entries—Option Designated as a Cash Flow Hedge**

3/1/18	Foreign Exchange Loss . . . . .	30,000	
	Accounts Receivable (€) . . . . .		30,000
	To adjust the value of the € receivable to the new spot rate of \$1.30 and record a foreign exchange loss resulting from the depreciation of the € since December 31 (Cash Flow Hedge Step C.1. in Exhibit 9.2).		
	Foreign Currency Option . . . . .	14,000	
	Accumulated Other Comprehensive Income (AOCI) . . .		14,000
	To adjust the fair value of the option from \$6,000 to \$20,000 with a corresponding credit to AOCI (Cash Flow Hedge Step C.2. in Exhibit 9.2).		
	Accumulated Other Comprehensive Income (AOCI) . . . . .	30,000	
	Gain on Foreign Currency Option . . . . .		30,000
	To record a gain on foreign currency option to offset the foreign exchange gain on account receivable with a corresponding debit to AOCI (Cash Flow Hedge Step C.3. in Exhibit 9.2).		
	Option Expense . . . . .	6,000	
	Accumulated Other Comprehensive Income (AOCI) . . .		6,000
	To recognize the change in the time value of the option as a decrease in net income with a corresponding credit to AOCI (Cash Flow Hedge Step C.4. in Exhibit 9.2).		

The first three entries on March 1 result in the euro account receivable and the foreign currency option being reported at their fair values, with a net gain (loss) of zero. The fourth entry amortizes the remaining cost of the option to expense. As a result of these entries, the balance in AOCI is zero:  $\$10,000 + \$14,000 - \$30,000 + \$6,000 = \$0$ .

The next two journal entries recognize the receipt of euros from the customer, close out the euro account receivable, and record the exercise of the foreign currency option.

3/1/18	Foreign Currency (€) . . . . .	1,300,000	
	Accounts Receivable (€) . . . . .		1,300,000
	To record receipt of €1 million from the German customer as an asset at the spot rate of \$1.30 (Cash Flow Hedge Step C.5. in Exhibit 9.2).		
	Cash . . . . .	1,320,000	
	Foreign Currency (€) . . . . .		1,300,000
	Foreign Currency Option . . . . .		20,000
	To record exercise of the option (i.e., record receipt of \$1,320,000 in exchange for delivery of €1 million) and remove the foreign currency option from the accounts (Cash Flow Hedge Step C.6. in Exhibit 9.2).		

The impact on net income for the year 2018 follows:

Foreign exchange loss . . . . .	\$(30,000)	
Gain on foreign currency option . . . . .	<u>30,000</u>	
Net gain (loss) . . . . .		–0–
Option expense . . . . .		<u>(6,000)</u>
Impact on net income . . . . .		<u><u>\$(6,000)</u></u>

Over the two accounting periods, Amerco reports sales of \$1,320,000 and a cumulative option expense of \$9,000. The net effect on the balance sheet is an increase in the cash account of \$1,311,000 ( $\$1,320,000 - \$9,000$ ) with a corresponding increase in the retained earnings account of \$1,311,000 ( $\$1,317,000 - \$6,000$ ).

The net benefit from having acquired the option is \$11,000. This is the difference between the amount Amerco received from executing the option (\$1,320,000) and the amount Amerco would have received if it had not acquired the option (\$1,300,000), net of the option's cost (\$9,000):  $\$1,320,000 - \$1,300,000 - \$9,000 = \$11,000$ . Amerco indirectly reflects this "gain" in net income as the net gain on foreign currency option (\$10,000 loss in 2017 plus \$30,000 gain in 2018) less the cumulative option expense (\$9,000) recognized over the two accounting periods:  $\$20,000 - \$9,000 = \$11,000$ .

### Option Designated as Fair Value Hedge

Assume that Amerco decides not to designate the foreign currency option as a cash flow hedge but to treat it as a fair value hedge. In that case, it takes the gain or loss on the option directly to net income. The change in the time value of the option is not recognized, so there is no option expense recorded.

#### 2017 Journal Entries—Option Designated as a Fair Value Hedge

12/1/17	Accounts Receivable (€) . . . . .	1,320,000	
	Sales . . . . .		1,320,000
	To record the sale and €1 million account receivable at the spot rate of \$1.32 (Fair Value Hedge Step A.1. in Exhibit 9.2).		

(continued)

(continued)

	Foreign Currency Option . . . . .	9,000	
	Cash . . . . .		9,000
	To record the purchase of the foreign currency option as an asset at its fair value of \$9,000 (Fair Value Hedge Step A.2. in Exhibit 9.2).		
12/31/17	Accounts Receivable (€) . . . . .	10,000	
	Foreign Exchange Gain . . . . .		10,000
	To adjust the value of the € receivable to the new spot rate of \$1.33 and record a foreign exchange gain resulting from the appreciation of the € since December 1 (Fair Value Hedge Step B.1. in Exhibit 9.2).		
	Loss on Foreign Currency Option . . . . .	3,000	
	Foreign Currency Option . . . . .		3,000
	To adjust the fair value of the option from \$9,000 to \$6,000 and record a loss on foreign currency option for the change in the fair value of the option since December 1 (Fair Value Hedge Step B.2. in Exhibit 9.2).		

The impact on net income for the year 2017 follows:

Sales . . . . .		\$1,320,000
Foreign exchange gain . . . . .	\$10,000	
Loss on foreign currency option . . . . .	<u>(3,000)</u>	
Net gain (loss) . . . . .		<u>7,000</u>
Impact on net income . . . . .		<u>\$1,327,000</u>

**2018 Journal Entries—Option Designated as a Fair Value Hedge**

3/1/18	Foreign Exchange Loss . . . . .	30,000	
	Accounts Receivable (€) . . . . .		30,000
	To adjust the value of the € receivable to the new spot rate of \$1.30 and record a foreign exchange loss resulting from the depreciation of the € since December 31 (Fair Value Hedge Step C.1. in Exhibit 9.2).		
	Foreign Currency Option . . . . .	14,000	
	Gain on Foreign Currency Option . . . . .		14,000
	To adjust the fair value of the option from \$6,000 to \$20,000 and record a gain on foreign currency option for the change in fair value since December 31 (Fair Value Hedge Step C.2. in Exhibit 9.2).		
	Foreign Currency (€) . . . . .	1,300,000	
	Accounts Receivable (€) . . . . .		1,300,000
	To record receipt of €1 million from the German customer as an asset at the spot rate of \$1.30 (Fair Value Hedge Step C.3. in Exhibit 9.2).		
	Cash . . . . .	1,320,000	
	Foreign Currency (€) . . . . .		1,300,000
	Foreign Currency Option . . . . .		20,000
	To record exercise of the option (i.e., record receipt of \$1,320,000 in exchange for delivery of €1 million) and remove the foreign currency option from the accounts (Fair Value Hedge Step C.4. in Exhibit 9.2).		

The impact on net income for the year 2018 follows:

Foreign exchange loss . . . . .	\$(30,000)
Gain on foreign currency option . . . . .	14,000
Impact on net income . . . . .	<u>\$(16,000)</u>

Over the two accounting periods, Amerco reports sales of \$1,320,000 and a cumulative net loss of \$9,000 (\$7,000 net gain in 2017 and \$16,000 net loss in 2018). The net effect on the balance sheet is an increase in cash of \$1,311,000 (\$1,320,000 – \$9,000) with a corresponding increase in retained earnings of \$1,311,000 (\$1,327,000 – \$16,000). The net benefit from having acquired the option is \$11,000. Amerco reflects this in net income through the net gain on foreign currency option (\$3,000 loss in 2017 and \$14,000 gain in 2018) recognized over the two accounting periods.

The accounting for an option used as a fair value hedge of a foreign currency denominated asset or liability is the same as if the option had been considered a speculative derivative. The only advantage to designating the option as a fair value hedge relates to the disclosures made in the notes to the financial statements.

### ***Spot Rate Exceeds Strike Price***

If the spot rate at March 1, 2018, had been more than the strike price of \$1.32, Amerco would allow its option to expire unexercised. Instead it would sell its foreign currency (€) at the spot rate. The fair value of the foreign currency option on March 1, 2018, would be zero. The journal entries for 2017 to reflect this scenario would be the same as the preceding ones. The option would be reported as an asset on the December 31, 2017, balance sheet at \$6,000 and the € receivable would have a carrying value of \$1,330,000. The entries on March 1, 2018, assuming a spot rate on that date of \$1.325 (rather than \$1.30), would be as follows:

3/1/18	Foreign Exchange Loss . . . . .	5,000	
	Accounts Receivable (€) . . . . .		5,000
	To adjust the value of the € receivable to the new spot rate of \$1.325 and record a foreign exchange loss resulting from the depreciation of the € since December 31 (Fair Value Hedge Step C.1. in Exhibit 9.2).		
	Loss on Foreign Currency Option . . . . .	6,000	
	Foreign Currency Option . . . . .		6,000
	To adjust the fair value of the option from \$6,000 to \$0 and record a loss on foreign currency option for the change in fair value since December 31 (Fair Value Hedge Step C.2. in Exhibit 9.2).		
	Foreign Currency (€) . . . . .	1,325,000	
	Accounts Receivable (€) . . . . .		1,325,000
	To record receipt of €1 million from the German customer as an asset at the spot rate of \$1.325 (Fair Value Hedge Step C.3. in Exhibit 9.2).		
	Cash . . . . .	1,325,000	
	Foreign Currency (€) . . . . .		1,325,000
	To record the sale of €1 million at the spot rate of \$1.325 (Fair Value Hedge Step C.4. in Exhibit 9.2).		

The overall impact on net income for the year 2018 is as follows:

Foreign exchange loss . . . . .	\$ (5,000)
Loss on foreign currency option . . . . .	<u>(6,000)</u>
Impact on net income . . . . .	<u>\$(11,000)</u>

## LO 9-8

Account for forward contracts and options used as hedges of foreign currency firm commitments.

## Hedges of Unrecognized Foreign Currency Firm Commitments

In the examples thus far, Amerco does not enter into a hedge of its export sale until it actually makes the sale. Assume now that on December 1, 2017, Amerco receives and accepts an order from a German customer to deliver goods on March 1, 2018, at a price of 1 million euros. Assume further that under the terms of the sales agreement, Amerco will ship the goods to the German customer on March 1, 2018, and will receive immediate payment on delivery. In other words, Amerco will not extend credit to the German customer. Although Amerco will not make the sale until March 1, 2018, it has a firm commitment to make the sale and receive 1 million euros in three months. This creates a euro asset exposure to foreign exchange risk as of December 1, 2017. On that date, Amerco wants to hedge against an adverse change in the value of the euro over the next three months. This is known as a *hedge of a foreign currency firm commitment*. U.S. GAAP allows hedges of firm commitments to be designated either as cash flow or fair value hedges. However, because the results of fair value hedge accounting are intuitively more appealing, we do not cover cash flow hedge accounting for firm commitments.

A firm commitment is an executory contract; the company has not delivered goods nor has the customer paid for them. Normally, executory contracts are not recognized in financial statements. However, when a firm commitment is hedged using a derivative financial instrument, hedge accounting requires explicit recognition on the balance sheet at fair value of both the derivative financial instrument (forward contract or option) and the firm commitment. The change in fair value of the firm commitment results in a gain or loss that offsets the loss or gain on the hedging instrument (forward contract or option), thus achieving the goal of hedge accounting. This raises the conceptual question of how to measure the fair value of the firm commitment. When a forward contract is used as the hedging instrument, the fair value of the firm commitment is determined through reference to changes in the forward exchange rate. Changes in the spot exchange rate are used to determine the fair value of the firm commitment when a foreign currency option is the hedging instrument.

### Forward Contract Used as Fair Value Hedge of a Firm Commitment

To hedge its firm commitment exposure to a decline in the U.S. dollar value of the euro, Amerco decides to enter into a forward contract on December 1, 2017. Assume that on that date, the three-month forward rate for euros is \$1.305 and Amerco signs a contract with New Manhattan Bank to deliver 1 million euros in three months in exchange for \$1,305,000. No cash changes hands on December 1, 2017. Amerco measures the fair value of the firm commitment through changes in the forward rate. Because the fair value of the forward contract is also measured using changes in the forward rate, the gains and losses on the firm commitment and forward contract exactly offset. The fair value of the forward contract and firm commitment are determined as follows:

Date	Forward Rate to 3/1/18	Forward Contract		Firm Commitment	
		Fair Value	Change in Fair Value	Fair Value	Change in Fair Value
12/1/17	\$ 1.305	\$ -0-	\$ -0-	\$ -0-	\$ -0-
12/31/17	1.316	(10,783)*	- 10,783	10,783*	+ 10,783
3/1/18	1.30 (spot)	5,000†	+ 15,783	(5,000)†	- 15,783

\* $(\$1,305,000 - \$1,316,000) = \$(-11,000) \times 0.9803 = \$(-10,783)$ , where 0.9803 is the present value factor for two months at an annual interest rate of 12 percent (1 percent per month) calculated as  $1/1.01^2$ .

† $(\$1,305,000 - \$1,300,000) = \$5,000$ .

Amerco pays nothing to enter into the forward contract at December 1, 2017. Both the forward contract and the firm commitment have a fair value of zero on that date. As a result, there are no journal entries needed on December 1, 2017. At December 31,

2017, the forward rate for a contract to deliver euros on March 1, 2018, is \$1.316. A forward contract could be entered into on December 31, 2017, to sell 1 million euros for \$1,316,000 on March 1, 2018. Because Amerco is committed to sell 1 million euros for \$1,305,000, the value of the forward contract is \$(11,000); present value is \$(10,783), a liability. The fair value of the firm commitment is also measured through reference to changes in the forward rate. As a result, the fair value of the firm commitment is equal in amount but of opposite sign to the fair value of the forward contract. At December 31, 2017, the firm commitment is an asset of \$10,783. To apply the two steps in accounting for a fair value hedge of a firm commitment at the balance sheet date, on December 31, 2017, Amerco will:

1. Adjust the forward contract to fair value, which results in the recognition of a liability of \$10,783, and recognize the counterpart as a loss in net income (Fair Value Hedge Step B.1. in Exhibit 9.2).
2. Adjust the firm commitment to fair value, which results in the recognition of an asset of \$10,783, and recognize the counterpart as a gain on firm commitment in net income (Fair Value Hedge Step B.2. in Exhibit 9.2).

The journal entries in 2017 to account for the forward contract fair value hedge of a foreign currency firm commitment are as follows:

**2017 Journal Entries—Forward Contract Fair Value Hedge of Firm Commitment**

12/1/17	There is no entry to record either the sales agreement or the forward contract because both are executory contracts. A memorandum designates the forward contract as a hedge of the risk of changes in the fair value of the firm commitment resulting from changes in the U.S. dollar–euro forward exchange rate (Fair Value Hedge Steps A.1. and A.2. in Exhibit 9.2).		
12/31/17	Loss on Forward Contract . . . . .	10,783	
	Forward Contract . . . . .		10,783
	To record the forward contract as a liability at its fair value of \$(10,783) and record a forward contract loss for the change in the fair value of the forward contract since December 1 (Fair Value Hedge Step B.1. in Exhibit 9.2).		
	Firm Commitment . . . . .	10,783	
	Gain on Firm Commitment . . . . .		10,783
	To record the firm commitment as an asset at its fair value of \$10,783 and record a firm commitment gain for the change in the fair value of the firm commitment since December 1 (Fair Value Hedge Step B.2. in Exhibit 9.2).		

Consistent with the objective of hedge accounting, the gain on the firm commitment offsets the loss on the forward contract, and the impact on 2017 net income is zero. Amerco reports the forward contract as a liability and reports the firm commitment as an asset on the December 31, 2017, balance sheet. This achieves the objective of making sure that derivatives are reported on the balance sheet and ensures that there is no impact on net income.

On March 1, 2018, the forward rate to sell euros on that date, by definition, is the spot rate, \$1.30. At that rate, Amerco could sell 1 million euros for \$1,300,000. Because Amerco has a contract to sell euros for \$1,305,000, the fair value of the forward contract on March 1, 2018, is \$5,000 (an asset). The firm commitment has a value of \$(5,000), a liability.

On March 1, 2018, Amerco first recognizes changes in the fair value of the forward contract and firm commitment since December 31. The company then records the sale and the

settlement of the forward contract. Finally, the \$5,000 balance in the firm commitment account is closed as an adjustment to net income. The required journal entries are as follows:

**2018 Journal Entries—Forward Contract Fair Value Hedge of Firm Commitment**

3/1/18	Forward Contract . . . . .	15,783	
	Gain on Forward Contract . . . . .		15,783
	To adjust the fair value of the forward contract from \$(10,783) to \$5,000 and record a forward contract gain for the change in fair value since December 31 (Fair Value Hedge Step C.1. in Exhibit 9.2).		
	Loss on Firm Commitment . . . . .	15,783	
	Firm Commitment . . . . .		15,783
	To adjust the fair value of the firm commitment from \$10,783 to \$(5,000) and record a firm commitment loss for the change in fair value since December 31 (Fair Value Hedge Step C.2. in Exhibit 9.2).		
	Foreign Currency (€) . . . . .	1,300,000	
	Sales . . . . .		1,300,000
	To record the sale and the receipt of €1 million as an asset at the spot rate of \$1.30 (Fair Value Hedge Step C.3. in Exhibit 9.2).		
	Cash . . . . .	1,305,000	
	Foreign Currency (€) . . . . .		1,300,000
	Forward Contract . . . . .		5,000
	To record settlement of the forward contract (receipt of \$1,305,000 in exchange for delivery of €1 million) and remove the forward contract from the accounts (Fair Value Hedge Step C.4. in Exhibit 9.2).		
	Firm Commitment . . . . .	5,000	
	Adjustment to Net Income—Firm Commitment . . . . .		5,000
	To close the firm commitment as an adjustment to net income (Fair Value Hedge Step C.5. in Exhibit 9.2).		

Once again, the gain on forward contract and the loss on firm commitment offset. As a result of the last entry, the export sale increases 2018 net income by \$1,305,000 (\$1,300,000 in sales plus a \$5,000 adjustment to net income). This exactly equals the amount of cash received. In practice, companies use a variety of account titles for the adjustment to net income that results from closing the firm commitment account.

The net gain on forward contract of \$5,000 (\$10,783 loss in 2017 plus \$15,783 gain in 2018) measures the net benefit to the company from hedging its firm commitment. Without the forward contract, Amerco would have sold the 1 million euros received on March 1, 2018, at the spot rate of \$1.30 generating cash flow of \$1,300,000. Through the forward contract, Amerco is able to sell the euros for \$1,305,000, a net gain of \$5,000.

**Option Used as Fair Value Hedge of Firm Commitment**

Now assume that to hedge its exposure to a decline in the U.S. dollar value of the euro, Amerco purchases a put option to sell 1 million euros on March 1, 2018, at a strike price of \$1.32. The premium for such an option on December 1, 2017, is \$0.009 per euro. With this option, Amerco is guaranteed a minimum cash flow from the export sale of \$1,311,000 (\$1,320,000 from option exercise less \$9,000 cost of the option).

Amerco measures the fair value of the firm commitment by referring to changes in the U.S. dollar–euro spot rate. In this case, Amerco must discount the fair value of the firm commitment to its present value. The fair value and changes in fair value for the firm commitment and foreign currency option are summarized here:

Date	Option Premium for 3/1/18	Foreign Currency Option		Spot Rate	Firm Commitment	
		Fair Value	Change in Fair Value		Fair Value	Change in Fair Value
12/1/17	\$0.009	\$ 9,000	\$ -0-	\$1.32	\$ -0-	\$ -0-
12/31/17	0.006	6,000	- 3,000	1.33	9,803*	+ 9,803
3/1/18	0.020	20,000	+14,000	1.30	(20,000) <sup>†</sup>	-29,803

\*\$1,330,000 - \$1,320,000 = \$10,000 × 0.9803 = \$9,803, where 0.9803 is the present value factor for two months at an annual interest rate of 12 percent (1 percent per month) calculated as  $1/1.01^2$ .

<sup>†</sup>\$1,300,000 - \$1,320,000 = \$(20,000).

At December 1, 2017, given the spot rate of \$1.32, the firm commitment to receive 1 million euros in three months would generate a cash flow of \$1,320,000. At December 31, 2017, the cash flow that the firm commitment could generate increases by \$10,000 to \$1,330,000. The fair value of the firm commitment at December 31, 2017, is the present value of \$10,000 discounted at 1 percent per month for two months. Amerco determines the fair value of the firm commitment on March 1, 2018, by referring to the change in the spot rate from December 1, 2017, to March 1, 2018. Because the spot rate declines by \$0.02 over that period, the firm commitment to receive 1 million euros has a fair value of \$(20,000) on March 1, 2018. The journal entries to account for the foreign currency option and related foreign currency firm commitment are discussed next:

### 2017 Journal Entries—Option Fair Value Hedge of Firm Commitment

12/1/17	Foreign Currency Option . . . . .	9,000	
	Cash . . . . .		9,000
	To record the purchase of the foreign currency option as an asset (Fair Value Hedge Step A.2. in Exhibit 9.2).		

There is no entry to record the sales agreement because it is an executory contract (Fair Value Hedge Step A.1. in Exhibit 9.2). Amerco prepares a memorandum to designate the option as a hedge of the risk of changes in the fair value of the firm commitment resulting from changes in the spot exchange rate.

12/31/17	Loss on Foreign Currency Option . . . . .	3,000	
	Foreign Currency Option . . . . .		3,000
	To adjust the fair value of the option from \$9,000 to \$6,000 and record the change in the value of the option as a loss (Fair Value Hedge Step B.1. in Exhibit 9.2).		
	Firm Commitment . . . . .	9,803	
	Gain on Firm Commitment . . . . .		9,803
	To record the firm commitment as an asset at its fair value of \$9,803 and record a firm commitment gain for the change in the fair value of the firm commitment since December 1 (Fair Value Hedge Step B.2. in Exhibit 9.2).		

Because the fair value of the firm commitment is based on changes in the spot rate whereas the fair value of the option is based on a variety of factors, the gain on the firm commitment and loss on the option do not exactly offset.

The impact on net income for the year 2017 is as follows:

Gain on firm commitment . . . . .	\$ 9,803
Loss on foreign currency option . . . . .	<u>(3,000)</u>
Impact on net income . . . . .	<u>\$ 6,803</u>



The effect on the December 31, 2017, balance sheet follows:

<b>Assets</b>		<b>Liabilities and Stockholders' Equity</b>	
Cash .....	\$ (9,000)	Retained earnings .....	<u>\$6,803</u>
Foreign currency option . . . .	6,000		
Firm commitment .....	<u>9,803</u>		
	<u>\$ 6,803</u>		

On March 1, 2018, following fair value hedge accounting procedures, Amerco first recognizes changes in the fair value of the option and of the firm commitment since December 31. The company then records the sale and the exercise of the option. Finally, the \$20,000 balance in the firm commitment account is closed as an adjustment to net income. The required journal entries are as follows:

### ***2018 Journal Entries—Option Fair Value Hedge of Firm Commitment***

3/1/18	Foreign Currency Option .....	14,000	
	Gain on Foreign Currency Option .....		14,000
	To adjust the fair value of the foreign currency option from \$6,000 to \$20,000 and record a gain on foreign currency option for the change in fair value since December 31 (Fair Value Hedge Step C.1. in Exhibit 9.2)		
	Loss on Firm Commitment .....	29,803	
	Firm Commitment .....		29,803
	To adjust the fair value of the firm commitment from \$9,803 to \$(20,000) and record a firm commitment loss for the change in fair value since December 31 (Fair Value Hedge Step C.2. in Exhibit 9.2)		
	Foreign Currency (€) .....	1,300,000	
	Sales .....		1,300,000
	To record the sale and the receipt of €1 million as an asset at the spot rate of \$1.30 (Fair Value Hedge Step C.3. in Exhibit 9.2).		
	Cash .....	1,320,000	
	Foreign Currency (€) .....		1,300,000
	Foreign Currency Option .....		20,000
	To record exercise of the foreign currency option (receipt of \$1,320,000 in exchange for delivery of €1 million) and remove the foreign currency option from the accounts (Fair Value Hedge Step C.4. in Exhibit 9.2).		
	Firm Commitment .....	20,000	
	Adjustment to Net Income—Firm Commitment		20,000
	To close the firm commitment as an adjustment to net income (Fair Value Hedge Step C.5. in Exhibit 9.2).		

The following is the impact on net income for the year 2018:

Sales .....	\$1,300,000
Loss on firm commitment .....	(29,803)
Gain on foreign currency option .....	14,000
Adjustment to net income—firm commitment .....	<u>20,000</u>
Impact on net income .....	<u>\$1,304,197</u>

The net increase in net income over the two accounting periods is \$1,311,000 (\$6,803 in 2017 plus \$1,304,197 in 2018), which exactly equals the net cash flow realized on the export sale (\$1,320,000 from exercising the option less \$9,000 to purchase the option). The net gain

on the option of \$11,000 (loss of \$3,000 in 2017 plus gain of \$14,000 in 2018) reflects the net benefit from having entered into the hedge. Without the option, Amerco would have sold the 1 million euros received on March 1, 2018, at the spot rate of \$1.30 for \$1,300,000.

**LO 9-9**

Account for forward contracts and options used as hedges of forecasted foreign currency transactions.

## Hedge of Forecasted Foreign Currency Denominated Transaction

Cash flow hedge accounting also is used for foreign currency derivatives used to hedge the cash flow risk associated with a forecasted foreign currency transaction. For hedge accounting to apply, the forecasted transaction must be probable (likely to occur), the hedge must be highly effective in offsetting fluctuations in the cash flow associated with the foreign currency risk, and the hedging relationship must be properly documented.

Accounting for a hedge of a forecasted transaction differs from accounting for a hedge of a foreign currency firm commitment in two ways:

1. Unlike the accounting for a firm commitment, there is no recognition of the forecasted transaction or gains and losses on the forecasted transaction. (Because there is no recognition of an asset or liability, there is no fair value exposure to foreign exchange risk. Thus, fair value hedge accounting is not appropriate for hedges of forecasted transactions.)
2. The company reports the hedging instrument (forward contract or option) at fair value, but because no gain or loss occurs on the forecasted transaction to offset against, the company does not report changes in the fair value of the hedging instrument as gains and losses in net income. Instead, it reports them in other comprehensive income. On the projected date of the forecasted transaction, the company transfers the cumulative change in the fair value of the hedging instrument from accumulated other comprehensive income (balance sheet) to net income (income statement).

### Forward Contract Cash Flow Hedge of a Forecasted Transaction

To demonstrate the accounting for a hedge of a forecasted foreign currency transaction, assume that Amerco has a long-term relationship with its German customer and can reliably forecast that the customer will require delivery of goods costing 1 million euros in March 2018. Confident that it will receive 1 million euros on March 1, 2018, Amerco enters into a forward contract on December 1, 2017, to sell 1 million euros on March 1, 2018, at a rate of \$1.30. The facts are essentially the same as those for the hedge of a firm commitment except that Amerco does not receive a sales order from the German customer until late February 2018. Relevant exchange rates and the fair value of the forward contract are as follows:

Date	Forward Rate to 3/1/18	Forward Contract	
		Fair Value	Change in Fair Value
12/1/17	\$1.305	\$ -0-	\$ -0-
12/31/17	1.316	(10,783)*	- 10,783
3/1/18	1.30 (spot)	5,000	+ 15,783

\* $(\$1,305,000 - \$1,316,000) = \$(-11,000) \times 0.9803 = \$(-10,783)$ , where 0.9803 is the present value factor for two months at an annual interest rate of 12 percent (1 percent per month) calculated as  $1/1.01^2$ . The original discount on the forward contract is determined by the difference in the € spot rate and the three-month forward rate on December 1, 2017:  $(\$1.305 - \$1.32) \times \text{€}1 \text{ million} = \$15,000$ .

### 2017 Journal Entries—Forward Contract Hedge of a Forecasted Transaction

12/1/17	There is no entry to record either the forecasted sale or the forward contract. A memorandum designates the forward contract as a hedge of the risk of changes in the cash flows related to the forecasted sale resulting from changes in the spot rate (Cash Flow Hedge Steps A.1. and A.2. in Exhibit 9.2).
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On December 31, the forward contract is recognized as a liability at its fair value, with the counterpart reflected in AOCI, and discount expense is recognized due to the passage of time, with the counterpart also reflected in AOCI. The necessary journal entries are:

12/31/17	Accumulated Other Comprehensive Income (AOCI) . . . . .	10,783	
	Forward Contract . . . . .		10,783
	To record the forward contract as a liability at its fair value of \$10,783 with a corresponding debit to AOCI (Cash Flow Hedge Step B.2. in Exhibit 9.2).		
	Discount Expense . . . . .	5,000	
	Accumulated Other Comprehensive Income (AOCI) . .		5,000
	To record straight-line allocation of the forward contract discount: $\$15,000 \times \frac{1}{3} = \$5,000$ (Cash Flow Hedge Step B.4. in Exhibit 9.2).		

Discount expense reduces 2017 net income by \$5,000. The impact on the December 31, 2017, balance sheet is as follows:

Assets	Liabilities and Stockholders' Equity	
No effect	Forward contract . . . . .	\$10,783
	Retained earnings . . . . .	(5,000)
	AOCI . . . . .	(5,783)
		\$ -0-

On March 1, 2018, the carrying value of the forward contract is adjusted to fair value and the discount is amortized to expense. Then, the sale and the settlement of the forward contract are recorded. Finally, the balance in AOCI related to the hedge of the forecasted transaction is closed as an adjustment to net income. The following entries are required:

### ***2018 Journal Entries—Forward Contract Hedge of a Forecasted Transaction***

3/1/18	Forward Contract . . . . .	15,783	
	Accumulated Other Comprehensive Income (AOCI) . .		15,783
	To adjust the carrying value of the forward contract to its current fair value of \$5,000 with a corresponding credit to AOCI (Cash Flow Hedge Step C.1. in Exhibit 9.2).		
3/1/18	Discount Expense . . . . .	10,000	
	Accumulated Other Comprehensive Income (AOCI) . .		10,000
	To record straight-line allocation of the forward contract discount: $\$15,000 \times \frac{2}{3} = \$10,000$ (Cash Flow Hedge Step C.2. in Exhibit 9.2).		
	Foreign Currency (€) . . . . .	1,300,000	
	Sales . . . . .		1,300,000
	To record the sale and the receipt of €1 million as an asset at the spot rate of \$1.30 (Cash Flow Hedge Step C.3. in Exhibit 9.2).		
	Cash . . . . .	1,305,000	
	Foreign Currency (€) . . . . .		1,300,000
	Forward Contract . . . . .		5,000
	To record settlement of the forward contract (receipt of \$1,305,000 in exchange for delivery of €1 million) and remove the forward contract from the accounts (Cash Flow Hedge Step C.4. in Exhibit 9.2).		
	Accumulated Other Comprehensive Income (AOCI) . . . . .	20,000	
	Adjustment to Net Income—Forecasted Transaction . . .		20,000
	To close AOCI as an adjustment to net income (Cash Flow Hedge Step C.5. in Exhibit 9.2).		

As a result of these entries, the forward contract liability reported at December 31, 2017, has been reduced to zero, as has the balance in AOCI related to this forward contract.

The impact on net income for the year 2018 follows:

Sales.....	\$1,300,000
Discount expense .....	(10,000)
Adjustment to net income—forecasted transaction . . .	20,000
Impact on net income .....	<u>\$1,310,000</u>

Over the two accounting periods, the net impact on net income is \$1,305,000, which equals the amount of net cash inflow realized from the sale.

### Option Designated as a Cash Flow Hedge of a Forecasted Transaction

Now assume that Amerco hedges its forecasted foreign currency transaction by purchasing a 1 million euro put option on December 1, 2017. The option, which expires on March 1, 2018, has a strike price of \$1.32 and a premium of \$0.009 per euro. The fair value of the option at relevant dates is as follows (same as in previous examples):

Date	Option Premium for 3/1/18	Foreign Currency Option				
		Fair Value	Change in Fair Value	Intrinsic Value	Time Value	Change in Time Value
12/1/17	\$0.009	\$ 9,000	\$ -0-	\$ -0-	\$9,000	\$ -0-
12/31/17	0.006	6,000	- 3,000	-0-	6,000	- 3,000
3/1/18	0.020	20,000	+14,000	20,000	-0-	- 6,000

#### 2017 Journal Entries—Option Hedge of a Forecasted Transaction

12/1/17	Foreign Currency Option.....	9,000	
	Cash .....		9,000
	To record the purchase of the foreign currency option as an asset (Cash Flow Hedge Step A.2. in Exhibit 9.2). There is no entry to record the forecasted sale. A memorandum designates the foreign currency option as a hedge of the risk of changes in the cash flows related to the forecasted sale (Cash Flow Hedge Step A.1. in Exhibit 9.2).		

At December 31, the carrying value of the option is decreased for the change in fair value since December 1, and the change in the time value of the option is recognized as option expense. The required journal entries are as follows:

12/31/17	Accumulated Other Comprehensive Income (AOCI).....	3,000	
	Foreign Currency Option		3,000
	To adjust the carrying value of the option to its fair value with a corresponding debit to AOCI (Cash Flow Hedge Step B.2. in Exhibit 9.2).		
	Option Expense .....	3,000	
	Accumulated Other Comprehensive Income (AOCI) ...		3,000
	To recognize the change in the time value of the option as a decrease in net income with a corresponding credit to AOCI (Cash Flow Hedge Step B.4. in Exhibit 9.2).		

The impact on net income for the year 2017 follows:

Option expense . . . . .	\$(3,000)
Impact on net income . . . . .	<u>\$(3,000)</u>

A foreign currency option of \$6,000 is reported as an asset on the December 31, 2017, balance sheet. Cash is decreased by \$9,000, and Retained Earnings is decreased by \$3,000.

On March 1, 2018, first the carrying value of the option is adjusted to fair value and the change in the time value of the option is recognized as option expense. Then, the sale and the exercise of the foreign currency option are recorded. Finally, the balance in AOCI related to the hedge of the forecasted transaction is closed as an adjustment to net income. The following entries are required:

### 2018 Journal Entries—Option Hedge of a Forecasted Transaction

3/1/18	Foreign Currency Option. . . . .	14,000	
	Accumulated Other Comprehensive Income (AOCI) . . .		14,000
	To adjust the carrying value of the option to its fair value with a corresponding credit to AOCI (Cash Flow Hedge Step C.1. in Exhibit 9.2).		
	Option Expense. . . . .	6,000	
	Accumulated Other Comprehensive Income (AOCI) . . .		6,000
	To recognize the change in the time value of the option as a decrease in net income with a corresponding credit to AOCI (Cash Flow Hedge Step C.2. in Exhibit 9.2).		
	Foreign Currency (€) . . . . .	1,300,000	
	Sales . . . . .		1,300,000
	To record the sale and the receipt of €1 million as an asset at the spot rate of \$1.30 (Cash Flow Hedge Step C.3. in Exhibit 9.2).		
	Cash . . . . .	1,320,000	
	Foreign Currency (€) . . . . .		1,300,000
	Foreign Currency Option. . . . .		20,000
	To record the exercise of the foreign currency option (receipt of \$1,320,000 in exchange for delivery of €1 million) and remove the foreign currency option from the accounts (Cash Flow Hedge Step C.4. in Exhibit 9.2).		
	Accumulated Other Comprehensive Income (AOCI) . . . . .	20,000	
	Adjustment to Net Income—Forecasted Transaction. . .		20,000
	To close AOCI as an adjustment to net income (Cash Flow Hedge Step C.5. in Exhibit 9.2).		

The following is the impact on net income for the year 2018:

Sales. . . . .	\$1,300,000
Option expense . . . . .	(6,000)
Adjustment to net income—forecasted transaction . . . . .	<u>20,000</u>
Impact on net income . . . . .	<u>\$1,314,000</u>

Over the two periods, a total of \$1,311,000 is recognized as net income, which is equal to the net cash inflow realized from the export sale (\$1,320,000 from the sale less \$9,000 for the option).

## Use of Hedging Instruments

There are probably as many different corporate strategies regarding hedging foreign exchange risk as there are companies exposed to that risk. Some companies require hedges of all foreign currency transactions. Others require the use of a forward contract hedge when the forward

rate results in a larger cash inflow or smaller cash outflow than with the spot rate. Still other companies have proportional hedging policies that require hedging on some predetermined percentage (e.g., 50 percent, 60 percent, or 70 percent) of transaction exposure. For example, on page 79 of its 2014 annual report, Johnson Controls, Inc., states: “The Company hedges 70% to 90% of the nominal amount of each of its known foreign exchange transactional exposures.”

Companies are required to provide information on the use of derivative financial instruments to hedge foreign exchange risk in the notes to financial statements. Exhibit 9.4 presents disclosures made by Abbott Laboratories in its 2014 annual report. Abbott Labs uses forward contracts to hedge foreign exchange risk associated with anticipated foreign currency transactions, foreign currency denominated payables and receivables, and foreign currency borrowings. Much of its hedging activity relates to intra-entity transactions involving foreign subsidiaries. The table in Exhibit 9.4 discloses that (1) Abbott’s forward contracts primarily are to sell foreign currencies to receive U.S. dollars, (2) 49 percent of Abbott’s \$15,562 million in forward contracts at December 31, 2014, was in euros, and (3) the net fair value of all the company’s forward contracts was positive and reported on the balance sheet as an asset (receivable).

Abbott Labs uses forward contracts exclusively to manage its foreign exchange risk. Thermo Fischer Scientific uses foreign currency forward contracts as well as options to hedge exposures resulting from changes in currency exchange rates. In contrast, The Coca-Cola Company employs a combination of forward contracts, currency options, and collars<sup>11</sup> in its foreign exchange risk-hedging strategy.

#### EXHIBIT 9.4 Disclosures Related to Hedging Foreign Exchange Risk in Abbott Laboratories’ 2014 Annual Report

##### Foreign Currency Sensitive Financial Instruments

Certain Abbott foreign subsidiaries enter into foreign currency forward exchange contracts to manage exposures to changes in foreign exchange rates for anticipated intercompany purchases by those subsidiaries whose functional currencies are not the U.S. dollar. These contracts are designated as cash flow hedges of the variability of the cash flows due to changes in foreign exchange rates and are marked-to-market with the resulting gains or losses reflected in Accumulated other comprehensive income (loss). Gains or losses will be included in Cost of products sold at the time the products are sold, generally within the next twelve to eighteen months. At December 31, 2014 and 2013, Abbott held \$1.5 billion and \$135 million, respectively, of such contracts. Contracts held at December 31, 2014 will mature in 2015 or 2016 depending on the contract. Contracts held at December 31, 2013 matured in 2014.

Abbott enters into foreign currency forward exchange contracts to manage its exposure to foreign currency denominated intercompany loans and trade payables and third-party trade payables and receivables. The contracts are marked-to-market, and resulting gains or losses are reflected in income and are generally offset by losses or gains on the foreign currency exposure being managed. At December 31, 2014 and 2013, Abbott held \$14.1 billion and \$13.8 billion, respectively, of such contracts, which generally mature in the next twelve months.

The following table reflects the total foreign currency forward contracts outstanding at December 31, 2014.

<i>(dollars in millions)</i>	<b>Contract Amount</b>	<b>Weighted Average Exchange Rate</b>	<b>Fair and Carrying Value Receivable/ (Payable)</b>
Receive primarily U.S. Dollars in exchange for the following currencies:			
Euro	\$ 7,574	1.2458	\$ 19
British pound	1,295	1.5790	9
Japanese yen	2,258	115.0311	56
Canadian dollar	371	1.1197	13
All other currencies	<u>4,064</u>	N/A	<u>31</u>
Total	<u>\$15,562</u>		<u>\$128</u>

<sup>11</sup> A foreign currency collar is created by simultaneously purchasing a call option and selling a put option in a foreign currency to fix a range of prices at which the foreign currency can be purchased at a predetermined future date.

## The Euro

The introduction of the euro as a common currency throughout much of Europe in 2002 reduced the need for hedging in that region of the world. For example, a German company purchasing goods from a Spanish supplier no longer has an exposure to foreign exchange risk because both countries use a common currency. This is also true for German subsidiaries of U.S. parent companies. However, any euro-denominated transactions between the U.S. parent and its German (or other euro zone) subsidiary continue to be exposed to foreign exchange risk.

One advantage of the euro for U.S. companies is that a euro account receivable from sales to a customer in, say, the Netherlands acts as a natural hedge of a euro account payable on purchases from, say, a supplier in Italy. Assuming that similar amounts and time periods are involved, any foreign exchange loss (gain) arising from the euro payable is offset by a foreign exchange gain (loss) on the euro receivable. A company does not need to hedge the euro account payable with a hedging instrument such as a foreign currency option.

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## **International Financial Reporting Standard 9— Financial Instruments**

*IFRS 9*, “Financial Instruments,” provides guidance on the accounting for hedging instruments including those used to hedge foreign exchange risk. Rules and procedures in *IFRS 9* related to foreign currency hedge accounting generally are consistent with U.S. GAAP. Similar to current U.S. standards, *IFRS 9* allows hedge accounting for foreign currency–denominated assets and liabilities, firm commitments, and forecasted transactions when documentation requirements and effectiveness tests are met and requires hedges to be designated as cash flow or fair value hedges. While the hedge accounting models in U.S. GAAP and *IFRS 9* are based on similar principles, a number of differences exist in the application guidance provided by the two sets of standards.

One difference between the two sets of standards relates to the type of financial instrument that can be designated as a foreign currency cash flow hedge. Under U.S. GAAP, only derivative financial instruments can be used as a cash flow hedge, whereas *IFRS 9* also allows nonderivative financial instruments, such as foreign currency loans, to be designated as hedging instruments in a foreign currency cash flow hedge.

The standards also differ with regard to the recognition of changes in fair value of forward contracts used as fair value hedges. *IFRS 9* allows companies to choose between recognizing these changes either in net income (as is required under U.S. GAAP) or in other comprehensive income.

Another difference relates to the accounting for the time value of options. Under *IFRS 9*, the initial time value of an option must be amortized to net income on a systematic and rational (e.g., straight-line) basis. To achieve this, changes in time value are reflected initially in AOCI rather than in net income, with an amount equal to the current period’s amortization reclassified from AOCI to net income. The total amount recognized as option expense in net income will be the same under both *IFRS 9* and U.S. GAAP, but the timing of income statement recognition is likely to differ.

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## Summary

1. Several exchange rate systems are used around the world. Most national currencies fluctuate in value against other currencies over time. However, some countries have pegged their national currency to the U.S. dollar.
2. Exposure to foreign exchange risk exists when a payment to be made or to be received is denominated (stated) in terms of a foreign currency. Appreciation in a foreign currency results in a foreign exchange gain when the foreign currency is to be received and a foreign exchange loss when the foreign currency is to be paid. Conversely, a decrease in the value of a foreign currency results in a foreign exchange loss when the foreign currency is to be received and a foreign exchange gain when the foreign currency is to be paid.
3. Companies must revalue foreign currency assets and liabilities to their current U.S. dollar value using current exchange rates when financial statements are prepared. The change in U.S. dollar

value of foreign currency balances is recognized as a foreign exchange gain or loss in net income in the period in which the exchange rate change occurs. This is known as the two-transaction perspective, accrual approach.

4. Borrowing foreign currency creates two exposures to foreign exchange risk. Foreign exchange gains and losses both on the foreign currency note payable and on the accrued foreign currency interest payable are recognized in net income over the life of the debt.
5. IFRS rules related to the accounting for foreign currency transactions generally are consistent with U.S. GAAP. *IAS 21* requires a two-transaction, accrual approach in accounting for foreign currency transactions.
6. Exposure to foreign exchange risk can be eliminated through hedging. Hedging involves establishing a price today at which a foreign currency to be received in the future can be sold in the future or at which a foreign currency to be paid in the future can be purchased in the future.
7. The two most popular derivative financial instruments for hedging foreign exchange risk are foreign currency forward contracts and foreign currency options. A *forward contract* is a binding agreement to exchange currencies at a predetermined rate. An *option* gives the buyer the right, but not the obligation, to exchange currencies at a predetermined rate.
8. Hedge accounting is appropriate when three criteria are met: (1) the derivative is used to hedge either a fair value exposure or cash flow exposure to foreign exchange risk, (2) the derivative is highly effective in offsetting changes in the fair value or cash flows related to the hedged item, and (3) the derivative is properly documented as a hedge. Hedge accounting requires reporting gains and losses on the hedging instrument in net income in the same period as gains and losses on the item being hedged.
9. Companies must report all derivatives, including forward contracts and options, on the balance sheet at their fair value. Changes in fair value are included in accumulated other comprehensive income if the derivative is designated as a cash flow hedge and in net income if it is designated as a fair value hedge.
10. Authoritative accounting literature provides guidance for hedges of (a) recognized foreign currency denominated assets and liabilities, (b) unrecognized foreign currency firm commitments, and (c) forecasted foreign currency denominated transactions. Cash flow hedge accounting can be used for all three types of hedges; fair value hedge accounting can be used only for (a) and (b).
11. If a company hedges a foreign currency firm commitment and designates the hedging instrument as a fair value hedge, it should recognize gains and losses on the hedging instrument as well as on the underlying firm commitment in net income. The firm commitment account created to offset the gain or loss on firm commitment is treated as an adjustment to the underlying transaction when it takes place.
12. If a company hedges a forecasted transaction, it must designate the hedging instrument as a cash flow hedge and report changes in the fair value of the hedging instrument in accumulated other comprehensive income. The cumulative change in fair value reported in other comprehensive income is included in net income in the period in which the forecasted transaction was originally anticipated to take place.
13. Similar to U.S. GAAP, *IFRS 9* allows hedge accounting for hedges of foreign currency assets and liabilities, firm commitments, and forecasted transactions, provided that the hedge is properly documented and is effective. Foreign currency hedging instruments are designated either as a cash flow or a fair value hedge; in either case the hedging instrument must be reported at fair value. Unlike U.S. GAAP, when a fair value hedge is designated, *IFRS 9* allows fair value changes to be reported in accumulated other comprehensive income. Similarly, the change in time value of an option is reported in AOCI.

## Comprehensive Illustration

### Problem

(Estimated Time: 60 to 75 minutes) Zelm Company is a U.S. company that produces electronic switches for the telecommunications industry. Zelm regularly imports component parts from a supplier located in Guadalajara, Mexico, and makes payments in Mexican pesos. The following spot exchange rates, forward exchange rates, and call option premium for Mexican pesos exist during the period August to October.

Date	U.S. Dollar per Mexican Peso		
	Spot Rate	Forward Rate to October 31	Call Option Premium for October 31 (strike price \$0.080)
August 1	\$0.080	\$0.085	\$0.0052
September 30	0.086	0.088	0.0095
October 31	0.091	0.091	0.0110



**Part A**

On August 1, Zelm imports parts from its Mexican supplier at a price of 1 million Mexican pesos. It receives the parts on August 1 but does not pay for them until October 31. In addition, on August 1, Zelm enters into a forward contract to purchase 1 million pesos on October 31. It appropriately designates the forward contract as a *cash flow hedge* of the Mexican peso liability exposure. Zelm's incremental borrowing rate is 12 percent per annum (1 percent per month), and the company uses a straight-line method on a monthly basis for allocating forward discounts and premiums.

**Part B**

The facts are the same as in Part A with the exception that Zelm designates the forward contract as a *fair value hedge* of the Mexican peso liability exposure.

**Part C**

On August 1, Zelm imports parts from its Mexican supplier at a price of 1 million Mexican pesos. It receives the parts on August 1 but does not pay for them until October 31. In addition, on August 1 Zelm purchases a three-month call option on 1 million Mexican pesos with a strike price of \$0.080. The option is appropriately designated as a *cash flow hedge* of the Mexican peso liability exposure.

**Part D**

On August 1, Zelm orders parts from its Mexican supplier at a price of 1 million Mexican pesos. It receives the parts and pays for them on October 31. On August 1, Zelm enters into a forward contract to purchase 1 million Mexican pesos on October 31. It designates the forward contract as a *fair value hedge* of the Mexican peso firm commitment. Zelm determines the fair value of the firm commitment by referring to changes in the forward exchange rate.

**Part E**

On August 1, Zelm orders parts from its Mexican supplier at a price of 1 million Mexican pesos. It receives the parts and pays for them on October 31. On August 1, Zelm purchases a three-month call option on 1 million Mexican pesos with a strike price of \$0.080. The option is appropriately designated as a *fair value hedge* of the Mexican peso firm commitment. The fair value of the firm commitment is by reference to changes in the spot exchange rate.

**Part F**

Zelm anticipates that it will import component parts from its Mexican supplier in the near future. On August 1, Zelm purchases a three-month call option on 1 million Mexican pesos with a strike price of \$0.080. It appropriately designates the option as a *cash flow hedge* of a forecasted Mexican peso transaction. Zelm receives and pays for parts costing 1 million Mexican pesos on October 31.

**Required**

Prepare journal entries for each of these independent situations in accordance with U.S. GAAP and determine the impact each situation has on the September 30 and October 31 trial balances.

**Solution****Part A. Forward Contract Cash Flow Hedge of a Recognized Foreign Currency Liability**

8/1	Parts Inventory . . . . .	80,000	
	Accounts Payable (Mexican pesos) . . . . .		80,000
	To record the purchase of parts and a peso account payable at the spot rate of \$0.080.		

The forward contract requires no formal entry. Zelm prepares a memorandum to designate the forward contract as a hedge of the risk of changes in the cash flow to be paid on the foreign currency payable resulting from changes in the U.S. dollar–Mexican peso exchange rate.

9/30	Foreign Exchange Loss . . . . .	6,000	
	Accounts Payable (Mexican pesos) . . . . .		6,000
	To adjust the value of the Mexican peso payable to the new spot rate of \$0.086 and record a foreign exchange loss resulting from the appreciation of the peso since August 1.		
	Forward Contract . . . . .	2,970	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		2,970
	To record the forward contract as an asset at its fair value of \$2,970 with a corresponding credit to AOCI.		

Zelm determines the fair value of the forward contract by referring to the change in the forward rate for a contract that settles on October 31:  $(\$0.088 - \$0.085) \times 1$  million pesos = \$3,000. The present value of \$3,000 discounted for one month (from October 31 to September 30) at an interest rate of 12 percent per year (1 percent per month) is calculated as follows:  $\$3,000 \times 0.9901 = \$2,970$ .

	Accumulated Other Comprehensive Income (AOCI) . . . . .	6,000	
	Gain on Forward Contract . . . . .		6,000
	To record a gain on forward contract to offset the foreign exchange loss on account payable with a corresponding debit to AOCI.		
	Premium Expense . . . . .	3,333	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		3,333
	To allocate the forward contract premium to income over the life of the contract using a straight-line method on a monthly basis $(\$5,000 \times \frac{2}{3} = \$3,333)$ .		

The original premium on the forward contract is determined by the difference in the peso spot rate and three-month forward rate on August 1:  $(\$0.085 - \$0.080) \times 1$  million pesos = \$5,000.

Trial Balance—September 30	Debit	Credit
Parts inventory . . . . .	\$80,000	\$ -0-
Accounts Payable (Mexican pesos) . . . . .		86,000
Forward Contract (asset) . . . . .	2,970	
AOCI . . . . .		303
Foreign exchange loss . . . . .	6,000	
Gain on forward contract . . . . .		6,000
Premium expense . . . . .	3,333	-0-
	<u>\$92,303</u>	<u>\$92,303</u>

10/31	Foreign Exchange Loss . . . . .	5,000	
	Accounts Payable (Mexican pesos) . . . . .		5,000
	To adjust the value of the Mexican peso payable to the new spot rate of \$0.091 and record a foreign exchange loss resulting from the appreciation of the peso since September 30.		
	Forward Contract . . . . .	3,030	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		3,030
	To adjust the carrying value of the forward contract to its current fair value of \$6,000 with a corresponding credit to AOCI.		

The current fair value of the forward contract is determined by referring to the difference in the spot rate on October 31 and the original forward rate:  $(\$0.091 - \$0.085) \times 1$  million pesos = \$6,000. The forward contract adjustment on October 31 is calculated as the difference in the current fair value and the carrying value at September 30:  $\$6,000 - \$2,970 = \$3,030$ .

Accumulated Other Comprehensive Income (AOCI) . . . . .	5,000	
Gain on Forward Contract . . . . .		5,000
To record a gain on forward contract to offset the foreign exchange loss on account payable with a corresponding debit to AOCI.		
Premium Expense . . . . .	1,667	
Accumulated Other Comprehensive Income (AOCI) . . . . .		1,667
To allocate the forward contract premium to income over the life of the contract using a straight-line method on a monthly basis ( $\$5,000 \times \frac{1}{3} = \$1,667$ ).		
Foreign Currency (Mexican pesos) . . . . .	91,000	
Cash . . . . .		85,000
Forward Contract . . . . .		6,000
To record settlement of the forward contract: Record payment of \$85,000 in exchange for 1 million pesos, record the receipt of 1 million pesos as an asset at the spot rate of \$0.091, and remove the forward contract from the accounts.		
Accounts Payable (pesos) . . . . .	91,000	
Foreign Currency (pesos) . . . . .		91,000
To record remittance of 1 million pesos to the Mexican supplier.		

<b>Trial Balance—October 31</b>	<b>Debit</b>	<b>Credit</b>
Cash . . . . .		\$85,000
Parts inventory . . . . .	\$80,000	—0—
Retained earnings, 9/30 . . . . .	3,333	—0—
Foreign exchange loss . . . . .	5,000	—0—
Gain on forward contract . . . . .	—0—	5,000
Premium expense . . . . .	1,667	—0—
	<u>\$90,000</u>	<u>\$90,000</u>

**Part B. Forward Contract Fair Value Hedge of a Recognized Foreign Currency Liability**

8/1	Parts Inventory . . . . .	80,000	
	Accounts Payable (Mexican pesos) . . . . .		80,000
	To record the purchase of parts and a Mexican peso account payable at the spot rate of \$0.080.		

The forward contract requires no formal entry. A memorandum designates the forward contract as a hedge of the risk of changes in the cash flow to be paid on the foreign currency payable resulting from changes in the U.S. dollar–peso exchange rate.

9/30	Foreign Exchange Loss . . . . .	6,000	
	Accounts Payable (Mexican pesos) . . . . .		6,000
	To adjust the value of the peso payable to the new spot rate of \$0.086 and record a foreign exchange loss resulting from the appreciation of the peso since August 1.		
	Forward Contract . . . . .	2,970	
	Gain on Forward Contract . . . . .		2,970
	To record the forward contract as an asset at its fair value of \$2,970 and record a forward contract gain for the change in the fair value of the forward contract since August 1.		

<b>Trial Balance—September 30</b>	<b>Debit</b>	<b>Credit</b>
Parts inventory . . . . .	\$80,000	\$ —0—
Accounts payable (Mexican pesos) . . . . .		86,000
Forward contract (asset) . . . . .	2,970	—0—
Foreign exchange loss . . . . .	6,000	—0—
Gain on forward contract . . . . .	—0—	2,970
	<u>\$88,970</u>	<u>\$88,970</u>

10/31	Foreign Exchange Loss . . . . .	5,000	
	Accounts Payable (Mexican pesos) . . . . .		5,000
	To adjust the value of the peso payable to the new spot rate of \$0.091 and record a foreign exchange loss resulting from the appreciation of the peso since September 30.		
	Forward Contract . . . . .	3,030	
	Gain on Forward Contract . . . . .		3,030
	To adjust the carrying value of the forward contract to its current fair value of \$6,000 and record a forward contract gain for the change in fair value since September 30.		
	Foreign Currency (Mexican pesos) . . . . .	91,000	
	Cash . . . . .		85,000
	Forward Contract . . . . .		6,000
	To record settlement of the forward contract: Record payment of \$85,000 in exchange for 1 million pesos, record the receipt of 1 million pesos as an asset at the spot rate of \$0.091, and remove the forward contract from the accounts.		
	Accounts Payable (pesos) . . . . .	91,000	
	Foreign Currency (pesos) . . . . .		91,000
	To record remittance of 1 million pesos to the Mexican supplier.		

<b>Trial Balance—October 31</b>	<b>Debit</b>	<b>Credit</b>
Cash . . . . .	\$ —0—	\$85,000
Parts inventory . . . . .	80,000	—0—
Retained earnings, 9/30 . . . . .	3,030	—0—
Foreign exchange loss . . . . .	5,000	—0—
Gain on forward contract . . . . .	—0—	3,030
	<u>\$88,030</u>	<u>\$88,030</u>

### Part C. Option Cash Flow Hedge of a Recognized Foreign Currency Liability

The following schedule summarizes the changes in the components of the fair value of the peso call option with a strike price of \$0.080:

<b>Date</b>	<b>Spot Rate</b>	<b>Option Premium</b>	<b>Fair Value</b>	<b>Change in Fair Value</b>	<b>Intrinsic Value</b>	<b>Time Value</b>	<b>Change in Time Value</b>
8/1	\$0.080	\$0.0052	\$ 5,200	\$ —0—	\$ —0—	\$5,200*	\$ —0—
9/30	0.086	0.0095	9,500	+4,300	6,000 <sup>†</sup>	3,500 <sup>‡</sup>	— 1,700
10/31	0.091	0.0110	11,000	+1,500	11,000	—0— <sup>‡</sup>	— 3,500

\*Because the strike price and spot rate are the same, the option has no intrinsic value. Fair value is attributable solely to the time value of the option.

<sup>†</sup>With a spot rate of \$0.086 and a strike price of \$0.08, the option has an intrinsic value of \$6,000. The remaining \$3,500 of fair value is attributable to time value.

<sup>‡</sup>The time value of the option at maturity is zero.

8/1	Parts Inventory . . . . .	80,000	
	Accounts Payable (Mexican pesos) . . . . .		80,000
	To record the purchase of parts and a peso account payable at the spot rate of \$0.080.		
	Foreign Currency Option . . . . .	5,200	
	Cash . . . . .		5,200
	To record the purchase of a foreign currency option as an asset.		
9/30	Foreign Exchange Loss . . . . .	6,000	
	Accounts Payable (pesos) . . . . .		6,000
	To adjust the value of the peso payable to the new spot rate of \$0.086 and record a foreign exchange loss resulting from the appreciation of the peso since August 1.		
	Foreign Currency Option . . . . .	4,300	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		4,300
	To adjust the fair value of the option from \$5,200 to \$9,500 with a corresponding credit to AOCI.		
	Accumulated Other Comprehensive Income (AOCI) . . . . .	6,000	
	Gain on Foreign Currency Option . . . . .		6,000
	To record a gain on forward currency option to offset the foreign exchange loss on account payable with a corresponding debit to AOCI.		
	Option Expense . . . . .	1,700	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		1,700
	To recognize the change in the time value of the foreign currency option as an expense with a corresponding credit to AOCI.		

<b>Trial Balance—September 30</b>		<b>Debit</b>	<b>Credit</b>
Cash . . . . .			\$ 5,200
Parts inventory . . . . .	\$80,000		—0—
Foreign currency option (asset) . . . . .	9,500		—0—
Accounts payable (Mexican pesos) . . . . .	—0—		86,000
Foreign exchange loss . . . . .	6,000		—0—
Gain on foreign currency option . . . . .	—0—		6,000
Option expense . . . . .	1,700		—0—
	<u>\$97,200</u>		<u>\$97,200</u>

10/31	Foreign Exchange Loss . . . . .	5,000	
	Accounts Payable (Mexican pesos) . . . . .		5,000
	To adjust the value of the peso payable to the new spot rate of \$0.091 and record a foreign exchange loss resulting from the appreciation of the peso since September 30.		
	Foreign Currency Option . . . . .	1,500	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		1,500
	To adjust the carrying value of the foreign currency option to its current fair value of \$11,000 with a corresponding credit to AOCI.		
	Accumulated Other Comprehensive Income (AOCI) . . . . .	5,000	
	Gain on Foreign Currency Option . . . . .		5,000
	To record a gain on foreign currency option to offset the foreign exchange loss on account payable with a corresponding debit to AOCI.		
	Option Expense . . . . .	3,500	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		3,500
	To recognize the change in the time value of the foreign currency option as an expense with a corresponding credit to AOCI.		

Foreign Currency (Mexican pesos) .....	91,000	
Cash .....		80,000
Foreign Currency Option .....		11,000
To record exercise of the foreign currency option: Record payment of \$80,000 in exchange for 1 million pesos, record the receipt of 1 million pesos as an asset at the spot rate of \$0.091, and remove the option from the accounts.		
Accounts Payable (pesos) .....	91,000	
Foreign Currency (pesos) .....		91,000
To record remittance of 1 million pesos to the Mexican supplier.		

<b>Trial Balance—October 31</b>	<b>Debit</b>	<b>Credit</b>
Cash (\$5,200 credit balance + \$80,000 credit) .....	\$ -0-	\$85,200
Parts inventory .....	80,000	-0-
Retained earnings, 9/30 .....	1,700	-0-
Foreign exchange loss .....	5,000	-0-
Gain on foreign currency option .....	-0-	5,000
Option expense .....	3,500	-0-
	<u>\$90,200</u>	<u>\$90,200</u>

**Part D. Forward Contract Fair Value Hedge of a Foreign Currency Firm Commitment**

8/1	The forward contract or the purchase order requires no formal entry. A memorandum would be prepared designating the forward contract as a fair value hedge of the foreign currency firm commitment.		
9/30	Forward Contract .....	2,970	
	Gain on Forward Contract .....		2,970
	To record the forward contract as an asset at its fair value of \$2,970 and record a forward contract gain for the change in the fair value of the forward contract since August 1.		
	Loss on Firm Commitment .....	2,970	
	Firm Commitment .....		2,970
	To record the firm commitment as a liability at its fair value of \$2,970 based on changes in the forward rate and record a firm commitment loss for the change in fair value since August 1.		

<b>Trial Balance—September 30</b>	<b>Debit</b>	<b>Credit</b>
Forward contract (asset) .....	\$2,970	\$ -0-
Firm commitment (liability) .....	-0-	2,970
Gain on forward contract .....	-0-	2,970
Loss on firm commitment .....	2,970	-0-
	<u>\$5,940</u>	<u>\$5,940</u>

10/31	Forward Contract .....	3,030	
	Gain on Forward Contract .....		3,030
	To adjust the carrying value of the forward contract to its current fair value of \$6,000 and record a forward contract gain for the change in fair value since September 30.		
	Loss on Firm Commitment .....	3,030	
	Firm Commitment .....		3,030
	To adjust the value of the firm commitment to \$6,000 based on changes in the forward rate and record a firm commitment loss for the change in fair value since September 30.		

Foreign Currency (Mexican pesos) . . . . .	91,000	
Cash . . . . .		85,000
Forward Contract . . . . .		6,000
To record settlement of the forward contract: Record payment of \$85,000 in exchange for 1 million pesos, record the receipt of 1 million pesos as an asset at the spot rate of \$0.091, and remove the forward contract from the accounts.		
Parts Inventory . . . . .	91,000	
Foreign Currency (Mexican pesos) . . . . .		91,000
To record the purchase of parts through the payment of 1 million pesos to the Mexican supplier.		
Firm Commitment . . . . .	6,000	
Adjustment to Net Income—Firm Commitment . . . . .		6,000
To close the firm commitment account as an adjustment to net income.		

(Note: The final entry to close the Firm Commitment account to Adjustment to Net Income must be made *only* in the period in which Parts Inventory affects net income through Cost of Goods Sold. The Firm Commitment account remains on the books as a liability until that point in time.)

<b>Trial Balance—October 31</b>	<b>Debit</b>	<b>Credit</b>
Cash . . . . .	\$ 0—	\$85,000
Parts inventory (cost of goods sold) . . . . .	91,000	0—
Gain on forward contract . . . . .	0—	3,030
Loss on firm commitment . . . . .	3,030	0—
Adjustment to net income—firm commitment . . . . .	0—	6,000
	<u>\$94,030</u>	<u>\$94,030</u>

#### **Part E. Option Fair Value Hedge of a Foreign Currency Firm Commitment**

8/1	Foreign Currency Option . . . . .	5,200	
	Cash . . . . .		5,200
To record the purchase of a foreign currency option as an asset.			
9/30	Foreign Currency Option . . . . .	4,300	
	Gain on Foreign Currency Option . . . . .		4,300
To adjust the fair value of the option from \$5,200 to \$9,500 and record an option gain for the change in fair value since August 1.			
	Loss on Firm Commitment . . . . .	5,940	
	Firm Commitment . . . . .		5,940
To record the firm commitment as a liability at its fair value of \$5,940 based on changes in the spot rate and record a firm commitment loss for the change in fair value since August 1.			

The fair value of the firm commitment is determined by referring to changes in the spot rate from August 1 to September 30:  $(\$0.080 - \$0.086) \times 1 \text{ million pesos} = \$(6,000)$ . This amount must be discounted for one month at 12 percent per annum (1 percent per month):  $\$(6,000) \times 0.9901 = \$(5,940)$ .

<b>Trial Balance—September 30</b>	<b>Debit</b>	<b>Credit</b>
Cash . . . . .	\$ 0—	\$ 5,200
Foreign currency option (asset) . . . . .	9,500	0—
Firm commitment (liability) . . . . .	0—	5,940
Gain on foreign currency option . . . . .	0—	4,300
Loss on firm commitment . . . . .	5,940	0—
	<u>\$15,440</u>	<u>\$15,440</u>

10/31	Foreign Currency Option . . . . .	1,500	
	Gain on Foreign Currency Option . . . . .		1,500
	To adjust fair value of the option from \$9,500 to \$11,000 and record an option gain for the change in fair value since September 30.		
	Loss on Firm Commitment . . . . .	5,060	
	Firm Commitment . . . . .		5,060
	To adjust the fair value of the firm commitment from \$5,940 to \$11,000 and record a firm commitment loss for the change in fair value since September 30.		

The fair value of the firm commitment is determined by referring to changes in the spot rate from August 1 to October 31:  $(\$0.080 - \$0.091) \times 1 \text{ million pesos} = \$(11,000)$ .

Foreign Currency (Mexican pesos) . . . . .	91,000	
Cash . . . . .		80,000
Foreign Currency Option . . . . .		11,000
To record exercise of the foreign currency option: Record payment of \$80,000 in exchange for 1 million pesos, record the receipt of 1 million pesos as an asset at the spot rate of \$0.091, and remove the option from the accounts.		
Parts Inventory . . . . .	91,000	
Foreign Currency (pesos) . . . . .		91,000
To record the purchase of parts through the payment of 1 million pesos to the Mexican supplier.		
Firm Commitment . . . . .	11,000	
Adjustment to Net Income—Firm Commitment . . . . .		11,000
To close Firm Commitment account to Adjustment to Net Income.		

(Note: The final entry to close the Firm Commitment to Adjustment to Net Income is made *only* in the period in which Parts Inventory affects net income through Cost of Goods Sold. The Firm Commitment account remains on the books as a liability until that point in time.)

Trial Balance—October 31	Debit	Credit
Cash (\$5,200 credit balance + \$80,000 credit) . . . . .	\$ 0—	\$85,200
Parts inventory (cost of goods sold) . . . . .	91,000	0—
Retained earnings, 9/30 . . . . .	1,640	0—
Gain on foreign currency option . . . . .	0—	1,500
Loss on firm commitment . . . . .	5,060	0—
Adjustment to net income—firm commitment . . . . .	0—	11,000
	\$97,700	\$97,700

**Part F. Option Cash Flow Hedge of a Forecasted Foreign Currency Transaction**

8/1	Foreign Currency Option . . . . .	5,200	
	Cash . . . . .		5,200
	To record the purchase of a foreign currency option as an asset.		
9/30	Foreign Currency Option . . . . .	4,300	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		4,300
	To adjust the fair value of the option from \$5,200 to \$9,500 with a corresponding adjustment to AOCI.		
	Option Expense . . . . .	1,700	
	Accumulated Other Comprehensive Income (AOCI) . . . . .		1,700
	To recognize the change in the time value of the foreign currency option as an expense with a corresponding credit to AOCI.		



<b>Trial Balance—September 30</b>		<b>Debit</b>	<b>Credit</b>
Cash .....		\$ -0-	\$ 5,200
Foreign currency option (asset) .....		9,500	-0-
Accumulated other comprehensive income .....		-0-	6,000
Option expense .....		1,700	-0-
		<u>\$11,200</u>	<u>\$11,200</u>

10/31	Foreign Currency Option .....	1,500	
	Accumulated Other Comprehensive Income (AOCI) ..		1,500
	To adjust the fair value of the option from \$9,500 to \$11,000 with a corresponding adjustment to AOCI.		
	Option Expense .....	3,500	
	Accumulated Other Comprehensive Income (AOCI) ..		3,500
	To recognize the change in the time value of the foreign currency option as an expense with a corresponding credit to AOCI.		
	Foreign Currency (Mexican pesos) .....	91,000	
	Cash .....		80,000
	Foreign Currency Option .....		11,000
	To record exercise of the foreign currency option: Record payment of \$80,000 in exchange for 1 million pesos, record the receipt of 1 million pesos as an asset at the spot rate of \$0.091, and remove the option from the accounts.		
	Parts Inventory .....	91,000	
	Foreign Currency (Mexican pesos) .....		91,000
	To record the purchase of parts through the payment of 1 million pesos to the Mexican supplier.		
	Accumulated Other Comprehensive Income (AOCI) .....	11,000	
	Adjustment to Net Income—Forecasted Transaction ..		11,000
	To close AOCI as an adjustment to net income.		

(Note: The final entry to close AOCI to Adjustment to Net Income is made at the date that the forecasted transaction was expected to occur, regardless of when the parts inventory affects net income.)

<b>Trial Balance—October 31</b>		<b>Debit</b>	<b>Credit</b>
Cash (\$5,200 credit balance + \$80,000 credit) .....		\$ -0-	\$85,200
Parts inventory (cost of goods sold) .....		91,000	-0-
Retained earnings, 9/30 .....		1,700	-0-
Foreign currency option expense .....		3,500	-0-
Adjustment to net income—forecasted transaction .....		-0-	11,000
		<u>\$96,200</u>	<u>\$96,200</u>

## Questions

1. What concept underlies the two-transaction perspective in accounting for foreign currency transactions?
2. A company makes an export sale denominated in a foreign currency and allows the customer one month to pay. Under the two-transaction perspective, accrual approach, how does the company account for fluctuations in the exchange rate for the foreign currency?
3. What factors create a foreign exchange gain on a foreign currency transaction? What factors create a foreign exchange loss?
4. In what way is the accounting for a foreign currency borrowing more complicated than the accounting for a foreign currency account payable?
5. What does the term *hedging* mean? Why do companies elect to follow this strategy?
6. How does a foreign currency option differ from a foreign currency forward contract?
7. How does the timing of hedges of (a) foreign currency denominated assets and liabilities, (b) foreign currency firm commitments, and (c) forecasted foreign currency transactions differ?

8. Why would a company prefer a foreign currency option over a forward contract in hedging a foreign currency firm commitment? Why would a company prefer a forward contract over an option in hedging a foreign currency asset or liability?
9. How do companies report foreign currency derivatives, such as forward contracts and options, on the balance sheet?
10. How does a company determine the fair value of a foreign currency forward contract? How does it determine the fair value of an option?
11. What is hedge accounting?
12. Under what conditions can companies use hedge accounting to account for a foreign currency option used to hedge a forecasted foreign currency transaction?
13. What are the differences in accounting for a forward contract used as (a) a cash flow hedge and (b) a fair value hedge of a foreign currency denominated asset or liability?
14. What are the differences in accounting for a forward contract used as a fair value hedge of (a) a foreign currency denominated asset or liability and (b) a foreign currency firm commitment?
15. What are the differences in accounting for a forward contract used as a cash flow hedge of (a) a foreign currency denominated asset or liability and (b) a forecasted foreign currency transaction?
16. How are changes in the fair value of an option accounted for in a cash flow hedge? In a fair value hedge?

## Problems

### LO 9-1

1. Which of the following combinations correctly describes the relationship between foreign currency transactions, exchange rate changes, and foreign exchange gains and losses?

Type of Transaction	Foreign Currency	Foreign Exchange Gain or Loss
a. Export sale	Appreciates	Loss
b. Import purchase	Appreciates	Gain
c. Import purchase	Depreciates	Gain
d. Export sale	Depreciates	Gain

### LO 9-2

2. In accounting for foreign currency transactions, which of the following approaches is used in the United States?
  - a. One-transaction perspective; accrue foreign exchange gains and losses.
  - b. One-transaction perspective; defer foreign exchange gains and losses.
  - c. Two-transaction perspective; defer foreign exchange gains and losses.
  - d. Two-transaction perspective; accrue foreign exchange gains and losses.

### LO 9-2

3. On October 1, 2017, Tile Co., a U.S. company, purchased products from Azulejo, a Portuguese company, with payment due on December 1, 2017. If Tile's 2017 operating income included no foreign exchange gain or loss, the transaction could have
  - a. Been denominated in U.S. dollars.
  - b. Resulted in an unusual gain.
  - c. Generated a foreign exchange gain to be reported as a deferred charge on the balance sheet.
  - d. Generated a foreign exchange loss to be reported as a separate component of stockholders' equity.

### LO 9-2

4. Brief, Inc., had a receivable from a foreign customer that is payable in the customer's local currency. On December 31, 2017, Brief correctly included this receivable for 200,000 local currency units (LCU) in its balance sheet at \$110,000. When Brief collected the receivable on February 15, 2018, the U.S. dollar equivalent was \$120,000. In Brief's 2018 consolidated income statement, how much should it report as a foreign exchange gain?
  - a. \$-0-
  - b. \$10,000
  - c. \$15,000
  - d. \$25,000

## LO 9-2, 9-3

5. On July 1, 2017, Mifflin Company borrowed 200,000 euros from a foreign lender evidenced by an interest-bearing note due on July 1, 2018. The note is denominated in euros. The U.S. dollar equivalent of the note principal is as follows:

Date	Amount
July 1, 2017 (date borrowed) . . . . .	\$225,000
December 31, 2017 (Mifflin's year-end) . . . . .	220,000
July 1, 2018 (date repaid) . . . . .	210,000

In its 2018 income statement, what amount should Mifflin include as a foreign exchange gain or loss on the note?

- \$15,000 gain
- \$15,000 loss
- \$10,000 gain
- \$10,000 loss

## LO 9-1, 9-2

6. Grace Co. had a Chinese yuan payable resulting from imports from China and a Mexican peso receivable resulting from exports to Mexico. Grace recorded foreign exchange losses related to both its yuan payable and peso receivable. Did the foreign currencies increase or decrease in dollar value from the date of the transaction to the settlement date?

Yuan	Peso
a. Increase	Increase
b. Increase	Decrease
c. Decrease	Increase
d. Decrease	Decrease

## LO 9-2, 9-3

7. Matthias Corp. had the following foreign currency transactions during 2017:
- Purchased merchandise from a foreign supplier on January 20 for the U.S. dollar equivalent of \$60,000 and paid the invoice on April 20 at the U.S. dollar equivalent of \$50,000.
  - On September 1, borrowed the U.S. dollar equivalent of \$300,000 evidenced by a note that is payable in the lender's local currency in one year. On December 31, the U.S. dollar equivalent of the principal amount was \$320,000.

In Matthias's 2017 income statement, what amount should be included as a net foreign exchange gain or loss?

- \$10,000 gain
- \$10,000 loss
- \$20,000 gain
- \$30,000 loss

## LO 9-7

8. A U.S. exporter has a Thai baht account receivable resulting from an export sale on June 1 to a customer in Thailand. The exporter signed a forward contract on June 1 to sell Thai baht and designated it as a cash flow hedge of a recognized Thai baht receivable. The spot rate was \$0.022 on that date, and the forward rate was \$0.021. Which of the following did the U.S. exporter report in net income?

- Discount expense
- Discount revenue
- Premium expense
- Premium revenue

## LO 9-8

9. St. Philip Company ordered parts costing €100,000 from a foreign supplier on January 15 when the spot rate was \$0.20 per €. A one-month forward contract was signed on that date to purchase €100,000 at a forward rate of \$0.23. The forward contract is properly designated as a fair value hedge of the €100,000 firm commitment. On February 15, when the company receives the parts, the spot rate is \$0.22. At what amount should St. Philip Company carry the parts inventory on its books?

- \$20,000
- \$21,000
- \$22,000
- \$23,000

## LO 9-5

10. On December 1, 2017, Ringling Company (a U.S.-based company) entered into a three-month forward contract to purchase 1,000,000 pesos on March 1, 2018. The following U.S. dollar per peso exchange rates apply:

Date	Spot Rate	Forward Rate (to March 1, 2018)
December 1, 2017	\$0.044	\$0.047
December 31, 2017	0.046	0.049
March 1, 2018	0.050	N/A

Ringling's incremental borrowing rate is 12 percent. The present value factor for two months at an annual interest rate of 12 percent (1 percent per month) is 0.9803.

Which of the following correctly describes the manner in which Ringling Company will report the forward contract on its December 31, 2017, balance sheet?

- As an asset in the amount of \$1,960.60.
- As an asset in the amount of \$2,940.90.
- As a liability in the amount of \$980.30.
- As a liability in the amount of \$2,940.90.

**Use the following information for Problems 11 and 12.**

MNC Corp. (a U.S.-based company) sold parts to a South Korean customer on December 1, 2017, with payment of 10 million South Korean won to be received on March 31, 2018. The following exchange rates apply:

Date	Spot Rate	Forward Rate (to March 31, 2018)
December 1, 2017	\$0.0035	\$0.0034
December 31, 2017	0.0033	0.0032
March 31, 2018	0.0038	N/A

MNC's incremental borrowing rate is 12 percent. The present value factor for three months at an annual interest rate of 12 percent (1 percent per month) is 0.9706.

## LO 9-2

11. Assuming that MNC did not enter into a forward contract, how much foreign exchange gain or loss should it report on its 2017 income statement with regard to this transaction?
- \$5,000 gain
  - \$3,000 gain
  - \$2,000 loss
  - \$1,000 loss

## LO 9-7

12. Assuming that MNC entered into a forward contract to sell 10 million South Korean won on December 1, 2017, as a fair value hedge of a foreign currency receivable, what is the net impact on its net income in 2017 resulting from a fluctuation in the value of the won?
- No impact on net income.
  - \$58.80 decrease in net income.
  - \$2,000 decrease in net income.
  - \$1,941.20 increase in net income.

## LO 9-9

13. On March 1, Pimlico Corporation (a U.S.-based company) expects to order merchandise from a supplier in Sweden in three months. On March 1, when the spot rate is \$0.10 per Swedish krona, Pimlico enters into a forward contract to purchase 500,000 Swedish kroner at a three-month forward rate of \$0.12. At the end of three months, when the spot rate is \$0.115 per Swedish krona, Pimlico orders and receives the merchandise, paying 500,000 kroner. What amount does Pimlico report in net income as a result of this cash flow hedge of a forecasted transaction?
- \$10,000 premium expense plus a \$7,500 positive adjustment to net income when the merchandise is purchased.
  - \$10,000 Discount expense plus a \$5,000 positive adjustment to net income when the merchandise is purchased.

- c. \$2,500 premium expense plus a \$5,000 negative adjustment to net income when the merchandise is purchased.
- d. \$2,500 premium expense plus a \$2,500 positive adjustment to net income when the merchandise is purchased.

**LO 9-9**

14. Torres Corporation (a U.S.-based company) expects to order goods from a foreign supplier at a price of 100,000 pounds, with delivery and payment to be made on September 20. On July 20, Torres purchased a two-month call option on 100,000 pounds and designated this option as a cash flow hedge of a forecasted foreign currency transaction. The option has a strike price of \$1.25 per pound and costs \$600. The spot rate for pounds is \$1.25 on June 20 and \$1.30 on September 20. What amount will Torres Corporation report as an option expense in net income for the quarter ended September 30?
- a. \$300
  - b. \$600
  - c. \$2,000
  - d. \$5,000

**Use the following information for Problems 15 through 17.**

On September 1, 2017, Jensen Company received an order to sell a machine to a customer in Canada at a price of 100,000 Canadian dollars. Jensen shipped the machine and received payment on March 1, 2018. On September 1, 2017, Jensen purchased a put option giving it the right to sell 100,000 Canadian dollars on March 1, 2018, at a price of \$80,000. Jensen properly designated the option as a fair value hedge of the Canadian dollar firm commitment. The option cost \$2,000 and had a fair value of \$2,300 on December 31, 2017. The fair value of the firm commitment was measured by referring to changes in the spot rate. The following spot exchange rates apply:

Date	U.S. Dollar per Canadian Dollar
September 1, 2017	\$0.80
December 31, 2017	0.79
March 1, 2018	0.77

Jensen Company's incremental borrowing rate is 12 percent. The present value factor for two months at an annual interest rate of 12 percent (1 percent per month) is 0.9803.

**LO 9-8**

15. What was the net impact on Jensen Company's 2017 income as a result of this fair value hedge of a firm commitment?
- a. \$-0-
  - b. \$680.30 decrease in income.
  - c. \$300 increase in income.
  - d. \$980.30 increase in income.

**LO 9-8**

16. What was the net impact on Jensen Company's 2018 income as a result of this fair value hedge of a firm commitment?
- a. \$-0-
  - b. \$1,319.70 decrease in income.
  - c. \$77,980.30 increase in income.
  - d. \$78,680.30 increase in income.

**LO 9-8**

17. What was the net increase or decrease in cash flow from having purchased the foreign currency option to hedge this exposure to foreign exchange risk?
- a. \$-0-
  - b. \$1,000 increase in cash flow.
  - c. \$1,500 decrease in cash flow.
  - d. \$3,000 increase in cash flow.

**Use the following information for Problems 18 through 20.**

On June 1, 2017, Micro Corp. received an order for parts from a Mexican customer at a price of 1,000,000 Mexican pesos with a delivery date of July 31, 2017. On June 1, when the U.S. dollar-Mexican peso

spot rate is \$0.115, Micro Corp. entered into a two-month forward contract to sell 1,000,000 pesos at a forward rate of \$0.12 per peso. Micro designates the forward contract as a fair value hedge of the firm commitment to receive pesos, and the fair value of the firm commitment is measured by referring to changes in the peso forward rate. Micro delivers the parts and receives payment on July 31, 2017, when the peso spot rate is \$0.118. On June 30, 2017, the Mexican peso spot rate is \$0.123, and the forward contract has a fair value of \$2,400.

LO 9-8

18. What is the net impact on Micro's net income for the quarter ended June 30, 2017, as a result of this forward contract hedge of a firm commitment?
- \$-0-
  - \$2,400 increase in net income.
  - \$4,000 decrease in net income.
  - \$8,000 increase in net income.

LO 9-8

19. What is the net impact on Micro's net income for the quarter ended September 30, 2017, as a result of this forward contract hedge of a firm commitment?
- \$-0-
  - \$115,000 increase in net income.
  - \$118,000 increase in net income.
  - \$120,000 increase in net income.

LO 9-8

20. What is Micro's net increase or decrease in cash flow from having entered into this forward contract hedge?
- \$-0-
  - \$1,000 increase in cash flow.
  - \$1,500 decrease in cash flow.
  - \$2,000 increase in cash flow.

**Use the following information for Problems 21 and 22.**

On November 1, 2017, Dos Santos Company forecasts the purchase of raw materials from a Brazilian supplier on February 1, 2018, at a price of 200,000 Brazilian reals. On November 1, 2017, Dos Santos pays \$1,500 for a three-month call option on 200,000 reals with a strike price of \$0.40 per real. Dos Santos properly designates the option as a cash flow hedge of a forecasted foreign currency transaction. On December 31, 2017, the option has a fair value of \$1,100. The following spot exchange rates apply:

Date	U.S. Dollar per Brazilian Real
November 1, 2017	\$0.40
December 31, 2017	0.38
February 1, 2018	0.41

LO 9-9

21. What is the net impact on Dos Santos Company's 2017 net income as a result of this hedge of a forecasted foreign currency transaction?
- \$-0-
  - \$400 decrease in net income.
  - \$1,000 decrease in net income.
  - \$1,400 decrease in net income.

LO 9-9

22. What is the net impact on Dos Santos Company's 2018 net income as a result of this hedge of a forecasted foreign currency transaction? Assume that the raw materials are consumed and become a part of the cost of goods sold in 2018.
- \$80,000 decrease in net income.
  - \$80,600 decrease in net income.
  - \$81,100 decrease in net income.
  - \$83,100 decrease in net income.

## LO 9-2

23. Turbo Corporation (a U.S.-based company) acquired merchandise on account from a foreign supplier on November 1, 2017, for 100,000 markkas. It paid the foreign currency account payable on January 17, 2018. The following exchange rates for 1 markka are known:

November 1, 2017	\$0.754
December 31, 2017	0.742
January 15, 2018	0.747

- a. How does the fluctuation in exchange rates affect Turbo's 2017 income statement?  
 b. How does the fluctuation in exchange rates affect Turbo's 2018 income statement?

## LO 9-2

24. On December 20, 2017, Butanta Company (a U.S. company headquartered in Miami, Florida) sold parts to a foreign customer at a price of 50,000 ostras. Payment is received on January 10, 2018. Currency exchange rates for 1 ostra are as follows:

December 20, 2017	\$1.05
December 31, 2017	1.02
January 10, 2018	0.98

- a. How does the fluctuation in exchange rates affect Butanta's 2017 income statement?  
 b. How does the fluctuation in exchange rates affect Butanta's 2018 income statement?

## LO 9-2

25. Peerless Corporation (a U.S. company) made a sale to a foreign customer on September 15, for 100,000 crowns. It received payment on October 15. The following exchange rates for 1 crown apply:

September 15	\$0.60
September 30	0.66
October 15	0.62

Prepare all journal entries for Peerless in connection with this sale, assuming that the company closes its books on September 30 to prepare interim financial statements.

## LO 9-2

26. On December 15, 2017, Lisbeth Inc. (a U.S. company) purchases merchandise inventory from a foreign supplier for 50,000 schillings. Lisbeth agrees to pay in 45 days after it sells the merchandise. Lisbeth makes sales rather quickly and pays the entire obligation on January 25, 2018. Currency exchange rates for 1 schilling are as follows:

December 15, 2017	\$0.28
December 31, 2017	0.30
January 25, 2018	0.33
January 31, 2018	0.34

Prepare all journal entries for Lisbeth Company in connection with this purchase and payment.

## LO 9-2

27. Voltac Corporation (a U.S. company located in Charlotte, North Carolina) has the following import/export transactions denominated in Mexican pesos in 2017:

March 1	Bought inventory costing 100,000 pesos on credit.
May 1	Sold 60 percent of the inventory for 80,000 pesos on credit.
August 1	Collected 70,000 pesos from customers.
September 1	Paid 60,000 pesos to suppliers.

Currency exchange rates for 1 peso for 2017 are as follows:

March 1	\$0.10
May 1	0.12
August 1	0.13
September 1	0.14
December 31	0.15

For each of the following accounts, how much will Voltac report on its 2017 financial statements?

- a. Inventory.
- b. Cost of Goods Sold.
- c. Sales.
- d. Accounts Receivable.
- e. Accounts Payable.
- f. Cash.

## LO 9-3

28. On April 1, 2017, Mendoza Company borrowed 500,000 euros for one year at an interest rate of 5 percent per annum. Mendoza must make its first interest payment on the loan on October 1, 2017, and will make a second interest payment on March 31, 2018, when the loan is repaid. Mendoza prepares U.S.-dollar financial statements and has a December 31 year-end. Prepare all journal entries related to this foreign currency borrowing assuming the following exchange rates for 1 euro:

April 1, 2017	\$1.10
October 1, 2017	1.20
December 31, 2017	1.24
March 31, 2018	1.28

## LO 9-2

29. Benjamin, Inc., operates an export/import business. The company has considerable dealings with companies in the country of Camerrand. The denomination of all transactions with these companies is alaries (AL), the Camerrand currency. During 2017, Benjamin acquires 20,000 widgets at a price of 8 alaries per widget. It will pay for them when it sells them. Currency exchange rates for 1 AL are as follows:

September 1, 2017	\$0.46
December 1, 2017	0.44
December 31, 2017	0.48
March 1, 2018	0.45

- a. Assume that Benjamin acquired the widgets on December 1, 2017, and made payment on March 1, 2018. What is the effect of the exchange rate fluctuations on reported income in 2017 and in 2018?
- b. Assume that Benjamin acquired the widgets on September 1, 2017, and made payment on December 1, 2017. What is the effect of the exchange rate fluctuations on reported income in 2017?
- c. Assume that Benjamin acquired the widgets on September 1, 2017, and made payment on March 1, 2018. What is the effect of the exchange rate fluctuations on reported income in 2017 and in 2018?

## LO 9-3

30. On September 30, 2017, Ericson Company negotiated a two-year, 1,000,000 dudek loan from a foreign bank at an interest rate of 2 percent per year. It makes interest payments annually on September 30 and will repay the principal on September 30, 2019. Ericson prepares U.S.-dollar financial statements and has a December 31 year-end.
- a. Prepare all journal entries related to this foreign currency borrowing assuming the following exchange rates for 1 dudek:

September 30, 2017	\$0.100
December 31, 2017	0.105
September 30, 2018	0.120
December 31, 2018	0.125
September 30, 2019	0.150

- b. Taking the exchange rate effect on the cost of borrowing into consideration, determine the effective interest rate in dollars on the loan in each of the three years 2017, 2018, and 2019.

## LO 9-7

31. Brandlin Company of Anaheim, California, sells parts to a foreign customer on December 1, 2017, with payment of 16,000 korunas to be received on March 1, 2018. Brandlin enters into a forward



contract on December 1, 2017, to sell 16,000 korunas on March 1, 2018. Relevant exchange rates for the koruna on various dates are as follows:

Date	Spot Rate	Forward Rate (to March 1, 2018)
December 1, 2017	\$2.70	\$2.775
December 31, 2017	2.80	2.900
March 1, 2018	2.95	N/A

Brandlin's incremental borrowing rate is 12 percent. The present value factor for two months at an annual interest rate of 12 percent (1 percent per month) is 0.9803. Brandlin must close its books and prepare financial statements at December 31.

- a. Assuming that Brandlin designates the forward contract as a cash flow hedge of a foreign currency receivable and recognizes any premium or discount using the straight-line method, prepare journal entries for these transactions in U.S. dollars. What is the impact on 2017 net income? What is the impact on 2018 net income? What is the impact on net income over the two accounting periods?
  - b. Assuming that Brandlin designates the forward contract as a fair value hedge of a foreign currency receivable, prepare journal entries for these transactions in U.S. dollars. What is the impact on 2017 net income? What is the impact on 2018 net income? What is the impact on net income over the two accounting periods?
32. Use the same facts as in Problem 31 except that Brandlin Company purchases materials from a foreign supplier on December 1, 2017, with payment of 16,000 korunas to be made on March 1, 2018. The materials are consumed immediately and recognized as cost of goods sold at the date of purchase. On December 1, 2017, Brandlin enters into a forward contract to purchase 16,000 korunas on March 1, 2018.
- a. Assuming that Brandlin designates the forward contract as a cash flow hedge of a foreign currency payable and recognizes any premium or discount using the straight-line method, prepare journal entries for these transactions in U.S. dollars. What is the impact on 2017 net income? What is the impact on 2018 net income? What is the impact on net income over the two accounting periods?
  - b. Assuming that Brandlin designates the forward contract as a fair value hedge of a foreign currency payable, prepare journal entries for these transactions in U.S. dollars. What is the impact on net income in 2017 and in 2018? What is the impact on net income over the two accounting periods?
33. On June 1, Alexander Corporation sold goods to a foreign customer at a price of 1,000,000 pesos and will receive payment in three months on September 1. On June 1, Alexander acquired an option to sell 1,000,000 pesos in three months at a strike price of \$0.062. Relevant exchange rates and option premiums for the peso are as follows:

Date	Spot Rate	Put Option Premium for September 1 (strike price \$0.062)
June 1	\$0.062	\$0.0025
June 30	0.066	0.0018
September 1	0.061	N/A

Alexander must close its books and prepare its second-quarter financial statements on June 30.

- a. Assuming that Alexander designates the foreign currency option as a cash flow hedge of a foreign currency receivable, prepare journal entries for these transactions in U.S. dollars. What is the impact on net income over the two accounting periods?
  - b. Assuming that Alexander designates the foreign currency option as a fair value hedge of a foreign currency receivable, prepare journal entries for these transactions in U.S. dollars. What is the impact on net income over the two accounting periods?
34. On June 1, Cairns Corporation purchased goods from a foreign supplier at a price of 1,000,000 francs and will make payment in three months on September 1. On June 1, Cairns acquired an

LO 9-7

LO 9-7

LO 9-7

option to purchase 1,000,000 francs in three months at a strike price of \$0.852. Relevant exchange rates and option premiums for the franc are as follows:

Date	Spot Rate	Call Option Premium for September 1 (strike price \$0.852)
June 1	\$0.852	\$0.002
June 30	0.858	0.007
September 1	0.872	N/A

Cairns must close its books and prepare its second-quarter financial statements on June 30.

- Assuming that Cairns designates the foreign currency option as a cash flow hedge of a foreign currency payable, prepare journal entries for these transactions in U.S. dollars. What is the impact on net income over the two accounting periods?
- Assuming that Cairns designates the foreign currency option as a fair value hedge of a foreign currency payable, prepare journal entries for these transactions in U.S. dollars. What is the impact on net income over the two accounting periods?

## LO 9-7

35. On November 1, 2017, Bernard Company (a U.S.-based company) sold merchandise to a foreign customer for 100,000 FCUs with payment to be received on April 30, 2018. At the date of sale, Bernard entered into a six-month forward contract to sell 100,000 FCUs. The company properly designates the forward contract as a cash flow hedge of a foreign currency receivable. The following exchange rates apply:

Date	Spot Rate	Forward Rate (to April 30, 2018)
November 1, 2017	\$0.21	\$0.20
December 31, 2017	0.19	0.17
April 30, 2018	0.18	N/A

Bernard's incremental borrowing rate is 12 percent. The present value factor for four months at an annual interest rate of 12 percent (1 percent per month) is 0.9610.

- Prepare all journal entries, including December 31 adjusting entries, to record the sale and forward contract.
- What is the impact on net income in 2017?
- What is the impact on net income in 2018?

## LO 9-7

36. Eximco Corporation (based in Champaign, Illinois) has a number of transactions with companies in the country of Mongagua, where the currency is the mong. On November 30, 2017, Eximco sold equipment at a price of 500,000 mongs to a Mongaguan customer that will make payment on January 31, 2018. In addition, on November 30, 2017, Eximco purchased raw materials from a Mongaguan supplier at a price of 300,000 mongs; it will make payment on January 31, 2018. To hedge its net exposure in mongs, Eximco entered into a two-month forward contract on November 30, 2017, to deliver 200,000 mongs to the foreign currency broker in exchange for \$104,000. Eximco properly designates its forward contract as a fair value hedge of a foreign currency receivable. The following rates for the mong apply:

Date	Spot Rate	Forward Rate (to January 31, 2018)
November 30, 2017	\$0.53	\$0.52
December 31, 2017	0.50	0.48
January 31, 2018	0.49	N/A

Eximco's incremental borrowing rate is 12 percent. The present value factor for one month at an annual interest rate of 12 percent (1 percent per month) is 0.9901.

- Prepare all journal entries, including December 31 adjusting entries, to record these transactions and the forward contract.

- b. What is the impact on net income in 2017?  
 c. What is the impact on net income in 2018?

## LO 9-7, 9-8

37. On October 1, 2017, Sharp Company (based in Denver, Colorado) entered into a forward contract to sell 100,000 rubles in four months (on January 31, 2018) and receive \$39,000 in U.S. dollars. Exchange rates for the ruble follow:

Date	Spot Rate	Forward Rate (to January 31, 2018)
October 1, 2017	\$0.35	\$0.39
December 31, 2017	0.38	0.41
January 31, 2018	0.40	N/A

Sharp's incremental borrowing rate is 12 percent. The present value factor for one month at an annual interest rate of 12 percent (1 percent per month) is 0.9901. Sharp must close its books and prepare financial statements on December 31.

- a. Prepare journal entries, assuming that Sharp entered into the forward contract as a fair value hedge of a 100,000 ruble receivable arising from a sale made on October 1, 2017. Include entries for both the sale and the forward contract.  
 b. Prepare journal entries, assuming that Sharp entered into the forward contract as a fair value hedge of a firm commitment related to a 100,000 ruble sale that will be made on January 31, 2018. Include entries for both the firm commitment and the forward contract. The fair value of the firm commitment is measured by referring to changes in the forward rate.

## LO 9-8

38. On August 1, Ling-Harvey Corporation (a U.S.-based importer) placed an order to purchase merchandise from a foreign supplier at a price of 400,000 ringgits. Ling-Harvey will receive and make payment for the merchandise in three months on October 31. On August 1, Ling-Harvey entered into a forward contract to purchase 400,000 ringgits in three months at a forward rate of \$0.60. It properly designates the forward contract as a fair value hedge of a foreign currency firm commitment. The fair value of the firm commitment is measured by referring to changes in the forward rate. Relevant exchange rates for the ringgit are as follows:

Date	Spot Rate	Forward Rate (to October 31)
August 1	\$0.60	\$0.60
September 30	0.63	0.66
October 31	0.68	N/A

Ling-Harvey's incremental borrowing rate is 12 percent. The present value factor for one month at an annual interest rate of 12 percent (1 percent per month) is 0.9901. Ling-Harvey must close its books and prepare its third-quarter financial statements on September 30.

- a. Prepare journal entries for the forward contract and firm commitment through October 31.  
 b. Assuming the inventory is sold in the fourth quarter, what is the impact on net income over the two accounting periods?  
 c. What net cash outflow results from the purchase of merchandise from the foreign supplier?

## LO 9-8

39. On June 1, Vandervelde Corporation (a U.S.-based manufacturing firm) received an order to sell goods to a foreign customer at a price of 100,000 leks. Vandervelde will ship the goods and receive payment in three months on September 1. On June 1, Vandervelde purchased an option to sell 100,000 leks in three months at a strike price of \$1.00. It properly designated the option as a fair value hedge of a foreign currency firm commitment. The fair value of the firm commitment is measured by referring to changes in the spot rate. Relevant exchange rates and option premiums for the lek are as follows:

Date	Spot Rate	Put Option Premium for September 1 (strike price \$1.00)
June 1	\$1.00	\$0.020
June 30	0.94	0.028
September 1	0.88	N/A

Vandervelde's incremental borrowing rate is 12 percent. The present value factor for two months at an annual interest rate of 12 percent (1 percent per month) is 0.9803. Vandervelde Corporation must close its books and prepare its second-quarter financial statements on June 30.

- Prepare journal entries for the foreign currency option and firm commitment.
- What is the impact on net income over the two accounting periods?
- What is the net cash inflow resulting from the sale of goods to the foreign customer?

## LO 9-8

40. Spitz Company ordered merchandise from a foreign supplier on November 20 at a price of 100,000 forints when the spot rate was \$0.50 per forint. Delivery and payment were scheduled for December 20. On November 20, Spitz acquired a call option on 100,000 forints at a strike price of \$0.50, paying a premium of \$0.01 per forint. It designates the option as a fair value hedge of a foreign currency firm commitment. The fair value of the firm commitment is measured by referring to changes in the spot rate. The merchandise arrives and Spitz makes payment according to schedule. Spitz sells the merchandise by December 31, when it closes its books.

- Assuming a spot rate of \$0.53 per forint on December 20, prepare all journal entries to account for the foreign currency option, foreign currency firm commitment, and purchase of inventory.
- Assuming a spot rate of \$0.48 per forint on December 20, prepare all journal entries to account for the foreign currency option, foreign currency firm commitment, and purchase of inventory.

## LO 9-9

41. Based on past experience, Leickner Company expects to purchase raw materials from a foreign supplier at a cost of 1,000,000 marks on March 15, 2018. To hedge this forecasted transaction, the company acquires a three-month call option to purchase 1,000,000 marks on December 15, 2017. Leickner selects a strike price of \$0.58 per mark, paying a premium of \$0.005 per unit, when the spot rate is \$0.58. The spot rate increases to \$0.584 at December 31, 2017, causing the fair value of the option to increase to \$8,000. By March 15, 2018, when the raw materials are purchased, the spot rate has climbed to \$0.59, resulting in a fair value for the option of \$10,000.

- Prepare all journal entries for the option hedge of a forecasted transaction and for the purchase of raw materials, assuming that December 31 is Leickner's year-end and that the raw materials are included in the cost of goods sold in 2018.
- What is the overall impact on net income over the two accounting periods?
- What is the net cash outflow to acquire the raw materials?

## LO 9-7, 9-7, 9-8

42. Vino Veritas Company, a U.S.-based importer of wines and spirits, placed an order with a French supplier for 1,000 cases of wine at a price of 200 euros per case. The total purchase price is 200,000 euros. Relevant exchange rates for the euro are as follows:

Date	Spot Rate	Forward Rate to October 31	Call Option Premium for October 31 (strike price \$1.00)
September 15	\$1.00	\$1.06	\$0.035
September 30	1.05	1.09	0.070
October 31	1.10	1.10	0.100

Vino Veritas Company has an incremental borrowing rate of 12 percent (1 percent per month) and closes the books and prepares financial statements at September 30.

- Assume that the wine arrived on September 15, and the company made payment on October 31. There was no attempt to hedge the exposure to foreign exchange risk. Prepare journal entries to account for this import purchase.
- Assume that the wine arrived on September 15, and the company made payment on October 31. On September 15, Vino Veritas entered into a 45-day forward contract to purchase 200,000 euros. It properly designated the forward contract as a fair value hedge of a foreign currency payable. Prepare journal entries to account for the import purchase and foreign currency forward contract.
- Vino Veritas ordered the wine on September 15. The wine arrived and the company paid for it on October 31. On September 15, Vino Veritas entered into a 45-day forward contract to purchase 200,000 euros. The company properly designated the forward contract as a fair value hedge of a foreign currency firm commitment. The fair value of the firm commitment is measured by referring to changes in the forward rate. Prepare journal entries to account for the foreign currency forward contract, firm commitment, and import purchase.

- d. The wine arrived on September 15, and the company made payment on October 31. On September 15, Vino Veritas purchased a 45-day call option for 200,000 euros. It properly designated the option as a cash flow hedge of a foreign currency payable. Prepare journal entries to account for the import purchase and foreign currency option.
- e. The company ordered the wine on September 15. It arrived on October 31, and the company made payment on that date. On September 15, Vino Veritas purchased a 45-day call option for 200,000 euros. It properly designated the option as a fair value hedge of a foreign currency firm commitment. The fair value of the firm commitment is measured by referring to changes in the spot rate. Prepare journal entries to account for the foreign currency option, firm commitment, and import purchase.

## Develop Your Skills

### RESEARCH CASE—INTERNATIONAL FLAVORS AND FRAGRANCES



Many companies make annual reports available on their corporate web page, often under an Investors tab. Annual reports also can be accessed through the SEC's EDGAR system at [www.sec.gov](http://www.sec.gov) (under Filings, click Company Filings Search, type in Company Name, and under Filing Type, search for 10-K).

Access the most recent annual report for International Flavors and Fragrances (IFF) to complete the following requirements.

#### Required

1. Identify the location(s) in the annual report where IFF provides disclosures related to its management of foreign exchange risk.
2. Determine the types of hedging instruments the company uses and the types of hedges in which it engages.
3. Determine the manner in which the company discloses the fact that its foreign exchange hedges are effective in offsetting gains and losses on the underlying items being hedged.

### ACCOUNTING STANDARDS CASE—FORECASTED TRANSACTIONS



Fergusson Corporation, a U.S. company, manufactures components for the automobile industry. In the past, Fergusson purchased actuators used in its products from a supplier in the United States. The company plans to shift its purchases to a supplier in Portugal. Fergusson's CFO expects to place an order with the Portuguese supplier in the amount of 200,000 euros in three months. In contemplation of this future import, the CFO purchased a euro call option to hedge the cash flow risk that the euro might appreciate against the U.S. dollar over the next three months. The CFO is aware that a foreign currency option used to hedge the cash flow risk associated with a forecasted foreign currency transaction may be designated as a hedge for accounting purposes only if the forecasted transaction is probable. However, he is unsure how he should demonstrate that the anticipated import purchase from Portugal is likely to occur. He wonders whether management's intention to make the purchase is sufficient.

#### Required

Search current U.S. authoritative accounting literature to determine whether management's intent is sufficient to assess that a forecasted foreign currency transaction is likely to occur. If not, what additional evidence must be considered? Identify the FASB ASC guidance for answering these questions.

### EXCEL CASE—DETERMINE FOREIGN EXCHANGE GAINS AND LOSSES



Import/Export Company, a U.S. company, made a number of import purchases and export sales denominated in foreign currency in 2015. Information related to these transactions is summarized in the following table. The company made each purchase or sale on the date in the Transaction Date column and made payment in foreign currency or received payment on the date in the Settlement Date column.

Foreign Currency	Type of Transaction	Amount in Foreign Currency	Transaction Date	Settlement Date
Brazilian real (BRL)	Import purchase	(130,000)	1/10/2015	5/10/2015
Chilean peso (CLP)	Import purchase	(30,000,000)	1/10/2015	5/10/2015
Swiss franc (CHF)	Export sale	50,000	1/10/2015	4/10/2015
Swiss franc (CHF)	Import purchase	(50,000)	4/10/2015	7/10/2015
Euro	Export sale	45,000	1/10/2015	4/10/2015
Euro	Export sale	45,000	4/10/2015	7/10/2015
Chinese yuan (CNY)	Import purchase	(300,000)	1/10/2015	7/10/2015

### Required

1. Create an electronic spreadsheet with the information from the preceding table. Label columns as follows:
  - Foreign Currency
  - Type of Transaction
  - Amount in Foreign Currency
  - Transaction Date
  - Exchange Rate at Transaction Date
  - \$ Value at Transaction Date
  - Settlement Date
  - Exchange Rate at Settlement Date
  - \$ Value at Settlement Date
  - Foreign Exchange Gain (Loss)
2. Use historical exchange rate information available on the Internet at [www.x-rates.com](http://www.x-rates.com), Historic Lookup, to find the 2015 exchange rates between the U.S. dollar and each foreign currency on the relevant transaction and settlement dates.
3. Complete the electronic spreadsheet to determine the foreign exchange gain (loss) on each transaction. Determine the total net foreign exchange gain (loss) reported in Import/Export Company's 2015 income statement.
4. Explain why a foreign exchange gain arises for some transactions and a foreign exchange loss occurs for other transactions.

## ANALYSIS CASE—CASH FLOW HEDGE



On February 1, 2017, Linber Company forecasted the purchase of component parts on May 1, 2017, at a price of 100,000 euros. On that date, Linber entered into a forward contract to purchase 100,000 euros on May 1, 2017. It designated the forward contract as a cash flow hedge of the forecasted transaction. The spot rate for euros on February 1, 2017, was \$1 per euro. On May 1, 2017, the forward contract was settled, and the component parts were received and paid for. The parts were consumed in the second quarter of 2017.

Linber's financial statements reported the following amounts related to this cash flow hedge (credit balances in parentheses):

Income Statement	First Quarter 2017	Second Quarter 2017
Premium expense	\$4,000	\$ 2,000
Cost of goods sold	—0—	103,000
Adjustment to net income	—0—	3,000

Balance Sheet	3/31/17	5/1/17
Forward contract (liability)	\$(1,980)*	\$ —0—
AOCI (credit)	(2,020)	—0—
Change in cash	—0—	(106,000)

\*\$2,000 × 0.9901 = \$1,980, where 0.9901 is the present value factor for one month at an annual interest rate of 12 percent calculated as 1/1.01.

**Required**

1. On February 1, 2017, what was the U.S. dollar per euro forward rate to May 1, 2017?
2. On March 31, 2017, what was the U.S. dollar per euro forward rate to May 1, 2017?
3. Was Linber better off or worse off as a result of having entered into this cash flow hedge of a forecasted transaction? By what amount?
4. What does the total premium expense of \$6,000 reflect?

**INTERNET CASE—HISTORICAL EXCHANGE RATES**

The Pier Ten Company, a U.S. company, made credit sales to four customers in Asia on September 15, 2015, and received payment on October 15, 2015. Information related to these sales is as follows:

Customer	Location	Invoice Price
Rama Properties Ltd.	New Delhi	3,319,000 Indian rupees (INR)
Luzon Island Group	Manila	2,337,000 Philippine pesos (PHP)
Mishima Industries Inc.	Tokyo	6,017,000 Japanese yen (JPY)
Melayu Trading Company	Kuala Lumpur	214,800 Malaysian ringgit (MYR)

The Pier Ten Company's fiscal year ends September 30.

**Required**

1. Use historical exchange rate information available on the Internet at [www.x-rates.com](http://www.x-rates.com), Historical Lookup, to find exchange rates between the U.S. dollar and each foreign currency for September 15, September 30, and October 15, 2015.
2. Determine the foreign exchange gains and losses that Pier Ten would have recognized in net income in the fiscal years ended September 30, 2015, and September 30, 2016, and the overall foreign exchange gain or loss for each transaction. Determine for which transaction, if any, it would have been important for Pier Ten to hedge its foreign exchange risk.
3. Pier Ten could have acquired a one-month put option on September 15, 2015, to hedge the foreign exchange risk associated with each of the four export sales. In each case, the put option would have cost \$100 with the strike price equal to the September 15, 2015, spot rate. Determine for which hedges, if any, Pier Ten would have recognized a net gain on the foreign currency option.

**COMMUNICATION CASE—FORWARD CONTRACTS AND OPTIONS**

Palmetto Bug Extermination Corporation (PBEC), a U.S. company, regularly purchases chemicals from a supplier in Switzerland with the invoice price denominated in Swiss francs. PBEC has experienced several foreign exchange losses in the past year due to increases in the U.S. dollar price of the Swiss currency. As a result, Dewey Nukem, PBEC's CEO, has asked you to investigate the possibility of using derivative financial instruments, specifically foreign currency forward contracts and foreign currency options, to hedge the company's exposure to foreign exchange risk.

**Required**

Draft a memo to CEO Nukem comparing the advantages and disadvantages of using forward contracts and options to hedge foreign exchange risk. Recommend the type of hedging instrument you believe the company should employ and justify this recommendation.

# Translation of Foreign Currency Financial Statements

- Fluor Corporation said on Monday it would buy Dutch engineering and construction firm Stork from its private equity owner Arle Capital, for \$755 million . . . Fluor said the acquisition would combine well with its own operations in the same industry and give it access to Stork's customer base, which spans the globe but is most focused in Europe.<sup>1</sup>
- Omnicom Group Inc., the world's second largest advertising company, has agreed to pay 1 billion reais (\$270 million) for Brazil's Grupo ABC, growing Omnicom's publicity, branding services, and content in Latin America's largest economy, a source with direct knowledge of the transaction said on Friday.<sup>2</sup>
- *Kellogg Co is setting up a joint venture with the African arm of Singapore's Tolaram Group to bolster its breakfast and snack food offerings in West Africa.* Kellogg will also pay \$450 million for a 50 percent stake in Lagos, Nigeria-based Multipro, a food sales and distribution company owned by Tolaram, with an option to buy a stake in Tolaram's African unit.<sup>3</sup>

Recent announcements such as these are common in today's global economy. Companies establish operations in foreign countries for a variety of reasons including to develop new markets for their products, take advantage of lower production costs, or gain access to raw materials. Some multinational companies have reached a stage in their development in which domestic operations are no longer considered to be of higher priority than international operations. For example, in 2015, U.S.-based International Flavors and Fragrances, Inc., had operations in 38 countries and generated 76 percent of its net sales outside North America; Merck & Co., Inc., generated 56 percent of its sales and had 32 percent of its property, plant, and equipment outside of the United States.

Foreign operations create numerous managerial problems for the parent company that do not exist for domestic operations. Some of these problems arise from cultural differences between the home and foreign countries. Other problems exist because foreign operations generally are

## Learning Objectives

After studying this chapter, you should be able to:

- LO 10-1** Explain the theoretical underpinnings and the limitations of the current rate and temporal methods.
- LO 10-2** Describe guidelines for determining when foreign currency financial statements are to be translated using the current rate method and when they are to be remeasured using the temporal method.
- LO 10-3** Translate a foreign subsidiary's financial statements into its parent's reporting currency using the current rate method and calculate the related translation adjustment.
- LO 10-4** Remeasure a foreign subsidiary's financial statements using the temporal method and calculate the associated remeasurement gain or loss.
- LO 10-5** Understand the rationale for hedging a net investment in a foreign operation and describe the treatment of gains and losses on hedges used for this purpose.
- LO 10-6** Prepare a consolidation worksheet for a parent and its foreign subsidiary.

<sup>1</sup> Reuters U.S. Edition Online, "Fluor to buy Stork of the Netherlands for \$755 million," December 7, 2015, [www.reuters.com](http://www.reuters.com).

<sup>2</sup> Reuters U.S. Edition Online, "Omnicom to buy Brazil advertising group ABC, source says," November 20, 2015, [www.reuters.com](http://www.reuters.com).

<sup>3</sup> Reuters U.S. Edition Online, "Kellogg to spend \$450 million to expand in Africa," September 15, 2015," [www.reuters.com](http://www.reuters.com).



required to comply with the laws and regulations of the foreign country. For example, most countries require companies to prepare financial statements in the local currency using local accounting rules.

To prepare worldwide consolidated financial statements, a U.S. parent company must (1) convert the foreign GAAP financial statements of its foreign operations into U.S. GAAP and (2) translate the financial statements from the foreign currency into U.S. dollars. This conversion and translation process must be carried out regardless of whether the foreign operation is a branch, joint venture, majority-owned subsidiary, or affiliate accounted for under the equity method. This chapter deals with the issue of translating foreign currency financial statements into the parent's reporting currency.

Two major theoretical issues are related to the translation process: (1) which *translation method* should be used (the current rate method or the temporal method) and (2) where the resulting *translation adjustment* should be reported in the consolidated financial statements (as a translation gain/loss in net income or as a component of accumulated other comprehensive income in equity). In this chapter, these two issues are examined first from a conceptual perspective and second by the manner in which the FASB in the United States has resolved these issues. The chapter also discusses IFRS on this topic.

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## Exchange Rates Used in Translation

Two methods currently are used in the United States and most other countries to translate foreign currency financial statements into the parent company's reporting currency, and *two types of exchange rates* are used in applying these methods:

1. *Historical exchange rate*: the exchange rate that existed when a transaction occurred.
2. *Current exchange rate*: the exchange rate that exists at the balance sheet date.

Translation methods differ as to which balance sheet and income statement accounts are translated at historical exchange rates and which are translated at current exchange rates. Before continuing on to the next paragraph, please read the Discussion Question: How Do We Report This?

Assume that the company described in the Discussion Question began operations in Gualos on December 31, 2016, when the exchange rate was \$0.20 per vilsek. When Southwestern Corporation prepared its consolidated balance sheet at December 31, 2016, it had no choice about the exchange rate used to translate the Land account into U.S. dollars. It translated the Land account carried on the foreign subsidiary's books at 150,000 vilseks at an exchange rate of \$0.20; \$0.20 was both the *historical* and *current* exchange rate for the Land account at December 31, 2016.

<b>Consolidated Balance Sheet: 12/31/16</b>	
Land (150,000 vilseks × \$0.20) .....	\$30,000

During the first quarter of 2017, the vilsek appreciates relative to the U.S. dollar by 15 percent; the exchange rate at March 31, 2017, is \$0.23 per vilsek. In preparing its balance sheet at the end of the first quarter of 2017, Southwestern must decide whether the Land account carried on the subsidiary's balance sheet at 150,000 vilseks should be translated into dollars using the *historical exchange rate* of \$0.20 or the *current exchange rate* of \$0.23.

If the historical exchange rate is used at March 31, 2017, Land continues to be carried on the consolidated balance sheet at \$30,000 with no change from December 31, 2016.

<b>Historical Rate—Consolidated Balance Sheet: 3/31/17</b>	
Land (150,000 vilseks × \$0.20) .....	\$30,000



## Discussion Question

### HOW DO WE REPORT THIS?

Southwestern Corporation operates throughout Texas buying and selling widgets. To expand into more profitable markets, the company recently decided to open a small subsidiary in the nearby country of Gualos. The currency in Gualos is the vilsek. For some time, the government of that country held the exchange rate constant: 1 vilsek equaled \$0.20 (or 5 vilseks equaled \$1.00). Initially, Southwestern invested cash in this new operation; its \$90,000 was converted into 450,000 vilseks ( $\$90,000 \times 5$ ). Southwestern used one-third of this money (150,000 vilseks, or \$30,000) to purchase land to hold for the possible construction of a plant, invested one-third in short-term marketable securities, and spent one-third in acquiring inventory for future resale.

Shortly thereafter, the Gualos government officially revalued the currency so that 1 vilsek was worth \$0.23. Because of the strength of the local economy, the vilsek gained buying power in relation to the U.S. dollar. The vilsek then was considered more valuable than in the past. Southwestern's accountants realized that a change had occurred; each of the assets (land, inventory, and marketable securities) was now worth more in U.S. dollars than the original \$30,000 investment:  $150,000 \text{ vilseks} \times \$0.23 = \$34,500$ . Two of the company's top officers met to determine the appropriate method for reporting this change in currency values.

**Controller:** Nothing has changed. Our cost is still \$30,000 for each item. That's what we spent. Accounting uses historical cost wherever possible. Thus, we should do nothing.

**Finance director:** Yes, but the old rates are meaningless now. We would be foolish to report figures based on a rate that no longer exists. The cost is still 150,000 vilseks for each item. You are right, the cost has not changed. However, the vilsek is now worth \$0.23, so our reported value must change.

**Controller:** The new rate affects us only if we take money out of the country. We don't plan to do that for many years. The rate will probably change 20 more times before we remove money from Gualos. We've got to stick to our \$30,000 historical cost. That's our cost and that's good, basic accounting.

**Finance director:** You mean that for the next 20 years we will be translating balances for external reporting purposes using an exchange rate that has not existed for years? That doesn't make sense. I have a real problem using an antiquated rate for the inventory and marketable securities. They will be sold for cash when the new rate is in effect. These balances have no remaining relation to the original exchange rate.

**Controller:** You misunderstand the impact of an exchange rate fluctuation. Within Gualos, no impact occurs. One vilsek is still one vilsek. The effect is realized only when an actual conversion takes place into U.S. dollars at a new rate. At that point, we will properly measure and report the gain or loss. That is when realization takes place. Until then our cost has not changed.

**Finance director:** I simply see no value at all in producing financial information based entirely on an exchange rate that does not exist. I don't care when realization takes place.

**Controller:** You've got to stick with historical cost, believe me. The exchange rate today isn't important unless we actually convert vilseks to dollars.

How should Southwestern report each of these three assets on its current balance sheet? Does the company have a gain because the value of the vilsek has increased relative to the U.S. dollar?

If the current exchange rate is used, Land is carried on the consolidated balance sheet at \$34,500, an increase of \$4,500 from December 31, 2016.

<b>Current Rate—Consolidated Balance Sheet: 3/31/17</b>	
Land (150,000 vilseks × \$0.23) . . . . .	\$34,500

### Translation Adjustments

To keep the accounting equation ( $A = L + OE$ ) in balance, the increase of \$4,500 in the Land account on the asset (A) side of the consolidated balance sheet when the current exchange rate is used must be offset by an equal \$4,500 *increase* in owners' equity (OE) on the other side of the balance sheet. The increase in owners' equity is called a *positive translation adjustment*. It has a *credit* balance.

The increase in dollar value of the Land due to the vilsek's appreciation creates a positive translation adjustment. This is true for any asset on the Gualos subsidiary's balance sheet that is translated at the *current* exchange rate. *Assets translated at the current exchange rate when the foreign currency has appreciated generate a positive (credit) translation adjustment.*

Liabilities on the Gualos subsidiary's balance sheet that are translated at the current exchange rate also increase in dollar value when the vilsek appreciates. For example, Southwestern would report Notes Payable of 10,000 vilseks at \$2,000 on the December 31, 2016, balance sheet and at \$2,300 on the March 31, 2017, balance sheet. To keep the accounting equation in balance, the increase in liabilities (L) must be offset by a *decrease* in owners' equity (OE), giving rise to a *negative translation adjustment*. This has a *debit* balance. *Liabilities translated at the current exchange rate when the foreign currency has appreciated generate a negative (debit) translation adjustment.*

### Balance Sheet Exposure

Balance sheet items (assets and liabilities) translated at the *current* exchange rate change in dollar value from balance sheet to balance sheet as a result of the change in exchange rate. These items are *exposed* to translation adjustment. Balance sheet items translated at *historical* exchange rates do not change in dollar value from one balance sheet to the next. These items are *not* exposed to translation adjustment. Exposure to translation adjustment is referred to as *balance sheet, translation, or accounting exposure*. *Transaction exposure*, discussed in the previous chapter, arises when a company has foreign currency receivables and payables and can be contrasted with *balance sheet exposure* in the following way: *Transaction exposure gives rise to foreign exchange gains and losses that are ultimately realized in cash; translation adjustments arising from balance sheet exposure do not directly result in cash inflows or outflows.*

Each item translated at the current exchange rate is exposed to translation adjustment. In effect, a separate translation adjustment exists for each of these exposed items. However, negative translation adjustments on liabilities offset positive translation adjustments on assets when the foreign currency appreciates. If total exposed assets equal total exposed liabilities throughout the year, the translation adjustments (although perhaps significant on an individual basis) net to a zero balance. The *net* translation adjustment needed to keep the consolidated balance sheet in balance is based solely on the *net asset* or *net liability* exposure.

A foreign operation has a *net asset balance sheet exposure* when assets translated at the current exchange rate are higher in amount than liabilities translated at the current exchange rate. A *net liability balance sheet exposure* exists when liabilities translated at the current exchange rate are higher than assets translated at the current exchange rate. The following summarizes the relationship between exchange rate fluctuations, balance sheet exposure, and translation adjustments:

<b>Balance Sheet Exposure</b>	<b>Foreign Currency (FC)</b>	
	<b>Appreciates</b>	<b>Depreciates</b>
Net asset	Positive translation adjustment	Negative translation adjustment
Net liability	Negative translation adjustment	Positive translation adjustment

Exactly how to handle the translation adjustment in the consolidated financial statements is a matter of some debate. The major issue is whether the translation adjustment should be treated as a *translation gain or loss reported in net income* (and then closed to retained earnings) or whether the translation adjustment should be treated as a *direct adjustment to owners' equity* (in accumulated other comprehensive income) *without affecting net income*. We consider this issue in more detail later after examining methods of translation.

### LO 10-1

Explain the theoretical underpinnings and the limitations of the current rate and temporal methods.

## Translation Methods

Two major translation methods are currently used: (1) the current rate method and (2) the temporal method. In this section, we discuss the concepts and basic procedures of each method from the perspective of a U.S.-based multinational company translating foreign currency financial statements into U.S. dollars.

### Current Rate Method

The basic assumption underlying the *current rate method* is that a company's *net investment* in a foreign operation is *exposed* to foreign exchange risk. In other words, a foreign operation represents a foreign currency net asset and if the foreign currency *decreases* in value against the U.S. dollar, a *decrease in the U.S. dollar value of the foreign currency net asset* occurs. This decrease in U.S. dollar value of the net investment will be reflected by reporting a *negative* (debit balance) translation adjustment in the consolidated financial statements. If the foreign currency *increases* in value, an *increase in the U.S. dollar value of the net asset* occurs and will be reflected through a *positive* (credit balance) translation adjustment.

To measure the net investment's exposure to foreign exchange risk, *all assets and all liabilities* of the foreign operation are translated at the *current* exchange rate. Stockholders' equity items are translated at historical rates. *The balance sheet exposure under the current rate method is equal to the foreign operation's net asset (total assets minus total liabilities) position.*<sup>4</sup>

$$\text{Total assets} > \text{Total liabilities} \rightarrow \text{Net asset exposure}$$

A positive translation adjustment arises when the foreign currency appreciates, and a negative translation adjustment arises when the foreign currency depreciates.

To reiterate, assets and liabilities are translated at the current rate and stockholders' equity is translated at historical rates to reflect the fact that the current rate method assumes that the company's net investment in a foreign operation is exposed to foreign exchange risk; net investment is equal to stockholders' equity.

Another reason to translate equity accounts at historical rates is so that the translated amount for the subsidiary's equity accounts will be equal to the original amount of the investment in subsidiary on the parent's balance sheet. Otherwise, the parent will not be able to exactly eliminate the investment in subsidiary account against the subsidiary's stockholders' equity accounts on the consolidation worksheet.

As mentioned, the major difference between the translation adjustment and a foreign exchange gain or loss is that the translation adjustment is not necessarily realized through inflows and outflows of cash. The translation adjustment that arises when using the current rate method is unrealized. It can become a realized gain or loss only if the foreign operation is sold (for its book value) and the foreign currency proceeds from the sale are converted into U.S. dollars.

The current rate method requires translation of all income statement items at the exchange rate in effect at the date of accounting recognition. For example, January 1 sales revenue should be translated at the January 1 exchange rate, January 2 sales at the January 2 exchange rate, and so on. With so many transactions, this would be overly burdensome. Thus, in many cases, an assumption can be made that the revenue or expense is incurred evenly throughout

<sup>4</sup> In rare cases, a foreign subsidiary could have liabilities higher than assets (negative stockholders' equity). In those cases, a net liability exposure exists under the current rate method.

the accounting period and a weighted average-for-the-period exchange rate can be used for translation. However, when an income account, such as a gain or loss, occurs at a specific point in time, the exchange rate at that date should be used for translation.

### Temporal Method

The basic objective underlying the *temporal method* of translation is to produce a set of U.S. dollar–translated financial statements as if the foreign subsidiary had actually used U.S. dollars in conducting its operations. Continuing with the Gualos subsidiary example, Southwestern, the U.S. parent, should report the Land account on the consolidated balance sheet at the amount of U.S. dollars that it would have spent if it had sent dollars to the subsidiary to purchase land. Because the land cost 150,000 vilseks at a time when one vilsek could be acquired with \$0.20, the parent would have sent \$30,000 to the subsidiary to acquire the land; this is the land’s historical cost *in U.S. dollar terms*. The following rule is consistent with the temporal method’s underlying objective:

1. Assets and liabilities carried on the foreign operation’s balance sheet at *historical cost* are translated at *historical* exchange rates to yield an equivalent historical cost in U.S. dollars.
2. Conversely, assets and liabilities carried at a *current or future value* are translated at the *current* exchange rate to yield an equivalent current value in U.S. dollars.

Application of this rule maintains the underlying valuation method (current value or historical cost) that the foreign subsidiary uses in accounting for its assets and liabilities. In addition, stockholders’ equity accounts are translated at historical exchange rates. Similar to the current rate method, this ensures that the translated amount of subsidiary’s stockholders’ equity is equal to the original amount of the investment in subsidiary on the parent’s balance sheet.

Cash, marketable securities, receivables, and most liabilities are carried at current or future value and translated at the *current* exchange rate under the temporal method.<sup>5</sup> The temporal method generates either a net asset or a net liability balance sheet exposure, depending on whether cash plus marketable securities plus receivables are more than or less than liabilities.

Cash + Marketable securities + Receivables > Liabilities → Net asset exposure

Cash + Marketable securities + Receivables < Liabilities → Net liability exposure

Because the amount of liabilities (current plus long term) translated at the current exchange rate usually exceeds the amount of assets translated at the current exchange rate, *a net liability exposure generally exists when the temporal method is used*.

One way to understand the concept of exposure underlying the temporal method is to suppose that the parent actually carries on its balance sheet the foreign operation’s cash, marketable securities, receivables, and payables. For example, consider the Japanese subsidiary of a U.S. parent company. The Japanese subsidiary’s yen receivables that result from sales in Japan may be thought of as Japanese yen receivables of the U.S. parent that result from export sales to Japan. If the U.S. parent had yen receivables on its balance sheet, a decrease in the yen’s value would result in a *foreign exchange loss*. A foreign exchange loss also occurs on the Japanese yen held in cash by the U.S. parent and on the Japanese yen–denominated marketable securities. A foreign exchange gain on the parent’s Japanese yen payables resulting from foreign purchases would offset these foreign exchange losses. Whether a net gain or a net loss exists depends on the relative amount of yen cash, marketable securities, and receivables versus yen payables. Under the temporal method, the translation adjustment measures the “net foreign exchange gain or loss” on the foreign

<sup>5</sup> Under current authoritative literature, all marketable equity securities and marketable debt securities that are classified as “trading” or “available for sale” are carried at fair value. Marketable debt securities classified as “held to maturity” are carried at amortized cost. Throughout the remainder of this chapter, we will assume that all marketable securities are reported at fair value.

operation's cash, marketable securities, receivables, and payables, *as if those items were actually carried on the parent's books.*

Again, the major difference between the translation adjustment resulting from the use of the temporal method and a foreign exchange gain or loss is that the translation adjustment is not necessarily realized through inflows or outflows of cash. The U.S. dollar translation adjustment in this case *is realized* only if (1) the parent sends U.S. dollars to the Japanese subsidiary to pay all of its yen liabilities and (2) the subsidiary converts its yen receivables and marketable securities into yen cash and then sends this amount plus the amount in its yen cash account to the U.S. parent, which converts it into U.S. dollars.

The temporal method translates income statement items at exchange rates that exist when the revenue is generated or the expense is incurred. For most items, an assumption can be made that the revenue or expense is incurred evenly throughout the accounting period and an average-for-the-period exchange rate can be used for translation. However, some expenses are related to assets carried at historical cost—for example, cost of goods sold, depreciation of property, plant, and equipment, and amortization of intangibles. Because the related assets are translated at historical exchange rates, these expenses must be translated at historical rates as well.

The current rate method and temporal method are the two methods currently used in the United States and in all countries that have adopted International Financial Reporting Standards as their local GAAP. A summary of the appropriate exchange rates for selected financial statement items under these two methods is presented in Exhibit 10.1.

### Translation of Retained Earnings

Stockholders' equity items are translated at historical exchange rates under both the current rate and temporal methods. This creates somewhat of a problem in translating retained

**EXHIBIT 10.1**  
Exchange Rates for  
Selected Financial  
Statement Items

	Temporal Method Exchange Rate	Current Rate Method Exchange Rate
	Balance Sheet	Balance Sheet
<b>Assets</b>		
Cash and receivables	Current	Current
Marketable securities	Current*	Current
Inventory at net realizable value	Current	Current
Inventory at cost	Historical	Current
Prepaid expenses	Historical	Current
Property, plant, and equipment	Historical	Current
Intangible assets	Historical	Current
<b>Liabilities</b>		
Current liabilities	Current	Current
Deferred income	Historical	Current
Long-term debt	Current	Current
<b>Stockholders' equity</b>		
Capital stock	Historical	Historical
Additional paid-in capital	Historical	Historical
Retained earnings	Composite	Composite
Dividends	Historical	Historical
	<b>Income Statement</b>	<b>Income Statement</b>
Revenues	Average	Average
Most expenses	Average	Average
Cost of goods sold	Historical	Average
Depreciation of property, plant, and equipment	Historical	Average
Amortization of intangibles	Historical	Average

\*Marketable debt securities classified as held to maturity are carried at amortized cost and translated at the historical exchange rate under the temporal method.

earnings. Retained earnings is an accumulation of all of the net income less dividends declared by a company since its inception. At the end of the first year of a company's operations, foreign currency (FC) retained earnings (R/E) is translated as follows:

Net income in FC	[translated per method used to translate income statement items]	= Net income in \$
– Dividends in FC	× historical exchange rate when declared	= – Dividends in \$
<u>Ending R/E in FC</u>		<u>Ending R/E in \$</u>

The ending dollar amount of retained earnings in Year 1 becomes the beginning dollar retained earnings for Year 2, and the translated retained earnings in Year 2 (and subsequent years) are then determined as follows:

Beginning R/E in FC	(carried forward from last year's translation)	= Beginning R/E in \$
+ Net income in FC	[translated per method used to translate income statement items]	= + Net income in \$
– Dividends in FC	× historical exchange rate when declared	= – Dividends in \$
<u>Ending R/E in FC</u>		<u>Ending R/E in \$</u>

The same approach translates retained earnings under both the current rate and the temporal methods. The only difference is that translation of the current period net income is calculated differently under the two methods.

## Complicating Aspects of the Temporal Method

Under the temporal method, keeping a record of the acquisition date exchange rates is necessary when translating inventory, prepaid expenses, property, plant and equipment, and intangible assets because these assets, carried at historical cost, are translated at historical exchange rates. Keeping track of the historical rates for these assets is not necessary under the current rate method. Translating these assets at historical rates makes the application of the temporal method more complicated than the current rate method.

### Calculation of Cost of Goods Sold

Under the *current rate method*, the account Cost of Goods Sold (COGS) in foreign currency (FC) is simply translated using the average-for-the-period exchange rate (ER):

$$\text{COGS in FC} \times \text{Average ER} = \text{COGS in \$}$$

Under the *temporal method*, no single exchange rate can be used to directly translate COGS in FC into COGS in dollars. Instead, COGS must be decomposed into beginning inventory, purchases, and ending inventory, and each component of COGS must then be translated at its appropriate historical rate. For example, if a company acquires beginning inventory (FIFO basis) in the year 2017 evenly throughout the fourth quarter of 2016, then it uses the average exchange rate in the fourth quarter of 2016 to translate beginning inventory. Likewise, it uses the fourth quarter (4thQ) 2017 exchange rate to translate ending inventory. When purchases can be assumed to have been made evenly throughout 2017, the average 2017 exchange rate is used to translate purchases:

Beginning inventory in FC	×	Historical ER (4thQ 2016)	=	Beginning inventory in \$
+ Purchases in FC	×	Average ER (2017)	=	+ Purchases in \$
– Ending inventory in FC	×	Historical ER (4thQ 2017)	=	– Ending inventory in \$
<u>COGS in FC</u>				<u>COGS in \$</u>

### Application of the Lower-of-Cost-or-Net-Realizable-Value Rule

Under the *current rate method*, the ending inventory reported on the foreign currency balance sheet is translated at the current exchange rate regardless of whether it is carried at cost or a lower net realizable value. Application of the *temporal method* requires the inventory's foreign currency cost to be translated into U.S. dollars at the historical exchange rate and foreign currency net realizable value to be translated into U.S. dollars at the current exchange rate. The *lower of the dollar cost and dollar net realizable value* is reported on the consolidated balance sheet. As a result, inventory can be carried at foreign currency cost on the foreign currency balance sheet and at U.S. dollar–translated net realizable value on the U.S. dollar consolidated balance sheet, and vice versa.

### Property, Plant, and Equipment, Depreciation, and Accumulated Depreciation

The *temporal method* requires translating property, plant, and equipment acquired at different times at different (historical) exchange rates. The same is true for depreciation of property, plant, and equipment and accumulated depreciation related to property, plant, and equipment.

For example, assume that a company purchases a piece of equipment on January 1, 2015, for FC 1,000 when the exchange rate is \$1.00 per FC. It purchases another item of equipment one year later on January 1, 2016, for FC 5,000 when the exchange rate is \$1.20 per FC. Both pieces of equipment have a five-year useful life. The temporal method reports the amount of the equipment on the consolidated balance sheet on December 31, 2017, when the exchange rate is \$1.50 per FC, as follows:

$$\begin{array}{r} \text{FC } 1,000 \times \$1.00 = \$1,000 \\ \quad \quad \quad 5,000 \times 1.20 = \quad 6,000 \\ \hline \text{FC } 6,000 \qquad \qquad \quad \underline{\$7,000} \end{array}$$

Depreciation expense for 2017 under the temporal method is calculated as shown here:

$$\begin{array}{r} \text{FC } 200 \times \$1.00 = \$ 200 \\ \quad \quad \quad 1,000 \times 1.20 = \quad 1,200 \\ \hline \text{FC } 1,200 \qquad \qquad \quad \underline{\$1,400} \end{array}$$

Accumulated depreciation under the temporal method is calculated as shown:

$$\begin{array}{r} \text{FC } 600 \times \$1.00 = \$ 600 \\ \quad \quad \quad 2,000 \times 1.20 = \quad 2,400 \\ \hline \text{FC } 2,600 \qquad \qquad \quad \underline{\$3,000} \end{array}$$

Similar procedures apply for intangible assets as well.

The *current rate method* reports equipment on the December 31, 2017, balance sheet at \$9,000 (FC 6,000 × \$1.50). Depreciation expense is translated at the average exchange rate of \$1.40 to be \$1,680 (FC 1,200 × \$1.40), and accumulated depreciation is \$3,900 (FC 2,600 × \$1.50 = \$3,900).

In this example, the foreign subsidiary has only two pieces of equipment requiring translation. In comparison with the current rate method, the temporal method can require substantial additional work for subsidiaries that own hundreds and thousands of items of property, plant, and equipment.

### Gain or Loss on the Sale of an Asset

Assume that a foreign subsidiary sells land that cost FC 1,000 at a selling price of FC 1,200. The subsidiary reports an FC 200 gain on the sale of land on its income statement. It acquired the land when the exchange rate was \$1.00 per FC; it made the sale when the exchange rate was \$1.20 per FC; and the exchange rate at the balance sheet date is \$1.50 per FC. How should the gain on the sale of an asset be translated into U.S. dollars?



The *current rate method* translates the gain on sale of land at the exchange rate in effect at the date of sale:

$$\text{FC } 200 \times \$1.20 = \$240$$

The *temporal method* cannot translate the gain on the sale of land directly. Instead, it requires translating the cash received and the cost of the land sold into U.S. dollars separately, with the difference being the U.S. dollar value of the gain. In accordance with the rules of the temporal method, the Cash account is translated at the exchange rate on the date of sale, and the Land account is translated at the historical rate:

Cash	FC 1,200 × \$1.20 = \$1,440
Land	<u>1,000 × 1.00 = 1,000</u>
Gain	<u>FC 200</u> <u>\$ 440</u>

## Treatment of Translation Adjustment

The *first issue* related to the translation of foreign currency financial statements is selecting the appropriate method. The *second issue* in financial statement translation relates to deciding *where to report the resulting translation adjustment in the consolidated financial statements*. There are two prevailing schools of thought with regard to this second issue:

1. *Translation gain or loss*: This treatment considers the translation adjustment to be a gain or loss analogous to the gains and losses arising from foreign currency transactions and reports it in net income in the period in which the fluctuation in the exchange rate occurs.

The first of two conceptual problems with treating translation adjustments as gains or losses in income is that the gain or loss is unrealized; that is, no cash inflow or outflow accompanies it. The second problem is that the gain or loss could be inconsistent with economic reality. For example, the depreciation of a foreign currency can have a *positive* impact on the foreign operation's export sales and income, but the particular translation method used gives rise to a translation *loss*.

2. *Cumulative translation adjustment in other comprehensive income*: The alternative to reporting the translation adjustment as a gain or loss in net income is to include it in other comprehensive income. In effect, this treatment defers the gain or loss in stockholders' equity (Accumulated Other Comprehensive Income or AOCI) until it is realized in some way. As a balance sheet account, the cumulative translation adjustment is not closed at the end of an accounting period and fluctuates in amount over time.

The two major translation methods and the two possible treatments for the translation adjustment give rise to these four possible combinations:

Combination	Translation Method	Treatment of Translation Adjustment
A	Temporal	Gain or loss in Net Income
B	Temporal	Deferred in Other Comprehensive Income
C	Current rate	Gain or loss in Net Income
D	Current rate	Deferred in Other Comprehensive Income

## Authoritative Guidance

Prior to 1975, the United States had no authoritative guidance on which translation method to use or where to report the translation adjustment in the consolidated financial statements. Different companies used different combinations. As an indication of the importance of this particular accounting issue, the first official pronouncement issued by the newly created FASB in 1974 was *SFAS 1*, "Disclosure of Foreign Currency Translation Information." It did not express a preference for any particular combination but simply required disclosure of the method used and the treatment of the translation adjustment.

The use of different combinations by different companies created a lack of comparability across companies. To eliminate this noncomparability, in 1975 the FASB issued *SFAS 8*, “Accounting for the Translation of Foreign Currency Transactions and Foreign Currency Financial Statements.” It mandated use of the *temporal method* with all companies reporting *translation gains or losses* in net income for all foreign operations.

U.S. multinational companies (MNCs) strongly opposed *SFAS 8*. Specifically, they considered reporting translation gains and losses in income to be inappropriate because they are unrealized. Moreover, because currency fluctuations often reversed themselves in subsequent quarters, artificial volatility in quarterly earnings resulted.

After releasing two exposure drafts proposing new translation rules, the FASB finally issued *SFAS 52*, “Foreign Currency Translation,” in 1981. This resulted in a complete overhaul of U.S. GAAP with regard to foreign currency translation. A narrow four-to-three vote of the board approving *SFAS 52* indicates how contentious the issue of foreign currency translation has been. Despite the narrow vote, *SFAS 52* has stood the test of time and was incorporated into the FASB *Accounting Standards Codification*<sup>®</sup> (ASC) in 2009 as part of Topic 830, “Foreign Currency Matters.”

### LO 10-2

Describe guidelines for determining when foreign currency financial statements are to be translated using the current rate method and when they are to be remeasured using the temporal method.

## Determining the Appropriate Translation Method

Implicit in the *temporal method* is the assumption that foreign subsidiaries of U.S. MNCs have very close ties to their parent companies and that they would actually carry out their day-to-day operations and keep their books in the U.S. dollar if they could. To reflect the integrated nature of the foreign subsidiary with its U.S. parent, the translation process should create a set of U.S. dollar–translated financial statements as if the foreign subsidiary had actually used the dollar in carrying out its activities. This is the *U.S. dollar perspective* to translation.

In developing the current authoritative guidance, the FASB recognized two types of foreign entities. First, some foreign entities are so closely integrated with their parents that they conduct much of their business in U.S. dollars. *Second, other foreign entities are relatively self-contained and integrated with the local economy; primarily, they use a foreign currency in their daily operations.* For the first type of entity, the FASB determined that the U.S. dollar perspective still applies and, therefore, use of the temporal method with translation gains and losses reported in net income is still relevant.

For the second relatively independent type of entity, a *local currency perspective* to translation is applicable. For this type of entity, the FASB determined that a different translation methodology, namely the *current rate method*, should be used for translation and that translation adjustments should be reported as a *separate component in accumulated other comprehensive income* on the balance sheet.

### Functional Currency

To determine whether a specific foreign operation is integrated with its parent or self-contained and integrated with the local economy, the FASB created the concept of the *functional currency*. The functional currency is the primary currency of the foreign entity’s operating environment. It can be either the parent’s currency (U.S.\$ for a U.S.–based company) or a foreign currency (generally the local currency). The functional currency orientation results in the following rule:

Functional Currency	Translation Method	Translation Adjustment
U.S. dollar	Temporal method	Gain (loss) in Net Income
Foreign currency	Current rate method	Separate component of Other Comprehensive Income (Stockholders’ Equity)

In addition to introducing the concept of the *functional currency*, the FASB introduced some new terminology. The *reporting currency* is the currency in which the entity prepares its financial statements. For U.S.–based corporations, this is the U.S. dollar. If a foreign operation’s functional currency is the U.S. dollar, foreign currency balances must be *remeasured*

into U.S. dollars using the temporal method with translation adjustments reported as *remeasurement gains and losses* in net income. When a foreign currency is the functional currency, foreign currency balances are *translated* using the current rate method and a *translation adjustment* is reported in the stockholders' equity section of the balance sheet.

The functional currency is essentially a matter of fact. However, in some cases the facts will not clearly indicate a single functional currency. Management's judgment is essential in assessing the facts to determine a foreign entity's functional currency. Indicators provided by the FASB to guide parent company management in its determination of a foreign entity's functional currency are presented in Exhibit 10.2. Current authoritative literature provides no guidance as to how to weight these indicators in determining the functional currency. Leaving the decision about identifying the functional currency up to management allows some flexibility in this process.

### Highly Inflationary Economies

Multinationals do not need to determine the functional currency of those foreign entities located in a *highly inflationary economy*. In those cases, entities must use the *temporal method with remeasurement gains or losses reported in net income*.

A country is defined as having a *highly inflationary economy* when its cumulative three-year inflation exceeds 100 percent. With compounding, this equates to an average of approximately 26 percent per year for three years in a row. Countries that have met this definition at some time include Argentina, Brazil, Israel, Mexico, and Turkey. In any given year, a country may or may not be classified as highly inflationary, depending on its most recent three-year experience with inflation.

One reason for this rule is to avoid a "disappearing plant problem" caused by using the current rate method in a country with high inflation. Remember that under the current rate method, all assets (including fixed assets) are translated at the current exchange rate. To see the problem this creates in a highly inflationary economy, consider the following hypothetical example.

The Brazilian subsidiary of a U.S. parent purchased land at the end of 1984 for 10,000,000 cruzeiros (Cr\$) when the exchange rate was \$0.001 per Cr\$. Under the *current rate method*, Land is reported in the parent's consolidated balance sheet (B.S.) at \$10,000:

	Historical Cost		Current ER		Consolidated B.S.
1984	Cr\$ 10,000,000	×	\$0.001	=	\$10,000

In 1985, Brazil experienced roughly 200 percent inflation. Accordingly, with the forces of purchasing power parity at work, the cruzeiro plummeted against the U.S. dollar to a value of

#### EXHIBIT 10.2 Indicators for Determining the Functional Currency

Indication That Functional Currency Is the:		
Indicator	Foreign Currency	Parent's Currency
Cash flow	Primarily in FC and does not affect parent's cash flows.	Directly impacts parent's cash flows on a current basis.
Sales price	Not affected on short-term basis by changes in exchange rate.	Affected on short-term basis by changes in exchange rate.
Sales market	Active local sales market.	Sales market mostly in parent's country or sales denominated in parent's currency.
Expenses	Primarily local costs.	Primarily costs for components obtained from parent's country.
Financing	Primarily denominated in foreign currency and FC cash flows adequate to service obligations.	Primarily from parent or denominated in parent currency or FC cash flows not adequate to service obligations.
Intra-entity transactions	Low volume of intra-entity transactions, not extensive interrelationship with parent's operations.	High volume of intra-entity transactions and extensive interrelationship with parent's operations.

\$0.00025 at the end of 1985. Under the current rate method, the parent's consolidated balance sheet reports Land at \$2,500, and a negative translation adjustment of \$7,500 results:

	Historical Cost		Current ER		Consolidated B.S.
1985	Cr\$ 10,000,000	×	\$0.00025	=	\$2,500

Using the current rate method, 75 percent of the Land's U.S. dollar value "disappeared" in one year—and land is not even a depreciable asset!

In the exposure draft that led to the current authoritative guidance on translation, the FASB proposed requiring companies with operations in highly inflationary countries to first *restate* the foreign financial statements for inflation and then *translate* all financial statement accounts using the current exchange rate. For example, with 200 percent inflation in 1985, the Land account would have been written up to Cr\$ 40,000,000 and then translated at the current exchange rate of \$0.00025, producing a U.S. dollar–translated amount of \$10,000, the same as in 1984.

Companies objected to making inflation adjustments, however, because of a lack of reliable inflation indices in many countries. The FASB backed off from requiring the *restate/translate* approach; instead it requires using the temporal method in highly inflationary countries. In the previous example, under the *temporal method*, a firm uses the historical rate of \$0.001 to translate the land value year after year. The firm carries land on the consolidated balance sheet at \$10,000 each year, thereby avoiding the disappearing plant problem.

Once a country is classified as highly inflationary, a decrease in the cumulative three-year inflation rate below 100 percent is not necessarily sufficient to remove it from this classification. FASB ASC 830-10-55-25 and the SEC staff suggest that if there is no evidence to suggest that the drop below 100 percent is "other than temporary," the country should continue to be viewed as highly inflationary. The magnitude of the decrease below 100 percent, the length of time the rate is under 100 percent, and the country's current economic conditions should be taken into account in the "other than temporary" analysis.

In recent years, only a few countries in the world have met the FASB's definition of highly inflationary. One of the most significant countries recently exceeding this threshold is Venezuela, which has been identified as highly inflationary since January 2010.<sup>6</sup> Many U.S. companies, especially those in the energy industry, have subsidiaries in Venezuela. In 2010, those U.S. parent companies that previously designated their Venezuelan operation as having the local currency as functional currency, and therefore used the current rate method for translation, were compelled to change their translation method to the temporal method and begin reporting remeasurement gains and losses in net income.

### Appropriate Exchange Rate

In some countries, such as Venezuela, there is more than one rate at which the local currency can be converted into foreign currency. Often there is an "official rate" that is available from the Central Bank, and a "parallel rate" that is available in the open (sometimes illegal) market. Or in some countries there is one rate for certain types of transactions and another rate for other transactions. For example, in January 2010, in conjunction with an official devaluation of the local currency, the Venezuelan government established an exchange rate of 2.6 bolivar fuertes (BsF) per one U.S. dollar for *essential* imports (such as food and medicine), and an exchange rate of BsF 4.3 per U.S.\$ for the import of *nonessential* goods. The existence of multiple exchange rates raises the question of which exchange rate to use in the financial statement translation process.

When the temporal method is used, ASC 830-20-30-3 indicates that the appropriate rate to use is the applicable rate at which a transaction could be settled, which is a matter for management judgment. In the case of Venezuela, for example, the Center for Audit Quality's International Practices Task Force (IPTF) determined that while Venezuelan law generally requires

<sup>6</sup> The International Practices Task Force (IPTF) of the Center for Audit Quality (CAQ) SEC Regulations Committee monitors the inflationary status of certain countries and identifies those that meet the FASB's definition of highly inflationary. In May 2015, Malawi, Sudan, and Venezuela were the only countries identified by the IPTF with three-year cumulative inflation rates exceeding 100 percent. <http://www.theacaq.org/docs/default-source/iptf-highlights/iptf-may-2015-highlights.pdf?sfvrsn=2>.

foreign currency transactions to be settled at the official exchange rate, because some transactions denominated in U.S. dollars may be settled using the parallel rate of exchange, either exchange rate might be appropriate for the translation of U.S.\$-denominated assets and liabilities.

In contrast, when the current rate method is used, ASC 830-30-45-6 states that the exchange rate applicable for converting dividend remittances into U.S. dollars should be used to translate financial statements. Generally, this will be the official exchange rate established by the Central Bank or other governmental authority.

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## ***International Accounting Standard 21—The Effects of Changes in Foreign Exchange Rates***

*IAS 21*, “The Effects of Changes in Foreign Exchange Rates,” provides guidance in IFRS with respect to the translation of foreign currency financial statements. *IAS 21* generally follows the functional currency approach introduced by the FASB. Under *IAS 21*, as is true under U.S. GAAP, a foreign subsidiary’s financial statements are translated using the current rate method when a foreign currency is the functional currency and are remeasured using the temporal method when the parent company’s currency is the functional currency. Significant differences between IFRS and U.S. GAAP relate to (a) the hierarchy of factors used to determine the functional currency and (b) the method used to translate the foreign currency statements of a subsidiary located in a hyperinflationary country.

Although stated differently, the factors to be considered in determining the functional currency of a foreign subsidiary in *IAS 21* generally are consistent with U.S. GAAP functional currency indicators. Specifically, *IAS 21* indicates that the *primary* factors to be considered are:

1. The currency that mainly influences sales price.
2. The currency of the country whose competitive forces and regulations mainly determine sales price.
3. The currency that mainly influences labor, material, and other costs of providing goods and services.

Other factors to be considered are:

1. The currency in which funds from financing activities are generated.
2. The currency in which receipts from operating activities are retained.
3. Whether the foreign operation carries out its activities as an extension of the parent or with a significant degree of autonomy.
4. The volume of transactions with the parent.
5. Whether cash flows generated by the foreign operation directly affect the cash flows of the parent.
6. Whether cash flows generated by the foreign operation are sufficient to service its debt.

*IAS 21* states that when the above indicators are mixed and the functional currency is not obvious, the parent must give priority to the primary indicators in determining the foreign entity’s functional currency.

As noted earlier, U.S. GAAP is silent with respect to weights to be assigned to various indicators to determine the functional currency and there is no hierarchy provided. Because of this difference in the functional currency determination process, it is possible that a foreign subsidiary could be determined to have a functional currency under IFRS that would be different from the functional currency determined under U.S. GAAP.

Under *IAS 21*, the financial statements of a foreign subsidiary located in a hyperinflationary economy are translated into the parent’s currency using a two-step process. First, the financial statements are restated for local inflation in accordance with *IAS 29*, “Financial Reporting in Hyperinflationary Economies.” Second, each financial statement line item, which has now been restated for local inflation, is translated using the current exchange rate. In effect, neither the temporal method nor the current rate method is used when the subsidiary is located in a country experiencing hyperinflation. Because all balance sheet accounts, including stockholders’ equity, are translated at the current exchange rate, a translation adjustment does not exist.

Unlike U.S. GAAP, IFRS does not provide a bright-line threshold to identify a hyperinflationary economy. Instead, *IAS 29* provides a list of characteristics that indicate hyperinflation, including (a) the general population prefers to keep its wealth in a relatively stable foreign currency; (b) interest rates, wages, and other prices are linked to a price index; and (c) the cumulative rate of inflation over three years is approaching, or exceeds, 100 percent. As noted earlier in this chapter, under current U.S. GAAP, the financial statements of a foreign subsidiary located in a highly inflationary economy must be translated using the temporal method, and high inflation is defined as a cumulative three-year inflation of 100 percent or more.

## The Translation Process Illustrated

To provide a basis for demonstrating the translation and remeasurement procedures prescribed by current authoritative literature, assume that USCO (a U.S.-based company) forms a wholly owned subsidiary in Switzerland (SWISSCO) on December 31, 2016. On that date, USCO invested \$300,000 in exchange for all of the subsidiary's common stock. Given the exchange rate of \$0.60 per Swiss franc (CHF), the initial capital investment was CHF 500,000, of which CHF 150,000 was immediately invested in inventory and the remainder held in cash. Thus, SWISSCO began operations on January 1, 2017, with stockholders' equity (net assets) of CHF 500,000 and net monetary assets of CHF 350,000. (Recall that monetary assets consist primarily of cash, receivables, and marketable securities.)

<b>SWISSCO</b>			
<b>Opening Balance Sheet</b>			
<b>January 1, 2017</b>			
<b>Assets</b>	<b>CHF</b>	<b>Liabilities and Equity</b>	<b>CHF</b>
Cash .....	CHF 350,000	Common stock .....	CHF 100,000
Inventory .....	150,000	Additional paid-in capital .....	400,000
	<u>CHF 500,000</u>		<u>CHF 500,000</u>

During 2017, SWISSCO purchased property, plant, and equipment, acquired a patent, and purchased additional inventory, primarily on account. It negotiated a five-year loan to help finance the purchase of equipment. It sold goods, primarily on account, and incurred expenses. It generated income after taxes of CHF 470,000 and declared dividends of CHF 150,000 on October 1, 2017.

As a company incorporated in Switzerland, SWISSCO accounts for its activities using IFRS, which differs from U.S. GAAP in many respects. As noted in the introduction to this chapter, to prepare consolidated financial statements, USCO must first convert SWISSCO's financial statements to a U.S. GAAP basis.<sup>7</sup> SWISSCO's U.S. GAAP financial statements for the year 2017 in Swiss francs appear in Exhibit 10.3.

### EXHIBIT 10.3 Foreign Currency Financial Statements

<b>SWISSCO</b>	
<b>Income Statement</b>	
<b>For Year Ending December 31, 2017</b>	
	<b>CHF</b>
Sales .....	4,000,000
Cost of goods sold .....	(3,000,000)
Gross profit .....	1,000,000
Depreciation expense .....	(100,000)
Amortization expense .....	(10,000)
Other expenses .....	(220,000)
Income before income taxes .....	670,000
Income taxes .....	(200,000)
Net income .....	<u>470,000</u>

(continued)

<sup>7</sup> Differences in accounting rules across countries are discussed in more detail in Chapter 11.

**Statement of Retained Earnings  
For Year Ending December 31, 2017**

	<b>CHF</b>
Retained earnings, 1/1/17 .....	–0–
Net income, 2017 .....	470,000
Less: Dividends, 10/1/17 .....	(150,000)
Retained earnings, 12/31/17 .....	<u>320,000</u>

**Balance Sheet December 31, 2017**

<b>Assets</b>	<b>CHF</b>	<b>Liabilities and Equity</b>	<b>CHF</b>
Cash	130,000	Accounts payable .....	600,000
Accounts receivable .....	200,000	Total current liabilities .....	600,000
Inventory* .....	400,000	Long-term debt .....	250,000
Total current assets .....	730,000	Total liabilities .....	850,000
Property, plant & equipment . . .	1,000,000	Common stock .....	100,000
Accumulated depreciation .....	(100,000)	Additional paid-in capital . . .	400,000
Patents, net. ....	40,000	Retained earnings .....	320,000
Total assets .....	<u>1,670,000</u>	Total equity .....	820,000
		Total liabilities and equity . . .	<u>1,670,000</u>

**Statement of Cash Flows  
For Year Ending December 31, 2017**

	<b>CHF</b>
Operating activities:	
Net income .....	470,000
Add: Depreciation expense .....	100,000
Amortization expense .....	10,000
Increase in accounts receivable .....	(200,000)
Increase in inventory .....	(250,000)
Increase in accounts payable .....	600,000
Net cash from operations .....	<u>730,000</u>
Investing activities:	
Purchase of property, plant & equipment .....	(1,000,000)
Acquisition of patent .....	(50,000)
Net cash from investing activities .....	<u>(1,050,000)</u>
Financing activities:	
Proceeds from long-term debt .....	250,000
Payment of dividends .....	(150,000)
Net cash from financing activities .....	<u>100,000</u>
Decrease in cash .....	(220,000)
Cash at 12/31/16 .....	350,000
Cash at 12/31/17 .....	<u>130,000</u>

\*Inventory is valued at FIFO cost under the lower-of-cost-or-market-value rule; ending inventory was acquired evenly throughout the fourth quarter.

To properly translate the Swiss franc financial statements into U.S. dollars, USCO must gather exchange rates between the Swiss franc and U.S. dollar at various points in time. Relevant exchange rates (in U.S. dollars) are as follows:

January 1, 2017 .....	\$0.60
Rate when property, plant & equipment was acquired and long-term debt was incurred, March 15, 2017.....	0.61
Rate when patent was acquired, April 10, 2017 .....	0.62
Average 2017 .....	0.65
Rate when dividends were declared, October 1, 2017.....	0.67
Average fourth quarter 2017.....	0.68
December 31, 2017 .....	0.70

The Swiss franc steadily appreciated against the dollar during the year, from a value of \$0.60 on January 1 to \$0.70 on December 31.

**LO 10-3**

Translate a foreign subsidiary’s financial statements into its parent’s reporting currency using the current rate method and calculate the related translation adjustment.

## Translation of Financial Statements—Current Rate Method

The first step in translating foreign currency financial statements is to determine the functional currency. Assuming that the Swiss franc is the functional currency, the current rate method must be used with the cumulative translation adjustment reported in a separate component of stockholders’ equity on the balance sheet. The amount of the cumulative translation adjustment can be determined indirectly as the amount that is needed to keep the translated balance sheet in balance. Translating the income statement first, followed by the statement of retained earnings, and then the balance sheet, facilitates the translation adjustment being reported in the balance sheet. (Conversely, the balance sheet is remeasured first when the temporal method is used.) Translation of the income statement and statement of retained earnings into U.S. dollars using the current rate method is shown in Exhibit 10.4.

**EXHIBIT 10.4**  
Translation of Income Statement and Statement of Retained Earnings—Current Rate Method

<b>SWISSCO</b>			
<b>Income Statement</b>			
<b>For Year Ending December 31, 2017</b>			
	<b>CHF</b>	<b>Translation Rate*</b>	<b>U.S.\$</b>
Sales .....	CHF 4,000,000	0.65 A	\$2,600,000
Cost of goods sold .....	(3,000,000)	0.65 A	(1,950,000)
Gross profit .....	1,000,000		650,000
Depreciation expense.....	(100,000)	0.65 A	(65,000)
Amortization expense.....	(10,000)	0.65 A	(6,500)
Other expenses .....	(220,000)	0.65 A	(143,000)
Income before income taxes. . .	670,000		435,500
Income taxes. ....	(200,000)	0.65 A	(130,000)
Net income .....	<u>CHF 470,000</u>		<u>\$ 305,500</u>
<b>Statement of Retained Earnings</b>			
<b>For Year Ending December 31, 2017</b>			
	<b>CHF</b>	<b>Translation Rate*</b>	<b>U.S.\$</b>
Retained earnings, 1/1/17 .....	CHF —0—		\$ —0—
Net income, 2017 .....	470,000	From income statement	305,500
Dividends, 10/1/17 .....	(150,000)	0.67 H	(100,500)
Retained earnings, 12/31/17 ..	<u>CHF 320,000</u>		<u>\$ 205,000</u>

\*Indicates the exchange rate used and whether the rate is the current (C), average (A), or historical (H) rate.



All revenues and expenses are translated at the exchange rate in effect at the date of accounting recognition. We utilize the weighted average exchange rate for 2017 here because each revenue and expense in this illustration would have been recognized evenly throughout the year. However, when an income account, such as a gain or loss, occurs at a specific point in time, the exchange rate as of that date is applied. Depreciation and amortization expenses also are translated at the average rate for the year. These expenses accrue evenly throughout the year even though the journal entry to recognize them might not have been made until year-end for convenience.

The translated amount of net income for 2017 is brought down from the income statement into the statement of retained earnings. Dividends are translated at the exchange rate on the date of declaration.

### Translation of the Balance Sheet

Looking at SWISSCO's translated balance sheet in Exhibit 10.5, note that all assets and liabilities are translated at the current exchange rate. Common stock and additional paid-in capital are translated at the exchange rate on the day the common stock was originally acquired by the parent company. Retained earnings at December 31, 2017, is brought down from the statement of retained earnings. Application of these procedures results in total assets of \$1,169,000 and total liabilities and equities of \$1,100,000. The balance sheet is brought into balance by creating a positive translation adjustment of \$69,000 that is treated as an increase in Stockholders Equity.

Note that the translation adjustment for 2017 is a *positive* \$69,000 (credit balance). The sign of the translation adjustment (positive or negative) is a function of two factors: (1) the nature of the balance sheet exposure (asset or liability) and (2) the change in the exchange rate

**EXHIBIT 10.5**  
Translation of Balance  
Sheet—Current Rate  
Method

<b>SWISSCO</b>			
<b>Balance Sheet December 31, 2017</b>			
	<b>CHF</b>	<b>Translation Rate</b>	<b>U.S.\$</b>
<b>Assets</b>			
Cash . . . . .	CHF 130,000	0.70 C	\$91,000
Accounts receivable . . . . .	200,000	0.70 C	140,000
Inventory . . . . .	400,000	0.70 C	280,000
Total current assets . . . . .	730,000		511,000
Property, plant & equipment . . . . .	1,000,000	0.70 C	700,000
Less: Accumulated depreciation . . . . .	(100,000)	0.70 C	(70,000)
Patents, net . . . . .	40,000	0.70 C	28,000
Total assets . . . . .	<u>CHF1,670,000</u>		<u>\$1,169,000</u>
<b>Liabilities and Equities</b>			
Accounts payable . . . . .	CHF 600,000	0.70 C	\$ 420,000
Total current liabilities . . . . .	600,000		420,000
Long-term debt . . . . .	250,000	0.70 C	175,000
Total liabilities . . . . .	850,000		595,000
Common stock . . . . .	100,000	0.60 H	60,000
Additional paid-in capital . . . . .	400,000	0.60 H	240,000
Retained earnings . . . . .	320,000	From statement of R/E	205,000
<b>Cumulative translation adjustment</b>			
Total equity . . . . .	820,000	To balance	574,000
Total liabilities and equity . . . . .	<u>CHF 1,670,000</u>		<u>\$1,169,000</u>

(appreciation or depreciation). In this illustration, SWISSCO has a *net asset exposure* (total assets translated at the current exchange rate are more than total liabilities translated at the current exchange rate), and the Swiss franc has *appreciated*, creating a *positive translation adjustment*.

The translation adjustment can be derived as the amount needed to bring the balance sheet back into balance. The translation adjustment also can be calculated by considering the impact of exchange rate changes on the beginning balance and subsequent changes in the net asset position summarized as follows:

1. Translate the net asset balance of the subsidiary at the beginning of the year at the exchange rate in effect on that date (*a*).
2. Translate individual increases and decreases in the net asset balance during the year at the rates in effect when those increases and decreases occurred (*b*). Only a few events, such as net income, dividends, stock issuance, and the acquisition of treasury stock, actually change net assets. Transactions such as the acquisition of equipment or the payment of a liability have no effect on total net assets.
3. Combine the translated beginning net asset balance (*a*) and the translated value of the individual changes (*b*) to arrive at the relative value of the net assets being held prior to the impact of any exchange rate fluctuations during the year (*c*).
4. Translate the ending net asset balance at the current exchange rate to determine the reported value after all exchange rate changes have occurred (*d*).
5. Compare the translated value of the net assets prior to any rate changes (*c*) with the ending translated value (*d*). The difference is the result of exchange rate changes during the period. If (*c*) is higher than (*d*), a negative (debit) translation adjustment arises. If (*d*) is higher than (*c*), a positive (credit) translation adjustment results.

### ***Computation of Translation Adjustment***

Based on the process just described, the translation adjustment for SWISSCO in this example is calculated as follows:

Net asset balance, 1/1/17 .....	CHF 500,000	× 0.60	=	\$300,000	(a)
Change in net assets:					
Net income, 2017 .....	470,000	× 0.65	=	305,500	(b)
Dividends declared, 10/1/17.....	<u>(150,000)</u>	× 0.67	=	<u>(100,500)</u>	(b)
Net asset balance, 12/31/17.....	<u>CHF 820,000</u>			\$505,000	(c)
Net asset balance, 12/31/17 at current exchange rate .....	<u>CHF 820,000</u>	× 0.70	=	<u>574,000</u>	(d)
Translation adjustment, 2017 (positive).....				<u>\$(69,000)</u>	

The process just described and demonstrated is used to calculate the current period's translation adjustment. Because SWISSCO began operations at the beginning of the current year, the \$69,000 translation adjustment is the only amount that will be needed to keep the U.S. dollar consolidated balance sheet in balance. In subsequent years, a cumulative translation adjustment comprising the current year's translation adjustment plus translation adjustments from prior years will be included in stockholders' equity on the U.S. dollar consolidated balance sheet. Companies report the cumulative translation adjustment in Accumulated Other Comprehensive Income, along with unrealized foreign exchange gains and losses, gains and losses on cash flow hedges, unrealized gains and losses on available-for-sale marketable securities, and adjustments for pension accounting.

The cumulative translation adjustment remains within accumulated other comprehensive income only until the foreign operation is sold or liquidated. In the period in which sale or liquidation occurs, the cumulative translation adjustment related to the particular foreign entity is removed from accumulated other comprehensive income and included as part of the gain or loss on the sale of the investment. In effect, the accumulated unrealized foreign exchange gain

or loss that has been deferred in accumulated other comprehensive income becomes realized when the entity is disposed of.

### Translation of the Statement of Cash Flows

The current rate method requires translating all operating items in the statement of cash flows at the average-for-the-period exchange rate (see Exhibit 10.6). This is the same rate used for translating income statement items. Although the ending balances in Accounts Receivable, Inventory, and Accounts Payable on the balance sheet are translated at the current exchange rate, the average rate is used for the *changes* in these accounts because those changes are caused by operating activities (such as sales and purchases) that are translated at the average rate.

Investing and financing activities are translated at the exchange rate on the day the activity took place. Although long-term debt is translated in the balance sheet at the current rate, in the statement of cash flows, it is translated at the historical rate when the debt was incurred.

The \$(4,500) “effect of exchange rate change on cash” is a part of the overall translation adjustment of \$69,000. It represents that part of the translation adjustment attributable to a decrease in Cash and is derived as a balancing amount.

#### LO 10-4

Remeasure a foreign subsidiary’s financial statements using the temporal method and calculate the associated remeasurement gain or loss.

## Remeasurement of Financial Statements—Temporal Method

Now assume that a careful examination of the functional currency indicators in Exhibit 10.2 leads USCO’s management to conclude that SWISSCO’s functional currency is the U.S. dollar. In that case, the Swiss franc financial statements must be remeasured into U.S. dollars using the temporal method and the remeasurement gain or loss must be reported in income. To ensure that the remeasurement gain or loss is reported in income, it is easiest to remeasure the balance sheet first (as shown in Exhibit 10.7).

### EXHIBIT 10.6 Translated Statement of Cash Flows—Current Rate Method

<b>SWISSCO</b> <b>Statement of Cash Flows</b> <b>For Year Ending December 31, 2017</b>			
	<b>CHF</b>	<b>Translation Rate</b>	<b>U.S.\$</b>
Operating activities:			
Net income . . . . .	CHF 470,000	0.65 A	\$305,500
Add: Depreciation . . . . .	100,000	0.65 A	65,000
Amortization . . . . .	10,000	0.65 A	6,500
Increase in accounts receivable . . . . .	(200,000)	0.65 A	(130,000)
Increase in inventory . . . . .	(250,000)	0.65 A	(162,500)
Increase in accounts payable . . . . .	<u>600,000</u>	0.65 A	<u>390,000</u>
Net cash from operations . . . . .	<u>730,000</u>		<u>474,500</u>
Investing activities:			
Purchase of property, plant & equipment . .	(1,000,000)	0.61 H	(610,000)
Acquisition of patent . . . . .	<u>(50,000)</u>	0.62 H	<u>(31,000)</u>
Net cash from investing activities . . . . .	<u>(1,050,000)</u>		<u>(641,000)</u>
Financing activities:			
Proceeds from long-term debt . . . . .	250,000	0.61 H	152,500
Payment of dividends . . . . .	<u>(150,000)</u>	0.67 H	<u>(100,500)</u>
Net cash from financing activities . . . . .	<u>100,000</u>		<u>52,000</u>
Decrease in cash . . . . .	(220,000)		(114,500)
Effect of exchange rate change on cash . . . .		To balance	(4,500)
Cash at December 31, 2016 . . . . .	<u>CHF 350,000</u>	0.60 H	<u>210,000</u>
Cash at December 31, 2017 . . . . .	<u>CHF 130,000</u>	0.70 C	<u>\$ 91,000</u>

**EXHIBIT 10.7**  
**Remeasurement of Balance Sheet—Temporal Method**

<b>SWISSCO</b>				
<b>Balance Sheet</b>				
<b>December 31, 2017</b>				
	<b>CHF</b>	<b>Remeasurement Rate</b>		<b>U.S.\$</b>
<b>Assets</b>				
Cash . . . . .	CHF 130,000	0.70 C		\$91,000
Accounts receivable . . . . .	200,000	0.70 C		140,000
Inventory . . . . .	400,000	0.68 H		272,000
Total current assets . . . . .	730,000			503,000
Property, plant & equipment . . . . .	1,000,000	0.61 H		610,000
Less: Accumulated depreciation . . . . .	(100,000)	0.61 H		(61,000)
Patents, net . . . . .	40,000	0.62 H		24,800
Total assets . . . . .	CHF 1,670,000			\$1,076,800
<b>Liabilities and Equities</b>				
Accounts payable . . . . .	CHF 600,000	0.70 C		\$ 420,000
Total current liabilities . . . . .	600,000			420,000
Long-term debt . . . . .	250,000	0.70 C		175,000
Total liabilities . . . . .	850,000			595,000
Common stock . . . . .	100,000	0.60 H		60,000
Additional paid-in capital . . . . .	400,000	0.60 H		240,000
Retained earnings . . . . .	320,000	To balance		181,800
Total equity . . . . .	820,000			481,800
Total liabilities and equity . . . . .	CHF 1,670,000			\$1,076,800

According to the procedures outlined in Exhibit 10.1, the temporal method remeasures cash, receivables, and liabilities into U.S. dollars using the current exchange rate of \$0.70. Inventory (carried at FIFO cost), property, plant & equipment, patents, and contributed capital (common stock and additional paid-in capital) are remeasured at historical rates. These procedures result in total assets of \$1,076,800, liabilities of \$595,000, and contributed capital of \$300,000. To balance the balance sheet, retained earnings must total \$181,800. We verify the accuracy of this amount later.

### Remeasurement of the Income Statement

Exhibit 10.8 shows the remeasurement of SWISSCO's income statement and statement of retained earnings. Revenues and expenses incurred evenly throughout the year (sales, other expenses, and income taxes) are remeasured at the average exchange rate of \$0.65. Expenses related to assets remeasured at historical exchange rates (depreciation expense and amortization expense) are remeasured at relevant historical rates.

The following procedure remeasures cost of goods sold at historical exchange rates. Beginning inventory acquired on January 1 is remeasured at the exchange rate on that date (\$0.60). Purchases made evenly throughout the year are remeasured at the average rate for the year (\$0.65). Ending inventory (at FIFO cost) is purchased evenly throughout the fourth quarter of 2017 and the average exchange rate for the quarter (\$0.68) is used to remeasure that component of cost of goods sold. These procedures result in cost of goods sold of \$1,930,500, calculated as follows:

Beginning inventory, 1/1/17 . . . . .	CHF 150,000	× 0.60 =	\$ 90,000
Plus: Purchases, 2017 . . . . .	3,250,000	× 0.65 =	2,112,500
Less: Ending inventory, 12/31/17 . . . . .	(400,000)	× 0.68 =	(272,000)
Cost of goods sold, 2017 . . . . .	CHF 3,000,000		\$1,930,500

**EXHIBIT 10.8**  
**Remeasurement of Income**  
**Statement and Statement**  
**of Retained Earnings—**  
**Temporal Method**

<b>SWISSCO</b>			
<b>Income Statement For Year Ending December 31, 2017</b>			
	<b>CHF</b>	<b>Remeasurement Rate</b>	<b>U.S.\$</b>
Sales.....	CHF 4,000,000	0.65A	\$2,600,000
Cost of goods sold .....	(3,000,000)	Calculation	(1,930,500)
Gross profit.....	1,000,000		669,500
Depreciation expense.....	(100,000)	0.61H	(61,000)
Amortization expense.....	(10,000)	0.62H	(6,200)
Other expenses.....	(220,000)	0.65A	(143,000)
Income before income taxes.....	670,000		459,300
Income taxes.....	(200,000)	0.65A	(130,000)
Income before remeasurement loss ..	470,000		329,300
<b>Remeasurement Loss</b>		To balance	(47,000)
Net income .....	<u>CHF 470,000</u>	Below	<u>\$ 282,300</u>

<b>Statement of Retained Earnings</b>			
<b>For Year Ending December 31, 2017</b>			
	<b>CHF</b>	<b>Remeasurement Rate</b>	<b>U.S.\$</b>
Retained earnings, 1/1/17.....	CHF —0—		\$ —0—
Net income, 2017 .....	470,000	To balance	282,300
Dividends.....	(150,000)	0.67 H	(100,500)
Retained earnings, 12/31/17 .....	<u>CHF 320,000</u>	Above	<u>\$ 181,800</u>

The ending balances in retained earnings on the balance sheet and on the statement of retained earnings must reconcile with one another. Because dividends are remeasured into a U.S. dollar equivalent of \$100,500 and the ending balance in retained earnings on the balance sheet is \$181,800, net income must be \$282,300.

Reconciling the amount of income reported in the statement of retained earnings and in the income statement requires a remeasurement loss of \$47,000 in calculating net income. Without this remeasurement loss, the income statement, statement of retained earnings, and balance sheet are not consistent with one another.

The remeasurement loss can be calculated by considering the impact of exchange rate changes on the subsidiary's balance sheet exposure. Under the temporal method, SWISSCO's balance sheet exposure is defined by its net monetary asset or net monetary liability position. SWISSCO began 2017 with net monetary assets (cash) of CHF 350,000. During the year, however, expenditures of cash and the incurrence of liabilities caused monetary liabilities (accounts payable + long-term debt = CHF 850,000) to exceed monetary assets (cash + accounts receivable = CHF 330,000). A net monetary liability position of CHF 520,000 exists at December 31, 2017. The remeasurement loss is computed by translating the beginning net monetary asset position and subsequent changes in monetary items at appropriate exchange rates and then comparing this with the dollar value of net monetary liabilities at year-end based on the current exchange rate:

<b>Computation of Remeasurement Loss</b>			
Net monetary assets, 1/1/17.....	CHF 350,000	× 0.60 =	\$ 210,000
Increase in monetary assets:			
Sales, 2017.....	4,000,000	× 0.65 =	2,600,000
Decreases in monetary assets and increases in monetary liabilities:			
Purchases, 2017 .....	(3,250,000)	× 0.65 =	(2,112,500)
Other expenses, 2017 .....	(220,000)	× 0.65 =	(143,000)

Income taxes, 2017 .....	(200,000) × 0.65 =	(130,000)
Purchase of property, plant & equipment, 3/15/17 .....	(1,000,000) × 0.61 =	(610,000)
Acquisition of patent, 4/10/17 .....	(50,000) × 0.62 =	(31,000)
Dividends, 10/1/17 .....	(150,000) × 0.67 =	(100,500)
Net monetary liabilities, 12/31/17 .....	<u>CHF (520,000)</u>	\$ (317,000)
Net monetary liabilities, 12/31/17 at the current exchange rate .....	<u>CHF (520,000) × 0.70 =</u>	<u>(364,000)</u>
Remeasurement loss .....		<u>\$ 47,000</u>

Had SWISSCO maintained its net monetary asset position of CHF 350,000 for the entire year, a \$35,000 remeasurement gain would have resulted. The CHF held in cash was worth \$210,000 (CHF 350,000 × \$0.60) at the beginning of the year and \$245,000 (CHF 350,000 × \$0.70) at year-end. However, the net monetary asset position is not maintained because of changes during the year in monetary items other than the original cash balance. Indeed, a net monetary liability position arises over the course of the year. The foreign currency appreciation coupled with an increase in *net monetary liabilities* generates a *remeasurement loss* for the year.

### Remeasurement of the Statement of Cash Flows

In remeasuring the statement of cash flows (shown in Exhibit 10.9), the U.S. dollar value for net income comes directly from the remeasured income statement. Depreciation and amortization are remeasured at the rates used in the income statement, and the remeasurement loss

#### EXHIBIT 10.9 Remeasurement of Statement of Cash Flows— Temporal Method

<b>SWISSCO</b>			
<b>Statement of Cash Flows</b>			
<b>For Year Ending December 31, 2017</b>			
	CHF	Remeasurement Rate	U.S.\$
Operating activities:			
Net income .....	CHF 470,000	From I/S	\$ 282,300
Add: Depreciation expense .....	100,000	0.61 H	61,000
Amortization expense .....	10,000	0.62 H	6,200
<b>Remeasurement loss</b> .....		From I/S	47,000
Increase in accounts receivable .....	(200,000)	0.65 A	(130,000)
Increase in inventory .....	(250,000)	*	(182,000)
Increase in accounts payable .....	<u>600,000</u>	0.65 A	<u>390,000</u>
Net cash from operations .....	<u>730,000</u>		<u>474,500</u>
Investing activities:			
Purchase of property and equipment .....	(1,000,000)	0.61 H	(610,000)
Acquisition of patent .....	<u>(50,000)</u>	0.62 H	<u>(31,000)</u>
Net cash from investing activities .....	<u>(1,050,000)</u>		<u>(641,000)</u>
Financing activities:			
Proceeds from long-term debt .....	250,000	0.61 H	152,500
Payment of dividends .....	<u>(150,000)</u>	0.67 H	<u>(100,500)</u>
Net cash from financing activities .....	<u>100,000</u>		<u>52,000</u>
Decrease in cash .....	(220,000)		(114,500)
Effect of exchange rate changes on cash .....		To balance	(4,500)
Cash at December 31, 2016 .....	<u>CHF 350,000</u>	0.60 H	<u>\$ 210,000</u>
Cash at December 31, 2017 .....	<u>CHF 130,000</u>	0.70 C	<u>\$ 91,000</u>

\*In remeasuring cost of goods sold earlier, beginning inventory was remeasured as \$90,000 and ending inventory was remeasured as \$272,000: an increase of \$182,000.

is added back to net income because it is a noncash item. The increases in accounts receivable and accounts payable relate to sales and purchases and therefore are remeasured at the average rate. The U.S. dollar value for the increase in inventory is determined by referring to the remeasurement of the cost of goods sold.

The resulting U.S. dollar amount of “net cash from operations” (\$474,500) is exactly the same as when the current rate method was used in translation. In addition, the investing and financing activities are translated in the same manner under both methods. This makes sense; the amount of cash inflows and outflows is a matter of fact and is not affected by the particular translation methodology employed.

### Nonlocal Currency Balances

One additional issue related to the translation of foreign currency financial statements needs to be considered. How should a company deal with nonlocal currency balances in the foreign currency financial statements of their foreign operations? For example, if any of the accounts of the Swiss subsidiary are denominated in a currency other than the Swiss franc, those balances would first have to be restated into francs in accordance with the rules discussed in the previous chapter. Both the foreign currency balance and any related foreign exchange gain or loss would then be translated (or remeasured) into U.S. dollars.

For example, assume that SWISSCO borrows 100,000 euros on January 1, 2017. Exchange rates in 2017 between the Swiss franc (CHF) and euro (€) and between the CHF and U.S. dollar (\$) are as follows:

	CHF per €	\$ per CHF
January 1, 2017	CHF 1.20	\$0.60
Average, 2017	CHF 1.22	\$0.65
December 31, 2017	CHF 1.25	\$0.70

On December 31, 2017, SWISSCO remeasures the €100,000 note payable into CHF using the current rate as follows:  $€100,000 \times \text{CHF } 1.25 = \text{CHF } 125,000$ . SWISSCO also recognizes a CHF 5,000 [ $€100,000 \times (\text{CHF } 1.25 - \text{CHF } 1.20)$ ] foreign exchange loss. To consolidate SWISSCO’s CHF financial statements with those of its parent, the note payable remeasured in CHF is then translated into \$ using the current exchange rate, and the related foreign exchange loss in CHF is translated into \$ using the average exchange rate as follows:

Note payable	$\text{CHF } 125,000 \times \$0.70 \text{ C} = \$87,500$
Foreign exchange loss	$\text{CHF } 5,000 \times \$0.65 \text{ A} = \$3,250$

A note payable of \$87,500 will be reported on the consolidated balance sheet, and a loss of \$3,250 will be reflected in the measurement of consolidated net income.

The comprehensive illustration at the end of this chapter further demonstrates how nonlocal currency balances of a foreign entity are treated in the preparation of consolidated financial statements.

## Comparison of the Results from Applying the Two Different Methods

The determination of the foreign subsidiary’s functional currency (and the use of different translation methods) can have a significant impact on consolidated financial statements. The following chart shows differences for SWISSCO in several key items under the two different translation methods:

Item	Translation Method		Difference
	Current Rate	Temporal	
Net income (NI) .....	\$ 305,500	\$ 282,300	+ 8.2%
Total assets (TA) .....	1,169,000	1,076,800	+ 8.6
Total equity (TE).....	574,000	481,800	+ 19.1
Return on equity (NI/TE).....	53.2%	58.6%	- 9.2

In this illustration, if the Swiss franc is determined to be SWISSCO's functional currency (and the current rate method is applied), net income reported in the consolidated income statement would be 8.2 percent more than if the U.S. dollar is the functional currency (and the temporal method is applied). In addition, total assets would be 8.6 percent more and total equity would be 19.1 percent more using the current rate method. Because of the larger amount of equity, return on equity (net income/total equity) using the current rate method is 9.2 percent less.

Note that the current rate method does not always result in higher net income and a higher amount of equity than the temporal method. For example, had SWISSCO maintained its net monetary asset position, it would have computed a remeasurement gain under the temporal method leading to higher income than under the current rate method. Moreover, if the Swiss franc had depreciated during 2017, the temporal method would have resulted in higher net income.

The important point is that determining the functional currency and resulting translation method can have a significant impact on the amounts a parent company reports in its consolidated financial statements. The appropriate determination of the functional currency is an important issue.

“Within rather broad parameters,” says Peat, Marwick, Mitchell partner James Weir, “choosing the functional currency is basically a management call. So much so, in fact, that Texaco, Occidental, and Unocal settled on the dollar as the functional currency for most of their foreign operations, whereas competitors Exxon, Mobil, and Amoco chose primarily the local currencies as the functional currencies for their foreign businesses.”<sup>8</sup>

Different functional currencies selected by different companies in the same industry could have a significant impact on the comparability of financial statements within that industry. Indeed, one concern that those FASB members dissenting on the current standard raised was that the functional currency rules might not result in similar accounting for similar situations.

In addition to differences in amounts reported in the consolidated financial statements, the results of the SWISSCO illustration demonstrate several conceptual differences between the two translation methods.

### Underlying Valuation Method

Using the temporal method, SWISSCO remeasured its property, plant, and equipment as follows:

$$\text{Property, plant, and equipment CHF 1,000,000} \times \$0.61 \text{ H} = \$610,000$$

By multiplying the historical cost in Swiss francs by the historical exchange rate, \$610,000 represents the U.S. dollar-equivalent historical cost of this asset. It is the amount of U.S. dollars that the parent company would have had to pay to acquire assets having a cost of CHF 1,000,000 when the exchange rate was \$0.61 per Swiss franc.

Property, plant, and equipment was translated under the current rate method as follows:

$$\text{Property, plant, and equipment CHF 1,000,000} \times \$0.70 \text{ C} = \$700,000$$

The \$700,000 amount is not readily interpretable. It does not represent the U.S. dollar-equivalent historical cost of the asset; that amount is \$610,000. Nor does it represent the U.S.

<sup>8</sup> John Heins, “Plenty of Opportunity to Fool Around,” *Forbes*, June 2, 1986, p. 139.



dollar–equivalent fair value of the asset because CHF 1,000,000 is not the fair value of the asset in Switzerland. The \$700,000 amount is simply the product of multiplying two numbers together!

### Underlying Relationships

The following table reports the values for selected financial ratios calculated from the original foreign currency financial statements and from the U.S. dollar–translated statements using the two different translation methods:

Ratio	CHF	U.S.\$ Temporal	U.S.\$ Current Rate
Current ratio (current assets/current liabilities) . . . .	1.22	1.20	1.22
Debt/equity ratio (total liabilities/total equities) . . . .	1.04	1.23	1.04
Gross profit ratio (gross profit/sales) . . . . .	25%	25.8%	25%
Return on equity (net income/total equity) . . . . .	57.3%	58.6%	53.2%

The temporal method distorts all of the ratios measured in the foreign currency. The subsidiary appears to be less liquid, more highly leveraged, and more profitable than it does in Swiss franc terms.

The current rate method maintains the first three ratios but distorts return on equity. The distortion occurs because income was translated at the average-for-the-period exchange rate whereas total equity was translated at the current exchange rate. In fact, the use of the average rate for income and the current rate for assets and liabilities distorts any ratio combining balance sheet and income statement figures, such as turnover ratios.

#### LO 10-5

Understand the rationale for hedging a net investment in a foreign operation and describe the treatment of gains and losses on hedges used for this purpose.

## Hedging Balance Sheet Exposure

When the U.S. dollar is the functional currency or when a foreign operation is located in a highly inflationary economy, remeasurement gains and losses are reported in the consolidated income statement. Management of U.S. multinational companies could wish to avoid reporting remeasurement losses in net income because of the perceived negative impact this has on the company's stock price. Likewise, when the foreign currency is the functional currency, management could wish to avoid negative translation adjustments because of the adverse impact on the debt-to-equity ratio.

More and more corporations are hedging their translation exposure—the recorded value of international assets such as plant, equipment and inventory—to prevent gyrations in their quarterly accounts. Though technically only paper gains or losses, translation adjustments can play havoc with balance-sheet ratios and can spook analysts and creditors alike.<sup>9</sup>

Translation adjustments and remeasurement gains or losses are functions of two factors: (1) changes in the exchange rate and (2) balance sheet exposure. Although a company can do little if anything to influence exchange rates, parent companies can use several techniques to hedge the balance sheet exposures of their foreign operations.

Parent companies can hedge balance sheet exposure by using a derivative financial instrument, such as a forward contract or foreign currency option, or a nonderivative hedging instrument, such as a foreign currency borrowing. To illustrate, assume that SWISSCO's functional currency is the Swiss franc; this creates a net asset balance sheet exposure. USCO believes that the Swiss franc will depreciate, thereby generating a negative translation adjustment that will reduce consolidated stockholders' equity. USCO could hedge this balance sheet exposure by borrowing Swiss francs for a period of time, thus creating an offsetting Swiss franc liability exposure. As the Swiss franc depreciates, the U.S. dollar value of the Swiss franc borrowing decreases and USCO will be able to repay the Swiss franc borrowing using fewer U.S. dollars. This generates a foreign exchange gain, which offsets the negative translation

<sup>9</sup> Ida Picker, "Indecent Exposure," *Institutional Investor*, September 1991, p. 82.

adjustment arising from the translation of SWISSCO's financial statements. As an alternative to the Swiss franc borrowing, USCO might have acquired a Swiss franc put option to hedge its balance sheet exposure. A put option gives the company the right to sell Swiss francs at a predetermined strike price. As the Swiss franc depreciates, the fair value of the put option should increase, resulting in a gain. Current standards provide that the gain or loss on a hedging instrument designated and effective as a *hedge of the net investment in a foreign operation* should be reported in the same manner as the translation adjustment being hedged. Thus, the foreign exchange gain on the Swiss franc borrowing or the gain on the foreign currency option would be included in accumulated other comprehensive income along with the negative translation adjustment arising from the translation of SWISSCO's financial statements. In the event that the gain on the hedging instrument is larger than the translation adjustment being hedged, the excess is taken to net income.

The paradox of hedging a balance sheet exposure is that in the process of avoiding an unrealized translation adjustment, realized foreign exchange gains and losses can result. Consider USCO's foreign currency borrowing to hedge a Swiss franc balance sheet exposure. At the initiation of the loan, USCO converts the borrowed Swiss francs into U.S. dollars at the spot exchange rate. When the liability matures, USCO purchases Swiss francs at the spot rate prevailing at that date to repay the loan. The change in exchange rate over the life of the loan generates a *realized* gain or loss. If the Swiss franc depreciates as expected, a realized foreign exchange gain that offsets the negative translation adjustment in accumulated other comprehensive income results. Although the net effect on accumulated other comprehensive income is zero, a net increase in cash occurs as a result of the hedge. If the Swiss franc unexpectedly appreciates, a realized foreign exchange loss occurs. This is offset by a positive translation adjustment in accumulated other comprehensive income, but a net decrease in cash exists. While a hedge of a net investment in a foreign operation eliminates the possibility of reporting a negative translation adjustment in accumulated other comprehensive income, gains and losses realized in cash can result.

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## ***International Financial Reporting Standard 9— Financial Instruments***

As noted in the previous chapter, there is considerable similarity between IFRS and U.S. GAAP with respect to the accounting for derivative financial instruments used to hedge foreign exchange risk. Similar to U.S. GAAP, *IFRS 9* also allows hedge accounting for hedges of net investments in a foreign operation. The gain or loss on the hedging instrument is recognized in Accumulated Other Comprehensive Income (AOCI) along with the translation adjustment that is being hedged. Under both IFRS and U.S. GAAP, the cumulative translation adjustment and cumulative net gain or loss on the net investment hedge are transferred from AOCI to net income when the foreign subsidiary is sold or otherwise disposed of.

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## **Disclosures Related to Translation**

Current standards require firms to present an analysis of the change in the cumulative translation adjustment account in the financial statements or notes thereto. Many companies comply with this requirement directly in their statement of comprehensive income. Other companies provide separate disclosure in the notes; see Exhibit 10.10 for an example of this disclosure for Mondelez International, Inc.

An analysis of the Currency Translation Adjustments column in Exhibit 10.10 indicates a negative translation adjustment of \$952 million in 2013 and a negative translation adjustment of \$3,995 million in 2014. From the signs of these adjustments, one can infer that, in aggregate, the foreign currencies in which Mondelez International has operations depreciated against the U.S. dollar in both 2013 and 2014, with a much larger depreciation taking place in 2014. The negative translation adjustment of \$3,995 million in 2014 is quite large, being equal to 156 percent of 2014 pretax income of \$2,554 million.

**EXHIBIT 10.10** Mondelez International, Inc., 2014 Annual Report**Note 14 Reclassifications from Accumulated Other Comprehensive Earnings / (Losses)**

The components of accumulated other comprehensive earnings / (losses) attributable to Mondelez International during 2014 and 2013 were:

(in millions)	Currency Translation Adjustments	Pension and Other Benefits	Derivatives Accounted for as Hedges	Total
Balances at January 1, 2013	\$ (399)	\$(2,229)	\$ (38)	\$(2,666)
Other comprehensive earnings / (losses), before reclassifications:				
Currency translation adjustment	(952)	(29)	—	(981)
Pension and other benefits	—	713	—	713
Derivatives accounted for as hedges	(99)	—	169	70
Losses / (gains) reclassified as net earnings	—	197	72	269
Tax (expense) / benefit	<u>36</u>	<u>(244)</u>	<u>(86)</u>	<u>(294)</u>
Total other comprehensive earnings / (losses)				(223)
Balances at December 31, 2013	\$(1,414)	\$(1,592)	\$ 117	\$(2,889)
Other comprehensive earnings / (losses), before reclassifications:				
Currency translation adjustment (1)	(3,995)	146	—	(3,849)
Pension and other benefits	—	(1,388)	—	(1,388)
Derivatives accounted for as hedges	595	—	(166)	429
Losses / (gains) reclassified as net earnings	—	174	(45)	129
Tax (expense) / benefit	<u>(228)</u>	<u>386</u>	<u>92</u>	<u>250</u>
Total other comprehensive earnings / (losses)				(4,429)
Balances at December 31, 2014	<u>\$(5,042)</u>	<u>\$(2,274)</u>	<u>\$ (2)</u>	<u>\$(7,318)</u>

(1) The consolidated statement of comprehensive earnings for the year ended December 31, 2014, includes \$(33) million of currency translation adjustment attributable to noncontrolling interests.

Although not specifically required to do so, many companies describe their translation procedures in their “summary of significant accounting policies” in the notes to the financial statements. The following excerpt from International Business Machines (IBM) Corporation’s 2014 annual report illustrates this type of disclosure. Note that IBM uses the terms *translated* and *translation gains and losses* (rather than remeasured and remeasurement gains and losses) in describing its accounting policy with regard to foreign entities that operate in U.S. dollars:

**Translation of Non-U.S. Currency Amounts**—Assets and liabilities of non-U.S. subsidiaries that have a local functional currency are translated to United States (U.S.) dollars at year-end exchange rates. Translation adjustments are recorded in OCI. Income and expense items are translated at weighted-average rates of exchange prevailing during the year.

Inventories, property, plant and equipment—net, and other non-monetary assets and liabilities of non-U.S. subsidiaries and branches that operate in U.S. dollars are translated at the approximate exchange rates prevailing when the company acquired the assets or liabilities. All other assets and liabilities denominated in a currency other than U.S. dollars are translated at year-end exchange rates with the transaction gain or loss recognized in other (income) and expense. Income and expense items are translated at the weighted-average rates of exchange prevailing during the year. These translation gains and losses are included in net income for the period in which exchange rates change.

**LO 10-6**

Prepare a consolidation worksheet for a parent and its foreign subsidiary.

**Consolidation of a Foreign Subsidiary**

This section of the chapter demonstrates the procedures used to consolidate a foreign subsidiary’s financial statements with those of its parent. The treatment of the excess of fair value over book value requires special attention. As an item denominated in foreign currency, translation of the excess gives rise to a translation adjustment recorded on the consolidation worksheet.

On January 1, 2016, Altman, Inc., a U.S.-based manufacturing firm, acquired 100 percent of Bradford Ltd. in Great Britain. Altman paid 25 million British pounds (£25,000,000), which was equal to Bradford's fair value. Bradford's balance sheet on January 1, 2016, which reflects a book value of £22,700,000, showed the following totals:

Cash .....	£ 925,000	Accounts payable	£ 675,000
Accounts receivable .....	1,400,000	Long-term debt	4,000,000
Inventory .....	6,050,000	Common stock	20,000,000
Property, plant & equipment (net) ...	<u>£19,000,000</u>	Retained earnings	<u>2,700,000</u>
Total .....	<u>£27,375,000</u>	Total	<u>£ 27,375,000</u>

The £2,300,000 excess of fair value over book value resulted from undervalued land (part of Property, plant & equipment) and therefore is not subject to amortization. Altman uses the equity method to account for its investment in Bradford.

On December 31, 2017, two years after the acquisition date, Bradford submitted the following trial balance for consolidation (credit balances are in parentheses):

Cash .....	£ 600,000
Accounts receivable .....	2,700,000
Inventory .....	9,000,000
Property, plant & equipment (net) .....	17,200,000
Accounts payable	(500,000)
Long-term debt .....	(2,000,000)
Common stock .....	(20,000,000)
Retained earnings, 1/1/17 .....	(3,800,000)
Sales .....	(13,900,000)
Cost of goods sold .....	8,100,000
Depreciation expense .....	900,000
Other expenses .....	950,000
Dividends declared, 6/30/17 .....	<u>750,000</u>
	<u>£ -0-</u>

Although Bradford generated net income of £1,100,000 in 2016, it neither declared nor paid dividends that year. Other than the payment of dividends in 2017, no intra-entity transactions occurred between the two affiliates. Altman has determined the British pound to be Bradford's functional currency.

Relevant exchange rates for the British pound were as follows:

	January 1	June 30	December 31	Average
2016	\$1.51	N/A	\$1.56	\$1.54
2017	1.56	\$1.58	1.53	1.55

### Translation of Foreign Subsidiary Trial Balance

The initial step in consolidating the foreign subsidiary is to translate its trial balance from British pounds into U.S. dollars. Because the British pound has been determined to be the functional currency, this translation uses the current rate method. The historical exchange rate for translating Bradford's common stock and January 1, 2016, retained earnings is the exchange rate that existed at the acquisition date—\$1.51.

	British Pounds	Rate	U.S. Dollars
Cash .....	£ 600,000	1.53 C	£ 918,000
Accounts receivable .....	2,700,000	1.53 C	4,131,000
Inventory .....	9,000,000	1.53 C	13,770,000
Property, plant & equipment (net) .....	17,200,000	1.53 C	26,316,000
Accounts payable .....	(500,000)	1.53 C	(765,000)

(continued)

*(continued)*

	British Pounds	Rate	U.S. Dollars
Long-term debt .....	(2,000,000)	1.53 C	(3,060,000)
Common stock .....	(20,000,000)	1.51 H	(30,200,000)
Retained earnings, 1/1/17 .....	(3,800,000)	*	(5,771,000)
Sales .....	(13,900,000)	1.55 A	(21,545,000)
Cost of goods sold .....	8,100,000	1.55 A	12,555,000
Depreciation expense .....	900,000	1.55 A	1,395,000
Other expenses .....	950,000	1.55 A	1,472,500
Dividends declared, 6/30/17 .....	750,000	1.58 H	1,185,000
<b>Cumulative translation adjustment .....</b>			<b>(401,500)</b>
	<u>£ —0—</u>		<u>\$ —0—</u>
*Retained Earnings, 1/1/16 .....	£2,700,000	1.51 H	\$4,077,000
Net Income, 2016 .....	<u>1,100,000</u>	1.54 A	<u>1,694,000</u>
Retained Earnings, 12/31/16 .....	<u>£3,800,000</u>		<u>\$5,771,000</u>

A positive (credit balance) cumulative translation adjustment of \$401,500 is required to make the trial balance actually balance. The cumulative translation adjustment is calculated as follows:

Net assets, 1/1/16 .....	£22,700,000	1.51 H	\$34,277,000	
Change in net assets, 2016 .....				
Net income, 2016 .....	<u>1,100,000</u>	1.54 A	<u>1,694,000</u>	
Net assets, 12/31/16 .....	<u>£23,800,000</u>		<u>\$35,971,000</u>	
Net assets, 12/31/16, at current exchange rate .....	<u>£23,800,000</u>	1.56 C	<u>37,128,000</u>	
<b>Translation adjustment, 2016</b> (positive) .....				<b>\$ (1,157,000)</b>
Net assets, 1/1/17 .....	£23,800,000	1.56 H	\$37,128,000	
Change in net assets, 2017 .....				
Net income, 2017 .....	3,950,000	1.55 A	6,122,500	
Dividends, 6/30/17 .....	<u>(750,000)</u>	1.58 H	<u>(1,185,000)</u>	
Net assets, 12/31/17 .....	<u>£27,000,000</u>		<u>\$42,065,500</u>	
Net assets, 12/31/17, at current exchange rate .....	<u>£27,000,000</u>	1.53 C	<u>\$41,310,000</u>	
<b>Translation adjustment,</b> <b>2017</b> (negative) .....				<u>755,500</u>
<b>Cumulative translation adjustment,</b> <b>12/31/17</b> (positive) .....				<u><u>\$ (401,500)</u></u>

The translation adjustment in 2016 is positive because the British pound appreciated against the U.S. dollar that year; the translation adjustment in 2017 is negative because the British pound depreciated against the U.S. dollar that year.

### Determination of Balance in Investment Account—Equity Method

The original value of the investment in Bradford, the net income earned by Bradford, and the dividends paid by Bradford are all denominated in British pounds. Relevant amounts must be translated from pounds into U.S. dollars so Altman can account for its investment in Bradford under the equity method. In addition, the translation adjustment calculated each year is included in the Investment in Bradford account to update the foreign currency investment to its U.S. dollar equivalent. The counterpart is recorded as a translation adjustment on Altman's books:

12/31/16	Investment in Bradford. . . . .	\$1,157,000	
	Cumulative Translation Adjustment. . . . .		\$1,157,000
	To record the positive translation adjustment related to the investment in a British subsidiary when the British pound appreciated.		
12/31/17	Cumulative Translation Adjustment. . . . .	\$ 755,500	
	Investment in Bradford. . . . .		\$ 755,500
	To record the negative translation adjustment related to the investment in a British subsidiary when the British pound depreciated.		

As a result of these two journal entries, Altman has a cumulative translation adjustment of \$401,500 on its separate balance sheet.

The carrying value of the investment account in U.S. dollar terms at December 31, 2017, is determined as follows:

Investment in Bradford	British Pounds	Exchange Rate	U.S. Dollars
Original value . . . . .	£25,000,000	1.51 H	\$37,750,000
Bradford net income, 2016 . . . . .	1,100,000	1.54 A	1,694,000
Translation adjustment, 2016 . . . . .			1,157,000
Balance, 12/31/16. . . . .	£26,100,000		\$40,601,000
Bradford net income, 2017 . . . . .	3,950,000	1.55 A	6,122,500
Bradford dividends, 6/30/17 . . . . .	(750,000)	1.58 H	(1,185,000)
Translation adjustment, 2017 . . . . .			(755,500)
Balance, 12/31/17. . . . .	<u>£29,300,000</u>		<u>\$44,783,000</u>

In addition to Altman’s \$44,783,000 investment in Bradford, it has equity income on its December 31, 2017, trial balance in the amount of \$6,122,500.

### Consolidation Worksheet

Once the subsidiary’s trial balance has been translated into dollars and the carrying value of the investment is known, the consolidation worksheet at December 31, 2017, can be prepared. As is true in the consolidation of domestic subsidiaries, the investment account, the subsidiary’s equity accounts, and the effects of intra-entity transactions must be eliminated. The excess of fair value over book value at the date of acquisition also must be allocated to the appropriate accounts (in this example, Property, plant & equipment).

Unique to the consolidation of foreign subsidiaries is the fact that the excess of fair value over book value, denominated in foreign currency, also must be translated into the parent’s reporting currency. When the foreign currency is the functional currency, the excess is translated at the current exchange rate with a resulting translation adjustment. The excess is not carried on either the parent’s or the subsidiary’s books but is recognized only in the consolidation worksheet. *Neither the parent nor the subsidiary has recorded the translation adjustment related to the excess, and it also must be entered in the consolidation worksheet.* Exhibit 10.11 presents the consolidation worksheet of Altman and Bradford at December 31, 2017.

### Explanation of Consolidation Entries

*S*—Eliminates the subsidiary’s stockholders’ equity accounts as of the beginning of the current year along with the equivalent book value component within the original value of the Investment in Bradford account.

*A*—Allocates the excess of fair value over book value at the date of acquisition to land (Property, plant & equipment) and eliminates that amount within the original value of the Investment in Bradford account.

*I*—Eliminates the amount of equity income recognized by the parent in the current year and included in the Investment in Bradford account under the equity method.

**EXHIBIT 10.11 Consolidation Worksheet—Parent and Foreign Subsidiary**

<b>ALTMAN, INC., AND BRADFORD LTD.</b>					
<b>Consolidation Worksheet</b>					
<b>For Year Ending December 31, 2017</b>					
Accounts	Altman	Bradford	Consolidated Entries		Consolidated Totals
			Debits	Credits	
<b>Income Statement</b>					
Sales	\$ (32,489,000)	\$ (21,545,000)			\$ (54,034,000)
Cost of goods sold	16,000,000	12,555,000			28,555,000
Depreciation expense	9,700,000	1,395,000			11,095,000
Other expenses	2,900,000	1,472,500			4,372,500
Equity income	(6,122,500)		(I) 6,122,500		—0—
Net income	\$ (10,011,500)	\$ (6,122,500)			\$ (10,011,500)
<b>Statement of Retained Earnings</b>					
Retained earnings, 1/1/17	\$ (25,194,000)	\$ (5,771,000)	(S) 5,771,000		\$ (25,194,000)
Net income (above)	(10,011,500)	(6,122,500)			(10,011,500)
Dividends	1,500,000	1,185,000		(D) 1,185,000	1,500,000
Retained earnings, 12/31/17	\$ (33,705,500)	\$ (10,708,500)			\$ (33,705,500)
<b>Balance Sheet</b>					
Cash	\$ 3,649,800	\$ 918,000			\$ 4,567,800
Accounts receivable	3,100,000	4,131,000			7,231,000
Inventory	11,410,000	13,770,000			25,180,000
Investment in Bradford	44,783,000			(S) 35,971,000 (A) 3,473,000	—0—
Property, plant and equipment (net)	39,500,000	26,316,000	(D) 1,185,000 (A) 3,473,000 (E) 46,000	(I) 6,122,500 (T) 401,500	69,335,000
Total assets	\$ 102,442,800	\$ 45,135,000			\$ 106,313,800
Accounts payable	\$ (2,500,000)	\$ (765,000)			\$ (3,265,000)
Long-term debt	(22,728,800)	(3,060,000)			(25,788,800)
Common stock	(43,107,000)	(30,200,000)	(S) 30,200,000		(43,107,000)
Retained earnings, 12/31/17 (above)	(33,705,500)	(10,708,500)			(33,705,500)
Cumulative translation adjustment	(401,500)	(401,500)	(T) 401,500	(E) 46,000	(447,500)
Total liabilities and equities	\$ (102,422,800)	\$ (45,135,000)	\$47,199,000	\$47,199,000	\$(106,313,800)

*D*—Eliminates the subsidiary's dividend payment that was a reduction in the Investment in Bradford account under the equity method.

*T*—Eliminates the cumulative translation adjustment included in the Investment in Bradford account under the equity method and the cumulative translation adjustment on the subsidiary's translated books.

*E*—Revalues the excess of fair value over book value for the change in exchange rate since the date of acquisition with the counterpart recognized as an increase in the consolidated cumulative translation adjustment. The revaluation is calculated as follows:

<b>Excess of Fair Value over Book Value</b>			
U.S. dollar equivalent at 12/31/17 . . . . .	\$2,300,000 × \$1.53	=	\$3,519,000
U.S. dollar equivalent at 1/1/16 . . . . .	2,300,000 × \$1.51	=	3,473,000
Cumulative translation adjustment related to excess, 12/31/17 . . . . .			\$ 46,000

## Summary

1. Because many companies have significant financial involvement in foreign countries, the process by which foreign currency financial statements are translated into U.S. dollars has special accounting importance. The two major issues related to the translation process are (1) which method to use and (2) where to report the resulting translation adjustment in the consolidated financial statements.
2. Translation methods differ on the basis of which accounts are translated at the current exchange rate and which are translated at historical rates. Accounts translated at the current exchange rate are exposed to translation adjustment. Different translation methods give rise to different concepts of balance sheet exposure and translation adjustments of differing signs and magnitude.
3. The temporal method translates assets carried at current value (cash, marketable securities, receivables) and liabilities at the current exchange rate. This method translates assets carried at historical cost and stockholders' equity at historical exchange rates. When liabilities are more than the sum of cash, marketable securities, and receivables, a net liability balance sheet exposure exists. Foreign currency appreciation results in a negative translation adjustment (remeasurement loss). Foreign currency depreciation results in a positive translation adjustment (remeasurement gain). By translating assets carried at historical cost at historical exchange rates, the temporal method maintains the underlying valuation method used by the foreign operation but distorts relationships in the foreign currency financial statements.
4. The current rate method translates all assets and liabilities at the current exchange rate, giving rise to a net asset balance sheet exposure. Foreign currency appreciation results in a positive translation adjustment. Foreign currency depreciation results in a negative translation adjustment. By translating assets carried at historical cost at the current exchange rate, the current rate method maintains relationships in the foreign currency financial statements but distorts the underlying valuation method used by the foreign operation.
5. Current U.S. accounting procedures require two separate procedures for translating foreign currency financial statements into the parent's reporting currency. *Translation* through use of the current rate method is appropriate when the foreign operation's functional currency is a foreign currency. In this case, the translation adjustment is reported in the Accumulated Other Comprehensive Income account and reflected on the balance sheet as a separate component of stockholders' equity. *Remeasurement* by using the temporal method is appropriate when the operation's functional currency is the U.S. dollar. Remeasurement also is applied when the operation is in a country with a highly inflationary economy. In these situations, the translation adjustment is treated as a remeasurement gain or loss in net income.
6. IFRS and U.S. GAAP have broadly similar rules with regard to the translation of foreign currency financial statements. Differences exist with respect to the determination of functional currency, with *IAS 21* establishing a hierarchy of functional currency indicators, and in translating financial statements of foreign entities located in high inflation countries. For these entities, *IAS 21* requires financial statements to first be restated for local inflation and then be translated into the parent's currency using the current exchange rate for all financial statement items.
7. Some companies hedge their balance sheet exposures to avoid reporting remeasurement losses in net income and/or negative translation adjustments in accumulated other comprehensive income. Gains and losses on derivative or nonderivative instruments used to hedge net investments in foreign operations are reported in the same manner as the translation adjustment being hedged.

## Comprehensive Illustration

### Problem

(*Estimated Time: 55 to 65 Minutes*) Arlington Company is a U.S.-based organization with numerous foreign subsidiaries. As a preliminary step in preparing consolidated financial statements for 2017, it must translate the financial information from each foreign operation into its reporting currency, the U.S. dollar.

Arlington owns a Swedish subsidiary that has been in business for several years. On December 31, 2016, this entity's balance sheet was translated from Swedish kroner (SEK) (its functional currency) into U.S. dollars as prescribed by U.S. GAAP. Equity accounts at that date follow (all credit balances):

Common stock	SEK 110,000 = \$21,000
Retained earnings	194,800 = 36,100
Cumulative translation adjustment	3,860

At the end of 2017, the Swedish subsidiary produced the following trial balance. These figures include all of the entity's transactions for the year except for the results of several transactions related to sales made to a Chinese customer. A separate ledger has been maintained for these transactions denominated in Chinese renminbi (RMB). This ledger follows the company's trial balance.



**Trial Balance—Swedish Subsidiary**  
**December 31, 2017**

	Debit	Credit
Cash .....	SEK 41,000	
Accounts receivable .....	126,000	
Inventory .....	128,000	
Property, plant & equipment .....	388,000	
Accumulated depreciation .....		SEK 98,100
Accounts payable .....		39,000
Notes payable .....		56,000
Bonds payable .....		125,000
Common stock .....		110,000
Retained earnings, 1/1/17 .....		194,800
Sales .....		350,000
Cost of goods sold .....	165,000	
Depreciation expense .....	10,900	
Salary expense .....	36,000	
Rent expense .....	12,000	
Interest expense .....	10,000	
Other expenses .....	31,000	
Dividends, 7/1/17 .....	25,000	
Totals .....	<u>SEK 972,900</u>	<u>SEK 972,900</u>

**Ledger—Transactions in Chinese Renminbi**  
**December 31, 2017**

	Debit	Credit
Cash .....	RMB 10,000	
Accounts receivable .....	28,000	
Property, plant & equipment .....	20,000	
Accumulated depreciation .....		RMB 4,000
Notes payable .....		15,000
Sales .....		44,000
Depreciation expense .....	4,000	
Interest expense .....	1,000	
Totals .....	<u>RMB 63,000</u>	<u>RMB 63,000</u>

### Additional Information

- The Swedish subsidiary began selling to the Chinese customer at the beginning of the current year. At that time, it borrowed 20,000 RMB to acquire a truck for delivery purposes. It paid one-fourth of that debt before the end of the year. The subsidiary made sales to China evenly during the period.
- The U.S. dollar exchange rates for 1 SEK are as follows:

January 1, 2017	\$0.200 = 1.00 SEK
Weighted average rate for 2017	0.192 = 1.00
July 1, 2017	0.190 = 1.00
December 31, 2017	0.182 = 1.00

- The exchange rates applicable for the remeasurement of 1 RMB into Swedish kroner are as follows:

January 1, 2017	1.25 SEK = 1.00 RMB
Weighted average rate for 2017	1.16 = 1.00
December 1, 2017	1.101 = 1.00
December 31, 2017	1.04 = 1.00

- The Swedish subsidiary expended SEK 10,000 during the year on development activities. In accordance with IFRS, this cost has been capitalized within the Property, plant & equipment account. This expenditure had no effect on the depreciation recognized for the year.

**Required**

- Prepare the Swedish kroner trial balance for the Swedish subsidiary for the year ending December 31, 2017. Verify, through separate calculation, the amount of remeasurement gain/loss derived as a plug figure in the trial balance.
- Translate the Swedish kroner trial balance into U.S. dollars to facilitate Arlington Company’s preparation of consolidated financial statements. Verify, through separate calculation, the amount of cumulative translation adjustment derived as a plug figure in the trial balance.

**Solution**

**Part A**

**Remeasurement of Foreign Currency Balances**

A portion of the Swedish subsidiary’s operating results is presently stated in Chinese renminbi. These balances must be remeasured into the functional currency, the Swedish krona, before the translation process can begin. In remeasuring these accounts using the temporal method, the krona value of the monetary assets and liabilities is determined by using the current (C) exchange rate (1.04 SEK per RMB) whereas all other accounts are remeasured at historical (H) or average (A) rates.

**Remeasurement of Foreign Currency Balances**

	Renminbi		Rate	Kroner	
	Debit	Credit		Debit	Credit
Cash . . . . .	10,000		× 1.04 C =	10,400	
Accounts receivable . . . . .	28,000		× 1.04 C =	29,120	
Property, plant & equipment . . . . .	20,000		× 1.25 H =	25,000	
Accumulated depreciation . . . . .		4,000	× 1.25 H =		5,000
Notes payable . . . . .		15,000	× 1.04 C =		15,600
Sales . . . . .		44,000	× 1.16 A =		51,040
Depreciation expense . . . . .	4,000		× 1.25 H =	5,000	
Interest expense . . . . .	1,000		× 1.16 A =	1,160	
	<u>63,000</u>	<u>63,000</u>		70,680	71,640
Remeasurement loss . . . . .				960	
Total . . . . .				<u>71,640</u>	<u>71,640</u>

**Remeasurement Loss for 2017**

Net monetary asset balance, 1/1/17 . . . . .		-0-			-0-
Increases in net monetary items:					
Operations (sales less interest expense) . . . . .	RMB 43,000		× 1.16 A =		SEK 49,880
Decreases in net monetary items:					
Purchased truck, 1/1/17 . . . . .	(20,000)		× 1.25 H =		(25,000)
Net monetary assets, 12/31/17 . . . . .	<u>RMB 23,000</u>				SEK 24,880
Net monetary assets, 12/31/17, at current exchange rate . . . . .	<u>RMB 23,000</u>		× 1.04 C =		<u>SEK 23,920</u>
Remeasurement loss (gain) . . . . .					<u>SEK 960</u>

The net monetary asset exposure (cash and accounts receivable > notes payable) and depreciation of the Chinese renminbi create a remeasurement loss of SEK 960.

The remeasured figures from the Chinese operation must be combined in some manner with the subsidiary’s trial balance denominated in Swedish kroner. For example, a year-end adjustment can be

recorded in the Swedish subsidiary's accounting system to add the remeasured balances for financial reporting purposes, as follows:

12/31/17 Adjustment	Kroner	
	Debit	Credit
Cash .....	10,400	
Accounts receivable .....	29,120	
Property, plant & equipment .....	25,000	
Depreciation expense .....	5,000	
Interest expense .....	1,160	
Remeasurement loss .....	960	
Accumulated depreciation .....		5,000
Notes payable .....		15,600
Sales .....		51,040
To record in Swedish kroner the foreign currency transactions originally denominated in renminbi.		

One more adjustment is necessary before translating the subsidiary's Swedish krona financial statements into the parent's reporting currency. The development costs incurred by the Swedish entity should be reclassified as an expense as required by U.S. authoritative literature. After this adjustment, the Swedish subsidiary's statements conform with U.S. GAAP.

Alternatively, the results from remeasuring the Chinese renminbi balances into Swedish kroner and reclassification of development costs can be added to the Swedish subsidiary's unadjusted trial balance as follows:

12/31/17 Adjustment	Kroner	
	Debit	Credit
Other expenses .....	10,000	
Property, plant & equipment .....		10,000
To adjust property, plant & equipment and expenses in Swedish kroner to be in compliance with U.S. GAAP.		

#### Preparation of Adjusted Trial Balance in Swedish Kroner

	Unadjusted		Adjustments		Adjusted	
	Debit	Credit	Debit	Credit	Debit	Credit
Cash	41,000		10,400		51,400	
Accounts receivable	126,000		29,120		155,120	
Inventory	128,000				128,000	
Property, plant & equipment	388,000		25,000	10,000	403,000	
Accumulated depreciation		98,100		5,000		103,100
Accounts payable		39,000				39,000
Notes payable		56,000		15,600		71,600
Bonds payable		125,000				125,000
Common stock		110,000				110,000
Retained earnings, 1/1/17		194,800				194,800
Sales		350,000		51,040		401,040
Cost of goods sold	165,000				165,000	
Depreciation expense	10,900		5,000		15,900	
Salary expense	36,000				36,000	
Rent expense	12,000				12,000	
Interest expense	10,000		1,160		11,160	

(continued)

(continued)

	Unadjusted		Adjustments		Adjusted	
	Debit	Credit	Debit	Credit	Debit	Credit
Other expenses	31,000		10,000		41,000	
Remeasurement loss			960		960	
Dividends, 7/1/17	25,000				25,000	
Total	<u>972,900</u>	<u>972,900</u>	<u>81,640</u>	<u>81,640</u>	<u>1,044,540</u>	<u>1,044,540</u>

Having established all account balances in the functional currency (Swedish kroner), the subsidiary's trial balance now can be translated into U.S. dollars. Under the current rate method, the dollar values to be reported for income statement items are based on the average exchange rate for the current year. All assets and liabilities are translated at the current exchange rate at the balance sheet date, and equity accounts are translated at historical rates in effect at the date of accounting recognition.

## Part B

### Translation of Swedish Kroner Trial Balance into U.S. Dollars

	Swedish Kroner		Rate		U.S. Dollars	
	Debit	Credit			Debit	Credit
Cash	51,400		x 0.182	C =	9,354.80	
Accounts receivable	155,120		x 0.182	C =	28,231.84	
Inventory	128,000		x 0.182	C =	23,296.00	
Property, plant & equipment	403,000		x 0.182	C =	73,346.00	
Accumulated depreciation		103,100	x 0.182	C =		18,764.20
Accounts payable		39,000	x 0.182	C =		7,098.00
Notes payable		71,600	x 0.182	C =		13,031.20
Bonds payable		125,000	x 0.182	C =		22,750.00
Common stock		110,000	<b>Given</b>			21,000.00
Retained earnings, 1/1/17		194,800	<b>Given</b>			36,100.00
Sales		401,040	x 0.192	A =		76,999.68
Cost of goods sold	165,000		x 0.192	A =	31,680.00	
Depreciation expense	15,900		x 0.192	A =	3,052.80	
Salary expense	36,000		x 0.192	A =	6,912.00	
Rent expense	12,000		x 0.192	A =	2,304.00	
Interest expense	11,160		x 0.192	A =	2,142.72	
Other expenses	41,000		x 0.192	A =	7,872.00	
Remeasurement loss	960		x 0.192	A =	184.32	
Dividends, 7/1/17	25,000		x 0.190	H =	4,750.00	
Total	<u>1,044,540</u>	<u>1,044,540</u>			193,126.48	195,743.08
Cumulative translation adjustment					2,616.60	
Total					<u>195,743.08</u>	<u>195,743.08</u>

The cumulative translation adjustment at 12/31/17 comprises the beginning balance (given) plus the translation adjustment for the current year:

#### Cumulative Translation Adjustment

Balance, 1/1/17	\$ 3,860.00
Translation adjustment for 2017	(6,476.60)
Balance, 12/31/17	<u>\$(2,616.60)</u>

The negative translation adjustment for 2017 of \$6,476.60 is calculated by considering the effect of exchange rate changes on net assets:

Translation Adjustment for 2017				
Net assets, 1/1/17 .....	SEK 304,800*	×	0.200 C	= \$ 60,960.00
Increase in net assets:				
Net income, 2017 .....	119,020	×	0.192 A	= 22,851.84
Decrease in net assets:				
Dividends, 7/1/17 .....	(25,000)	×	0.190 H	= (4,750.00)
Net assets, 12/31/17 .....	<u>SEK 398,820<sup>†</sup></u>			\$ 79,061.84
Net assets, 12/31/17, at current exchange rate .....	<u>SEK 398,820</u>	×	0.182 C	= <u>72,585.24</u>
Translation adjustment, 2017— negative .....				<u>\$ 6,476.60</u>

\*Indicated by January 1, 2017, stockholders' equity balances—Common Stock, SEK 110,000; Retained Earnings, SEK 194,800.

<sup>†</sup> Indicated by December 31, 2017, stockholders' equity balances—Common Stock, SEK 110,000; Retained Earnings, SEK 288,820.

## Questions

1. What are the two major issues related to the translation of foreign currency financial statements?
2. What causes balance sheet (or translation) exposure to foreign exchange risk? How does balance sheet exposure compare with transaction exposure?
3. Why might a company want to hedge its balance sheet exposure? What is the paradox associated with hedging balance sheet exposure?
4. How are gains and losses on financial instruments used to hedge the net investment in a foreign operation reported in the consolidated financial statements?
5. What concept underlies the temporal method of translation? What concept underlies the current rate method of translation? How does balance sheet exposure differ under these two methods?
6. In translating the financial statements of a foreign subsidiary, why is the value assigned to retained earnings especially difficult to determine? How is this problem normally resolved?
7. What are the major procedural differences in applying the current rate and temporal methods of translation?
8. Clarke Company has a subsidiary operating in a foreign country. In relation to this subsidiary, what does the term *functional currency* mean? How is the functional currency determined?
9. A translation adjustment must be calculated and disclosed when financial statements of a foreign subsidiary are translated into the parent's reporting currency. How is this figure computed, and where is the amount reported in the financial statements?
10. In preparing the consolidation worksheet for a parent company and its foreign subsidiary, what consolidation entries are made related to the cumulative translation adjustment?
11. When is remeasurement rather than translation appropriate? How does remeasurement differ from translation?
12. Which translation method does U.S. GAAP require for operations in highly inflationary countries? What is the rationale for mandating use of this method?
13. In what ways does IFRS differ from U.S. GAAP with respect to the translation of foreign currency financial statements?

## Problems

LO 10-2

1. What is a subsidiary's functional currency?
  - a. The parent's reporting currency.
  - b. The currency used by the parent to acquire the subsidiary.
  - c. The currency in which the entity primarily generates and expends cash.
  - d. Always the currency of the country in which the company has its headquarters.
2. In comparing the current rate and temporal methods of translation, which of the following is true?
  - a. The reported balance of accounts receivable is normally the same under both methods.
  - b. The reported balance of inventory is normally the same under both methods.

LO 10-3, 10-4

LO 10-3

- c. The reported balance of equipment is normally the same under both methods.
  - d. The reported balance of depreciation expense is normally the same under both methods.
3. Which of the following statements is true for the translation process using the current rate method?
- a. A translation adjustment can affect consolidated net income.
  - b. Equipment is translated at the historical exchange rate in effect at the date of its purchase.
  - c. A translation adjustment is created by the change in the relative value of a subsidiary's monetary assets and monetary liabilities caused by exchange rate fluctuations.
  - d. A translation adjustment is created by the change in the relative value of a subsidiary's net assets caused by exchange rate fluctuations.

LO 10-2, 10-3

4. A foreign subsidiary of Thun Corporation has one asset (inventory) and no liabilities. The functional currency for this subsidiary is the yuan. The inventory was acquired for 100,000 yuan when the exchange rate was \$0.16 = 1 yuan. Consolidated statements are to be produced, and the current exchange rate is \$0.12 = 1 yuan. Which of the following statements is true for the consolidated financial statements?
- a. A remeasurement gain must be reported.
  - b. A positive translation adjustment must be reported.
  - c. A negative translation adjustment must be reported.
  - d. A remeasurement loss must be reported.

LO 10-3

5. At what rates should the following balance sheet accounts in foreign statements be translated (using the current rate method) into U.S. dollars?

	<b>Equipment</b>	<b>Accumulated Depreciation—Equipment</b>
a.	Current	Current
b.	Current	Average for year
c.	Historical	Current
d.	Historical	Historical

**Problems 6 and 7 are based on the following information.**

Certain balance sheet accounts of a foreign subsidiary of Orchid Company have been stated in U.S. dollars as follows:

	<b>Stated at</b>	
	<b>Current Rates</b>	<b>Historical Rates</b>
Accounts receivable, current	\$200,000	\$220,000
Accounts receivable, long term	100,000	110,000
Land	50,000	55,000
Patents	80,000	85,000
	<u>\$430,000</u>	<u>\$470,000</u>

LO 10-2, 10-3

6. This subsidiary's functional currency is a foreign currency. What total should Orchid's balance sheet include for the preceding items?
- a. \$430,000.
  - b. \$435,000.
  - c. \$440,000.
  - d. \$450,000.

LO 10-2, 10-4

7. This subsidiary's functional currency is the U.S. dollar. What total should Orchid's balance sheet include for the preceding items?
- a. \$430,000.
  - b. \$435,000.
  - c. \$440,000.
  - d. \$450,000.

**Problems 8 and 9 are based on the following information.**

Newberry, Inc., whose reporting currency is the U.S. dollar (\$), has a subsidiary in Argentina, whose functional currency also is the \$. The subsidiary acquires inventory on credit on November 1, 2017, for 100,000 pesos that is sold on January 17, 2018, for 130,000 pesos. The subsidiary pays for the inventory on January 31, 2018. Currency exchange rates are as follows:

November 1, 2017 .....	\$0.16 = 1 peso
December 31, 2017 .....	0.17 = 1
January 17, 2018 .....	0.18 = 1
January 31, 2018 .....	0.19 = 1

**LO 10-2, 10-3**

8. What amount does Newberry's consolidated balance sheet report for this inventory at December 31, 2017?
- \$16,000.
  - \$17,000.
  - \$18,000.
  - \$19,000.

**LO 10-2, 10-3**

9. What amount does Newberry's consolidated income statement report for cost of goods sold for the year ending December 31, 2018?
- \$16,000.
  - \$17,000.
  - \$18,000.
  - \$19,000.

**Problems 10 and 11 are based on the following information.**

A Clarke Corporation subsidiary buys marketable equity securities and inventory on April 1, 2017, for 100,000 won each. It pays for both items on June 1, 2017, and they are still on hand at year-end. Inventory is carried at cost under the lower-of-cost-or-net realizable rule. Currency exchange rates for 1 won follow:

January 1, 2017 .....	\$0.15 = 1 won
April 1, 2017 .....	0.16 = 1
June 1, 2017 .....	0.17 = 1
December 31, 2017 .....	0.19 = 1

**LO 10-2, 10-4**

10. Assume that the won is the subsidiary's functional currency. What balances does a consolidated balance sheet report as of December 31, 2017?
- Marketable equity securities = \$16,000 and Inventory = \$16,000.
  - Marketable equity securities = \$17,000 and Inventory = \$17,000.
  - Marketable equity securities = \$19,000 and Inventory = \$16,000.
  - Marketable equity securities = \$19,000 and Inventory = \$19,000.

**LO 10-2, 10-4**

11. Assume that the U.S. dollar is the subsidiary's functional currency. What balances does a consolidated balance sheet report as of December 31, 2017?
- Marketable equity securities = \$16,000 and Inventory = \$16,000.
  - Marketable equity securities = \$17,000 and Inventory = \$17,000.
  - Marketable equity securities = \$19,000 and Inventory = \$16,000.
  - Marketable equity securities = \$19,000 and Inventory = \$19,000.

**LO 10-2, 10-4**

12. A U.S. company's foreign subsidiary had these amounts in local currency units (LCU) in 2017:

Cost of goods sold .....	LCU 5,000,000
Beginning inventory .....	500,000
Ending inventory .....	600,000

The average exchange rate during 2017 was \$1.00 = LCU 1. The beginning inventory was acquired when the exchange rate was \$0.80 = LCU 1. Ending inventory was acquired when the exchange rate was \$1.10 = LCU 1. The exchange rate at December 31, 2017, was \$1.15 = LCU 1. Assuming

that the foreign country is highly inflationary, at what amount should the foreign subsidiary's cost of goods sold be reflected in the U.S. dollar income statement?

- a. \$4,440,000.
- b. \$4,840,000.
- c. \$5,000,000.
- d. \$5,750,000.

LO 10-3

13. Yang Corporation starts a foreign subsidiary on January 1 by investing 20,000 rand. Yang owns all of the shares of the subsidiary's common stock. The foreign subsidiary generates 40,000 rand of net income throughout the year and pays no dividends. The rand is the foreign subsidiary's functional currency. Currency exchange rates for 1 rand are as follows:

January 1 . . . . .	\$0.25 = 1 rand
Average for the year . . . . .	0.28 = 1
December 31 . . . . .	0.31 = 1

In preparing consolidated financial statements, what translation adjustment will Yang report at the end of the current year?

- a. \$400 positive (credit).
- b. \$1,000 positive (credit).
- c. \$1,400 positive (credit).
- d. \$2,400 positive (credit).

LO 10-1

14. In the translated financial statements, which method of translation maintains the underlying valuation methods used in preparing the foreign currency financial statements?

- a. Current rate method; income statement translated at average exchange rate for the year.
- b. Current rate method; income statement translated at exchange rate at the balance sheet date.
- c. Temporal method.
- d. Monetary/nonmonetary method.

LO 10-4

15. Charleston Corporation operates a branch operation in a foreign country. Although this branch operates in euros, the U.S. dollar is its functional currency. Thus, a remeasurement is necessary to produce financial information for external reporting purposes. The branch began the year with 500,000 euros in cash and no other assets or liabilities. However, the branch immediately used 300,000 euros to acquire a warehouse. On May 1, it purchased inventory costing 100,000 euros for cash that it sold on July 1 for 160,000 euros cash. The branch transferred 10,000 euros to the parent on October 1 and recorded depreciation on the warehouse of 10,000 euros for the year. Currency exchange rates for 1 euro follow:

January 1 . . . . .	\$1.14 = 1 euro
May 1 . . . . .	1.18 = 1
July 1 . . . . .	1.20 = 1
October 1 . . . . .	1.18 = 1
December 31 . . . . .	1.08 = 1
Average for the year . . . . .	1.16 = 1

What is the remeasurement gain or loss to be recognized in the consolidated income statement?

- a. \$100 gain.
- b. \$200 gain.
- c. \$100 loss.
- d. \$200 loss.

LO 10-4

16. Which of the following items is remeasured using the current exchange rate under the temporal method?

- a. Bonds payable.
- b. Dividends declared.
- c. Additional paid-in capital.
- d. Amortization of intangibles.



## LO 10-2

17. In accordance with U.S. generally accepted accounting principles, which translation combination is appropriate for a foreign operation whose functional currency is the U.S. dollar?

	Method	Treatment of Translation Adjustment
a.	Current rate	Other comprehensive income
b.	Current rate	Gain or loss in net income
c.	Temporal	Other comprehensive income
d.	Temporal	Gain or loss in net income

## LO 10-3

18. A foreign subsidiary's functional currency is its local currency, which has not experienced significant inflation. The current exchange rate at the balance sheet date is the appropriate exchange rate for translating:

	Insurance Expense	Prepaid Insurance
a.	Yes	Yes
b.	Yes	No
c.	No	Yes
d.	No	No

## LO 10-5

19. The functional currency of Bertrand, Inc.'s Irish subsidiary is the euro. Bertrand borrowed euros as a partial hedge of its investment in the subsidiary. Since then, the euro has decreased in value. Bertrand's negative translation adjustment on its investment in the subsidiary exceeded its foreign exchange gain on its euro borrowing. How should Bertrand report the effects of the negative translation adjustment and foreign exchange gain in its consolidated financial statements?
- Report the translation adjustment in accumulated other comprehensive income on the balance sheet and the foreign exchange gain as a gain on the income statement.
  - Report the translation adjustment in the income statement and defer the foreign exchange gain in accumulated other comprehensive income on the balance sheet.
  - Report the translation adjustment less the foreign exchange gain in accumulated other comprehensive income on the balance sheet.
  - Report the translation adjustment less the foreign exchange gain in the income statement.

**Problems 20 and 21 are based on the following information.**

McCarthy, Inc.'s Brazilian subsidiary borrowed 100,000 euros on January 1, 2017. Exchange rates between the Brazilian real (BRL) and euro (€) and between the U.S. dollar (\$) and BRL are as follows:

	BRL per €	US\$ per BRL
January 1, 2017 . . . . .	BRL 4.2	\$ 0.28
Average, 2017 . . . . .	BRL 4.3	\$ 0.25
December 31, 2017 . . . . .	BRL 4.6	\$ 0.20

## LO 10-4

20. At what amount should the Brazilian subsidiary's euro note payable be reported on McCarthy's December 31, 2017, consolidated balance sheet?
- \$84,000.
  - \$86,000.
  - \$92,000.
  - \$128,800.

## LO 10-4

21. What amount of foreign exchange gain or loss should be reflected in McCarthy's 2017 consolidated net income?
- \$8,000 loss.
  - \$10,000 loss.
  - \$2,000 gain.
  - \$5,000 gain.

LO 10-3

22. On January 1, Narnevik Corporation formed a subsidiary in a foreign country. On April 1, the subsidiary purchased inventory on account at a cost of 250,000 local currency units (LCU). One-fifth of this inventory remained unsold on December 31, while 30 percent of the account payable had not yet been paid. The U.S. \$ per LCU exchange rates were as follows:

January 1 .....	\$0.60
April 1 .....	0.58
Average for the current year .....	0.56
December 31 .....	0.54

At what amounts should the December 31 balances in inventory and accounts payable be translated into U.S. dollars using the current rate method?

LO 10-3, 10-4

23. The following accounts are denominated in rubles as of December 31, 2017. For reporting purposes, these accounts need to be stated in U.S. dollars. For each account, indicate the exchange rate that would be used to translate the ruble balance into U.S. dollars under the current rate method. Then, again for each account, indicate the exchange rate that would be used to remeasure the ruble balance to U.S. dollars using the temporal method. The company was started in 2012. The buildings were acquired in 2013 and the patents in 2015.

	Translation	Remeasurement
Accounts payable .....		
Accounts receivable .....		
Accumulated depreciation—buildings .....		
Advertising expense .....		
Amortization expense (patents) .....		
Buildings .....		
Cash .....		
Common stock .....		
Depreciation expense .....		
Dividends (10/1/17) .....		
Notes payable—due in 2020 .....		
Patents (net) .....		
Salary expense .....		
Sales .....		

Exchange rates for 1 ruble are as follows:

2012 .....	1 ruble = \$0.28
2013 .....	1 = 0.26
2015 .....	1 = 0.25
January 1, 2017 .....	1 = 0.24
April 1, 2017 .....	1 = 0.23
July 1, 2017 .....	1 = 0.22
October 1, 2017 .....	1 = 0.20
December 31, 2017 .....	1 = 0.16
Average for 2017 .....	1 = 0.19

LO 10-1, 10-3, 10-4

24. On December 18, 2017, Stephanie Corporation acquired 100 percent of a Swiss company for 4.0 million Swiss francs (CHF), which is indicative of book and fair value. At the acquisition date, the exchange rate was \$1.00 = CHF 1. On December 18, 2017, the book and fair values of the subsidiary's assets and liabilities were:

Cash .....	CHF 800,000
Inventory .....	1,300,000
Property, plant & equipment .....	4,000,000
Notes payable .....	(2,100,000)

Stephanie prepares consolidated financial statements on December 31, 2017. By that date, the Swiss franc has appreciated to \$1.10 = CHF 1. Because of the year-end holidays, no transactions took place prior to consolidation.

- a. Determine the translation adjustment to be reported on Stephanie’s December 31, 2017, consolidated balance sheet, assuming that the Swiss franc is the Swiss subsidiary’s functional currency. What is the economic relevance of this translation adjustment?
- b. Determine the remeasurement gain or loss to be reported in Stephanie’s 2017 consolidated net income, assuming that the U.S. dollar is the functional currency. What is the economic relevance of this remeasurement gain or loss?

**LO 10-3, 10-4**

25. The Isle of Palms Company (IOP), a U.S.-based entity, has a wholly owned subsidiary in Israel that has been determined as having the Israeli shekel (ILS) as its functional currency. On October 1, 2016, the Israeli subsidiary borrowed 500,000 Swiss francs (CHF) from a bank in Geneva for two years at an interest rate of 5 percent per year. The note payable and accrued interest are payable at the date of maturity. On December 31, 2017, the Israeli subsidiary has the following foreign currency balances on its books:

Interest expense . . . . .	CHF 25,000
Interest payable . . . . .	CHF 31,250
Note payable . . . . .	CHF 500,000

Relevant exchange rates between the Israeli shekel (ILS) and Swiss franc (CHF), and between the U.S. dollar (USD) and Israeli shekel (ILS) follow:

	ILS per CHF	USD per ILS
October 1, 2016 . . . . .	3.86	0.30
January 1, 2017 . . . . .	3.91	0.29
Average for 2017 . . . . .	3.95	0.27
December 31, 2017 . . . . .	4.02	0.25

- a. Determine the Israeli shekel amounts at which the Swiss franc balances should be reported on the Israel subsidiary’s December 31, 2017, trial balance.
- b. Determine the U.S. dollar amounts at which the Swiss franc balances should be included in IOP’s 2017 consolidated financial statements.

**LO 10-3**

26. Sullivan’s Island Company began operating a subsidiary in a foreign country on January 1, 2017, by investing capital in the amount of 60,000 pounds. The subsidiary immediately borrowed 140,000 pounds on a five-year note with 10 percent interest payable annually beginning on January 1, 2018. The subsidiary then purchased for 200,000 pounds a building that had a 10-year expected life and no salvage value and is to be depreciated using the straight-line method. Also on January 1, 2017, the subsidiary rented the building for three years to a group of local attorneys for 8,000 pounds per month. By year-end, rent payments totaling 80,000 pounds had been received, and 16,000 pounds was in accounts receivable. On October 1, 4,000 pounds was paid for a repair made to the building. The subsidiary transferred a cash dividend of 12,000 pounds back to Sullivan’s Island Company on December 31, 2017. The functional currency for the subsidiary is the pound. Currency exchange rates for 1 pound follow:

January 1, 2017 . . . . .	\$2.00 = 1 pound
October 1, 2017 . . . . .	2.05 = 1
December 31, 2017 . . . . .	2.08 = 1
Average for 2017 . . . . .	2.04 = 1

Prepare an income statement, statement of retained earnings, and balance sheet for this subsidiary in pounds and then translate these amounts into U.S. dollars.

**LO 10-3**

27. Refer to the information in problem 26. Prepare a statement of cash flows in pounds for Sullivan’s Island Company’s foreign subsidiary and then translate these amounts into U.S. dollars.

**LO 10-3, 10-4**

28. Rolfe Company (a U.S.-based company) has a subsidiary in Nigeria where the local currency unit is the naira (NGN). On December 31, 2016, the subsidiary had the following balance sheet (amounts are in thousands (000’s)):

Cash .....	NGN 16,000	Note payable .....	NGN 20,000
Inventory .....	10,000	Common stock .....	20,000
Land .....	4,000	Retained earnings .....	10,000
Building .....	40,000		
Accumulated depreciation .....	(20,000)		
	<u>NGN 50,000</u>		<u>NGN 50,000</u>

The subsidiary acquired the inventory on August 1, 2016, and the land and building in 2010. It issued the common stock in 2008. During 2017, the following transactions took place:

**2017**

Feb. 1	Paid 8,000,000 NGN on the note payable.
May 1	Sold entire inventory for 16,000,000 NGN on account.
June 1	Sold land for 6,000,000 NGN cash.
Aug. 1	Collected all accounts receivable.
Sept. 1	Signed long-term note to receive 8,000,000 NGN cash.
Oct. 1	Bought inventory for 20,000,000 NGN cash.
Nov. 1	Bought land for 3,000,000 NGN on account.
Dec. 1	Declared and paid 3,000,000 NGN cash dividend to parent.
Dec. 31	Recorded depreciation for the entire year of 2,000,000 NGN.

The U.S dollar (\$) exchange rates for 1 NGN are as follows:

2008 .....	NGN 1 = \$0.0048
2010 .....	1 = 0.0042
August 1, 2016 .....	1 = 0.0062
December 31, 2016 .....	1 = 0.0064
February 1, 2017 .....	1 = 0.0066
May 1, 2017 .....	1 = 0.0068
June 1, 2017 .....	1 = 0.0070
August 1, 2017 .....	1 = 0.0074
September 1, 2017 .....	1 = 0.0076
October 1, 2017 .....	1 = 0.0078
November 1, 2017 .....	1 = 0.0080
December 1, 2017 .....	1 = 0.0082
December 31, 2017 .....	1 = 0.0084
Average for 2017 .....	1 = 0.0074

- a. Assuming the NGN is the subsidiary’s functional currency, what is the translation adjustment determined solely for 2017?
- b. Assuming the U.S.\$ is the subsidiary’s functional currency, what is the remeasurement gain or loss determined solely for 2017?

**LO 10-3, 10-4**

29. Zugar Company is domiciled in a country whose currency is the dinar. Zugar begins 2017 with three assets: cash of 20,000 dinars, accounts receivable of 80,000 dinars, and land that cost 200,000 dinars when acquired on April 1, 2016. On January 1, 2017, Zugar has a 150,000 dinar note payable, and no other liabilities. On May 1, 2017, Zugar renders services to a customer for 120,000 dinars, which was immediately paid in cash. On June 1, 2017, Zugar incurred a 100,000 dinar operating expense, which was immediately paid in cash. No other transactions occurred during the year. Currency exchange rates for 1 dinar follow:

April 1, 2016 .....	\$0.33 = 1 dinar
January 1, 2017 .....	0.36 = 1
May 1, 2017 .....	0.37 = 1
June 1, 2017 .....	0.39 = 1
December 31, 2017 .....	0.41 = 1

- a. Assume that Zugar is a foreign subsidiary of a U.S. multinational company that uses the U.S. dollar as its reporting currency. Assume also that the dinar is the subsidiary's functional currency. What is the translation adjustment for this subsidiary for the year 2017?
- b. Assume that Zugar is a foreign subsidiary of a U.S. multinational company that uses the U.S. dollar as its reporting currency. Assume also that the U.S. dollar is the subsidiary's functional currency. What is the remeasurement gain or loss for 2017?
- c. Assume that Zugar is a foreign subsidiary of a U.S. multinational company. On the December 31, 2017, balance sheet, what is the translated value of the Land account? On the December 31, 2017, balance sheet, what is the remeasured value of the Land account?
30. Lancer, Inc. (a U.S.-based company), establishes a subsidiary in a foreign country on January 1, 2016. The following account balances for the year ending December 31, 2017, are stated in kanquo (KQ), the local currency:

LO 10-3, 10-4

Sales .....	KQ	200,000
Inventory (bought on 3/1/17) .....		100,000
Equipment (bought on 1/1/16) .....		80,000
Rent expense .....		10,000
Dividends (declared on 10/1/17) .....		20,000
Notes receivable (to be collected in 2020) .....		30,000
Accumulated depreciation—equipment .....		24,000
Salary payable .....		5,000
Depreciation expense .....		8,000

The following U.S.\$ per KQ exchange rates are applicable:

January 1, 2016 .....	\$0.13
Average for 2016 .....	0.14
January 1, 2017 .....	0.18
March 1, 2017 .....	0.19
October 1, 2017 .....	0.21
December 31, 2017 .....	0.22
Average for 2017 .....	0.20

Lancer is preparing account balances to produce consolidated financial statements.

- a. Assuming that the kanquo is the functional currency, what exchange rate would be used to report each of these accounts in U.S. dollar consolidated financial statements?
- b. Assuming that the U.S. dollar is the functional currency, what exchange rate would be used to report each of these accounts in U.S. dollar consolidated financial statements?
31. Board Company has a foreign subsidiary that began operations at the start of 2017 with assets of 132,000 kites (the local currency unit) and liabilities of 54,000 kites. During this initial year of operation, the subsidiary reported a profit of 26,000 kites. It distributed two dividends, each for 5,000 kites with one dividend declared on March 1 and the other on October 1. Applicable exchange rates for 1 kite follow:

LO 10-3, 10-5

January 1, 2017 (start of business) .....	\$0.80
March 1, 2017 .....	0.78
Weighted average rate for 2017 .....	0.77
October 1, 2017 .....	0.76
December 31, 2017 .....	0.75

- a. Assume that the kite is this subsidiary's functional currency. What translation adjustment would Board report for the year 2017?
- b. Assume that on October 1, 2017, Board entered into a forward exchange contract to hedge the net investment in this subsidiary. On that date, Board agreed to sell 200,000 kites in three months at a forward exchange rate of \$0.76/1 kite. Prepare the journal entries required by this forward contract.
- c. Compute the net translation adjustment for Board to report in accumulated other comprehensive income for the year 2017 under this second set of circumstances.

LO 10-3, 10-4



32. Kingsfield establishes a subsidiary operation in a foreign country on January 1, 2017. The country's currency is the kumquat (KQ). To start this business, Kingsfield invests 10,000 kumquats. Of this amount, it spends 3,000 kumquats immediately to acquire equipment. Later, on April 1, 2017, it also purchases land. All subsidiary operational activities occur at an even rate throughout the year. The U.S. dollar (\$) exchange rates for the kumquat for 2017 follow:

January 1 .....	\$1.71
April 1 .....	1.59
June 1 .....	1.66
Weighted average .....	1.64
December 31 .....	1.62

As of December 31, 2017, the subsidiary reports the following trial balance:

	Debits	Credits
Cash .....	KQ 8,000	
Accounts receivable .....	9,000	
Equipment .....	3,000	
Accumulated depreciation .....		KQ 600
Land .....	5,000	
Accounts payable .....		3,000
Notes payable (due 2025) .....		5,000
Common stock .....		10,000
Dividends declared (6/1/17) .....	4,000	
Sales .....		25,000
Salary expense .....	5,000	
Depreciation expense .....	600	
Miscellaneous expenses .....	9,000	
Totals .....	<u>KQ 43,600</u>	<u>KQ 43,600</u>

A corporation based in East Lansing, Michigan, Kingsfield uses the U.S. dollar as its reporting currency.

- Assume that the subsidiary's functional currency is the kumquat. Prepare a trial balance for it in U.S. dollars so that 2017 consolidated financial statements can be prepared.
- Assume that the subsidiary's functional currency is the U.S. dollar. Prepare a trial balance for it in U.S. dollars so that 2017 consolidated financial statements can be prepared.

LO 10-3



33. Livingston Company is a wholly owned subsidiary of Rose Corporation. Livingston operates in a foreign country with financial statements recorded in goghs (GH), the company's functional currency. Financial statements for the year 2017 are as follows:

**Income Statement  
For Year Ending December 31, 2017**

Sales .....	GH 270,000
Cost of goods sold .....	(155,000)
Gross profit .....	115,000
Less: Operating expenses .....	(54,000)
Gain on sale of equipment .....	10,000
Net income .....	<u>GH 71,000</u>

**Statement of Retained Earnings  
For Year Ending December 31, 2017**

Retained earnings, 1/1/17 .....	GH 216,000
Net income .....	71,000
Less: Dividends .....	(26,000)
Retained earnings, 12/31/17 .....	<u>GH 261,000</u>

**Balance Sheet**  
**December 31, 2017**

<b>Assets</b>	
Cash .....	GH 44,000
Receivables .....	116,000
Inventory .....	58,000
Property, plant and equipment (net) .....	339,000
Total assets .....	GH 557,000
<b>Liabilities and Equities</b>	
Liabilities .....	GH 176,000
Common stock .....	120,000
Retained earnings, 12/31/17 .....	261,000
Total liabilities and equities .....	GH 557,000

**Additional Information**

- The common stock was issued in 2010 when the exchange rate was \$2.08 per GH; property, plant, and equipment was acquired in 2011 when the rate was \$2.00 per GH.
- As of January 1, 2017, the retained earnings balance was translated as \$396,520.
- The U.S.\$ per GH exchange rates for 2017 follow:

January 1 .....	\$1.67
April 1 .....	1.61
September 1 .....	1.72
December 31 .....	1.54
Weighted average .....	1.59

- Inventory was acquired evenly throughout the year.
  - The December 31, 2016, balance sheet reported a translation adjustment with a debit balance of \$85,000.
  - Dividends were declared on April 1, 2017, and a piece of equipment was sold on September 1, 2017. Assume that the gogh is Livingston Company's functional currency. Translate the 2017 foreign currency financial statements into the parent's reporting currency, the U.S. dollar.
34. The following account balances are for the Agee Company as of January 1, 2017, and December 31, 2017. All amounts are denominated in kroner (Kr).

	January 1, 2017	December 31, 2017
Accounts payable .....	(15,000)	(25,000)
Accounts receivable .....	54,000	104,000
Accumulated depreciation—buildings .....	(45,000)	(50,000)
Accumulated depreciation—equipment .....	–0–	(7,500)
Bonds payable—due 2020 .....	(64,000)	(64,000)
Buildings .....	134,000	105,000
Cash .....	60,000	10,500
Common stock .....	(69,000)	(82,000)
Depreciation expense .....	–0–	40,000
Dividends (10/1/17) .....	–0–	57,000
Equipment .....	–0–	64,000
Gain on sale of building .....	–0–	(8,500)
Rent expense .....	–0–	21,500
Retained earnings .....	(55,000)	(55,000)
Salary expense .....	–0–	45,000
Sales .....	–0–	(162,000)
Utilities expense .....	–0–	7,000

**Additional Information**

- Agee issued additional shares of common stock during the year on April 1, 2017. Common stock at January 1, 2017, was sold at the start of operations in 2010.
- Agee purchased buildings in 2011 and sold one building with a book value of Kr 1,500 on July 1 of the current year.
- Equipment was acquired on April 1, 2017.

Relevant exchange rates for 1 Kr were as follows:

2010 .....	\$2.90
2011 .....	2.70
January 1, 2017 .....	3.00
April 1, 2017 .....	3.10
July 1, 2017 .....	3.30
October 1, 2017 .....	3.40
December 31, 2017 .....	3.50
Average for 2017 .....	3.20

- Assuming the U.S. dollar is the functional currency, what is the remeasurement gain or loss for 2017? The December 31, 2016, U.S. dollar–translated balance sheet reported retained earnings of \$145,200, which included a remeasurement loss of \$28,300.
  - Assuming the foreign currency is the functional currency, what is the translation adjustment for 2017? The December 31, 2016, U.S. dollar–translated balance sheet reported retained earnings of \$162,250 and a cumulative translation adjustment of \$9,650 (credit balance).
35. Sendelbach Corporation is a U.S.-based organization with operations throughout the world. One of its subsidiaries is headquartered in Toronto. Although this wholly owned company operates primarily in Canada, it engages in some transactions through a branch in Mexico. Therefore, the subsidiary maintains a ledger denominated in Mexican pesos (Ps) and a general ledger in Canadian dollars (C\$). As of December 31, 2017, the subsidiary is preparing financial statements in anticipation of consolidation with the U.S. parent corporation. Both ledgers for the subsidiary are as follows:

LO 10-3, 10-4



Main Operation—Canada		
	Debit	Credit
Accounts payable .....		C\$ 35,000
Accumulated depreciation .....		27,000
Buildings and equipment .....	C\$ 167,000	
Cash .....	26,000	
Common stock .....		50,000
Cost of goods sold .....	203,000	
Depreciation expense .....	8,000	
Dividends, 4/1/17 .....	28,000	
Gain on sale of equipment, 6/1/17 .....		5,000
Inventory .....	98,000	
Notes payable—due in 2020 .....		76,000
Receivables .....	68,000	
Retained earnings, 1/1/17 .....		135,530
Salary expense .....	26,000	
Sales .....		312,000
Utility expense .....	9,000	
Branch operation .....	7,530	
Totals .....	<u>C\$640,530</u>	<u>C\$640,530</u>



<b>Branch Operation—Mexico</b>		
	<b>Debit</b>	<b>Credit</b>
Accounts payable .....		Ps 49,000
Accumulated depreciation .....		19,000
Building and equipment .....	Ps 40,000	
Cash .....	59,000	
Depreciation expense .....	2,000	
Inventory (beginning—income statement) .....	23,000	
Inventory (ending—income statement) .....		28,000
Inventory (ending—balance sheet) .....	28,000	
Purchases .....	68,000	
Receivables .....	21,000	
Salary expense .....	9,000	
Sales .....		124,000
Main office .....		30,000
Totals .....	<u>Ps 250,000</u>	<u>Ps 250,000</u>

### Additional Information

- The Canadian subsidiary's functional currency is the Canadian dollar, and Sendelbach's reporting currency is the U.S. dollar. The Canadian and Mexican operations are not viewed as separate accounting entities.
- The building and equipment used in the Mexican operation were acquired in 2007 when the currency exchange rate was C\$0.25 = Ps 1.
- Purchases of inventory were made evenly throughout the fiscal year.
- Beginning inventory was acquired evenly throughout 2016; ending inventory was acquired evenly throughout 2017.
- The Main Office account on the Mexican records should be considered an equity account. This balance was remeasured into C\$7,530 on December 31, 2017.
- Currency exchange rates for 1 Ps applicable to the Mexican operation follow:

Weighted average, 2016 .....	C\$0.30
January 1, 2017 .....	0.32
Weighted average rate for 2017 .....	0.34
December 31, 2017 .....	0.35

- The December 31, 2016, consolidated balance sheet reported a cumulative translation adjustment with a \$36,950 credit (positive) balance.
- The subsidiary's common stock was issued in 2004 when the exchange rate was \$0.45 = C\$1.
- The subsidiary's December 31, 2016, retained earnings balance was C\$135,530, an amount that has been translated into U.S.\$70,421.
- The applicable currency exchange rates for 1 C\$ for translation purposes are as follows:

January 1, 2017 .....	U.S.\$0.70
April 1, 2017 .....	0.69
June 1, 2017 .....	0.68
Weighted average rate for 2017 .....	0.67
December 31, 2017 .....	0.65

- Remeasure the Mexican operation's account balances into Canadian dollars. (Note: Back into the beginning net monetary asset or liability position.)
- Prepare financial statements (income statement, statement of retained earnings, and balance sheet) for the Canadian subsidiary in its functional currency, Canadian dollars.
- Translate the Canadian dollar functional currency financial statements into U.S. dollars so that Sendelbach can prepare consolidated financial statements.

LO 10-3, 10-6

**excel**

36. On January 1, 2016, Cayce Corporation acquired 100 percent of Simbel Company for consideration transferred with a fair value of \$126,000. Cayce is a U.S.-based company headquartered in Buffalo, New York, and Simbel is in Cairo, Egypt. Cayce accounts for its investment in Simbel under the initial value method. Any excess of fair value of consideration transferred over book value is attributable to undervalued land on Simbel's books. Simbel had no retained earnings at the date of acquisition. Following are the 2017 financial statements for the two operations. Information for Cayce and for Simbel is in U.S. dollars (\$) and Egyptian pounds (£E), respectively.

	Cayce Corporation	Simbel Company
Sales	\$ 200,000	£E 800,000
Cost of goods sold	(93,800)	(420,000)
Salary expense	(19,000)	(74,000)
Rent expense	(7,000)	(46,000)
Other expenses	(21,000)	(59,000)
Dividend income—from Simbel	13,750	—0—
Gain on sale of building, 10/1/17	—0—	30,000
Net income	<u>\$ 72,950</u>	<u>£E 231,000</u>
Retained earnings, 1/1/17	\$ 318,000	£E 133,000
Net income	72,950	231,000
Dividends	(24,000)	(50,000)
Retained earnings, 12/31/17	<u>\$ 366,950</u>	<u>£E 314,000</u>
Cash and receivables	\$ 110,750	£E 146,000
Inventory	98,000	297,000
Prepaid expenses	30,000	—0—
Investment in Simbel (initial value)	126,000	—0—
Property, plant & equipment (net)	398,000	455,000
Total assets	<u>\$ 762,750</u>	<u>£E 898,000</u>
Accounts payable	\$ 60,800	£E 54,000
Notes payable—due in 2020	132,000	140,000
Common stock	120,000	240,000
Additional paid-in capital	83,000	150,000
Retained earnings, 12/31/17	<u>366,950</u>	<u>314,000</u>
Total liabilities and equities	<u>\$ 762,750</u>	<u>£E 898,000</u>

**Additional Information**

- During 2016, the first year of joint operation, Simbel reported income of £E 163,000 earned evenly throughout the year. Simbel declared a dividend of £E 30,000 to Cayce on June 1 of that year. Simbel also declared the 2017 dividend on June 1.
- On December 9, 2017, Simbel classified a £E 10,000 expenditure as a rent expense, although this payment related to prepayment of rent for the first few months of 2018.
- The exchange rates for 1 £E are as follows:

January 1, 2016	\$0.300
June 1, 2016	0.290
Weighted average rate for 2016	0.288
December 31, 2016	0.280
June 1, 2017	0.275
October 1, 2017	0.273
Weighted average rate for 2017	0.274
December 31, 2017	0.270

Translate Simbel's 2017 financial statements into U.S. dollars and prepare a consolidation worksheet for Cayce and its Egyptian subsidiary. Assume that the Egyptian pound is the subsidiary's functional currency.

LO 10-1, 10-3, 10-4



37. Diekmann Company, a U.S.-based company, acquired a 100 percent interest in Rakona A.S. in the Czech Republic on January 1, 2016, when the exchange rate for the Czech koruna (Kčs) was \$0.05. Rakona's financial statements as of December 31, 2017, two years later, follow:

<b>Balance Sheet</b>	
<b>December 31, 2017</b>	
<b>Assets</b>	
Cash .....	Kčs 2,000,000
Accounts receivable (net) .....	3,300,000
Inventory .....	8,500,000
Equipment .....	25,000,000
Less: Accumulated depreciation .....	(8,500,000)
Building .....	72,000,000
Less: Accumulated depreciation .....	(30,300,000)
Land .....	6,000,000
Total assets .....	<u>Kčs 78,000,000</u>
<b>Liabilities and Stockholders' Equity</b>	
Accounts payable .....	Kčs 2,500,000
Long-term debt .....	50,000,000
Common stock .....	5,000,000
Additional paid-in capital .....	15,000,000
Retained earnings .....	5,500,000
Total liabilities and stockholders' equity .....	<u>Kčs 78,000,000</u>

<b>Income Statement</b>	
<b>For Year Ending December 31, 2017</b>	
Sales .....	Kčs 25,000,000
Cost of goods sold .....	(12,000,000)
Depreciation expense—equipment .....	(2,500,000)
Depreciation expense—building .....	(1,800,000)
Research and development expense .....	(1,200,000)
Other expenses (including taxes) .....	(1,000,000)
Net income .....	Kčs 6,500,000
Plus: Retained earnings, 1/1/17 .....	500,000
Less: Dividends, 2017 .....	(1,500,000)
Retained earnings, 12/31/17 .....	<u>Kčs 5,500,000</u>

#### Additional Information

- The January 1, 2017, beginning inventory of Kčs 6,000,000 was acquired on December 18, 2016, when the exchange rate was \$0.043. Purchases of inventory were acquired uniformly during 2017. The December 31, 2017, ending inventory of Kčs 8,500,000 was acquired in the latter part of 2017 when the exchange rate was \$0.032. All depreciable assets (equipment and buildings) were on the books when the subsidiary was acquired except for Kčs 5,000,000 of equipment acquired on January 3, 2017, when the exchange rate was \$0.036, and Kčs 12,000,000 in buildings acquired on March 5, 2017, when the exchange rate was \$0.034. Straight-line depreciation is 10 years for equipment and 40 years for buildings. A full year's depreciation is taken in the year of acquisition.
- Dividends were declared and paid on December 15, 2017, when the exchange rate was \$0.031.
- Other exchange rates for 1 Kčs follow:

January 1, 2017 .....	\$0.040
Average 2017 .....	0.035
December 31, 2017 .....	0.030

**Part I.** Translate the Czech koruna financial statements at December 31, 2017, in the following three situations:

- a. The Czech koruna is the functional currency. The December 31, 2016, U.S. dollar–translated balance sheet reported retained earnings of \$22,500. The December 31, 2016, cumulative translation adjustment was negative \$202,500 (debit balance).
- b. The U.S. dollar is the functional currency. The December 31, 2016, U.S. dollar–remeasured balance sheet reported retained earnings (including a 2016 remeasurement gain) of \$353,000.
- c. The U.S. dollar is the functional currency. Rakona has no long-term debt. Instead, it has common stock of Kčs 20,000,000 and additional paid-in capital of Kčs 50,000,000. The December 31, 2016, U.S. dollar–remeasured balance sheet reported a negative balance in retained earnings of \$147,000 (including a 2016 remeasurement loss).

**Part II.** Explain the positive or negative sign of the translation adjustment in Part I(a) and explain why a remeasurement gain or loss exists in Parts I(b) and I(c).

38. Millager Company is a U.S.-based multinational corporation with the U.S. dollar (USD) as its reporting currency. To prepare consolidated financial statements for 2017, the company must translate the accounts of its subsidiary in Mexico, Cadengo S.A. On December 31, 2016, Cadengo’s balance sheet was translated from Mexican pesos (MXN) (its functional currency) into U.S. dollars as prescribed by U.S. GAAP. Equity accounts at that date follow:

December 31, 2016	MXN	USD
Common stock . . . . .	12,000,000	1,000,000
Retained earnings . . . . .	2,500,000	200,000
Cumulative translation adjustment (debit balance) . . . . .		(40,000)

Early in 2017, Cadengo negotiated a 5,000 Brazilian real (BRL) loan from a bank in Rio de Janeiro and established a sales office in Brazil.

At the end of 2017, Cadengo provided Millager a trial balance that includes all of Cadengo’s Mexican peso-denominated transactions for the year. A separate ledger has been maintained for transactions carried out by the Brazilian sales office that are denominated in BRL. A trial balance for the Brazilian real-denominated transactions follows Cadengo’s MXN trial balance.

<b>CADENGO S.A.</b>		
<b>Trial Balance</b>		
<b>December 31, 2017</b>		
	Debit	Credit
Cash . . . . .	MXN 1,000,000	
Accounts receivable . . . . .	3,000,000	
Inventory . . . . .	5,000,000	
Land . . . . .	2,000,000	
Machinery and equipment . . . . .	15,000,000	
Accumulated depreciation . . . . .		MXN 6,000,000
Accounts payable . . . . .		1,500,000
Notes payable . . . . .		4,000,000
Common stock . . . . .		12,000,000
Retained earnings, 1/1/17 . . . . .		2,500,000
Sales . . . . .		34,000,000
Cost of goods sold . . . . .	28,000,000	
Depreciation expense . . . . .	600,000	
Rent expense . . . . .	3,000,000	
Interest expense . . . . .	400,000	
Dividends, 7/1/17 . . . . .	2,000,000	
Total . . . . .	<u>MXN60,000,000</u>	<u>MXN60,000,000</u>

<b>BRAZILIAN SALES OFFICE</b>		
<b>Trial Balance</b>		
<b>December 31, 2017</b>		
	<b>Debit</b>	<b>Credit</b>
Cash .....	BRL 5,500	
Accounts receivable .....	28,000	
Notes payable .....		BRL 5,000
Sales .....		35,000
Rent expense .....	6,000	
Interest expense .....	500	
Total .....	<u>BRL 40,000</u>	<u>BRL 40,000</u>

**Additional Information**

The Mexican peso exchange rate for 1 Brazilian real (MXN/BRL) and the U.S. dollar exchange rate for 1 Mexican peso (USD/MXN) during 2017 follow:

<b>Date</b>	<b>MXN/BRL</b>	<b>USD/MXN</b>
January 1, 2017 .....	6.00	0.080
Average 2017 .....	6.20	0.075
July 1, 2017 .....	6.28	0.073
December 31, 2017 .....	6.30	0.072

- Using an electronic spreadsheet, prepare the Mexican peso trial balance for Cadengo S.A. for the year ending December 31, 2017. Verify the amount of remeasurement gain/loss derived as a plug figure in the spreadsheet through separate calculation.
- Using a second electronic worksheet, translate Cadengo S.A.'s Mexican peso trial balance into U.S. dollars to facilitate Millager Company's preparation of consolidated financial statements. Verify the amount of cumulative translation adjustment derived as a plug figure in the spreadsheet through separate calculation. Note: An additional row must be inserted in the trial balance for the remeasurement gain/loss calculated in part *a*.

## Develop Your Skills

### RESEARCH CASE 1—FOREIGN CURRENCY TRANSLATION AND HEDGING ACTIVITIES



Many companies make annual reports available on their corporate website, often under an Investors tab. Annual reports also can be accessed through the SEC's EDGAR system at [www.sec.gov](http://www.sec.gov) (under Filings, click Company Filings Search, type in Company Name, and under Filing Type, search for 10-K).

Access the most recent annual report for a U.S.-based multinational company with which you are familiar to complete the following requirements.

**Required**

- Identify the location(s) in the annual report that provides disclosures related to the translation of foreign currency financial statements and foreign currency hedging.
- Determine whether the company's foreign operations have a predominant functional currency.
- Determine the amount of remeasurement gain or loss, if any, reported in net income in each of the three most recent years.
- Determine the amount of translation adjustment, if any, reported in other comprehensive income in each of the three most recent years. Explain the sign (positive or negative) of the translation adjustment in each of the three most recent years.
- Determine whether the company hedges net investments in foreign operations. If so, determine the type(s) of hedging instrument used.

## RESEARCH CASE 2—FOREIGN CURRENCY TRANSLATION DISCLOSURES IN THE COMPUTER INDUSTRY



Many companies make annual reports available on their corporate website, often under an Investors tab. Annual reports also can be accessed through the SEC's EDGAR system at [www.sec.gov](http://www.sec.gov) (under Filings, click Company Filings Search, type in Company Name, and under Filing Type, search for 10-K).

Access the most recent annual report for the following U.S.-based multinational corporations to complete the requirements:

- International Business Machines Corporation.
- Intel Corporation.

### Required

- a. Identify the location(s) in the annual report that provides disclosures related to foreign currency translation and foreign currency hedging.
- b. Determine whether the company's foreign operations have a predominant functional currency.
- c. Determine the amount of translation adjustment, if any, reported in other comprehensive income in each of the three most recent years. Explain the sign (positive or negative) of the translation adjustment in each of the three most recent years. Compare the relative magnitude of these translation adjustments for the two companies.
- d. Determine whether each company hedges net investments in foreign operations. If so, determine the type(s) of hedging instrument used.

## ACCOUNTING STANDARDS CASE 1—MORE THAN ONE FUNCTIONAL CURRENCY



Lynch Corporation has a wholly owned subsidiary in Mexico (Lynmex) with two distinct and unrelated lines of business. Lynmex's Small Appliance Division manufactures small household appliances such as toasters and coffeemakers at a factory in Monterrey, Nuevo Leon, and sells them directly to retailers such as Gigantes throughout Mexico. Lynmex's Electronics Division imports finished products produced by Lynch Corporation in the United States and sells them to a network of distributors operating throughout Mexico.

Lynch's CFO believes that the two divisions have different functional currencies. The functional currency of the Small Appliance Division is the Mexican peso, whereas the functional currency of the Electronics Division is the U.S. dollar. The CFO is unsure whether to designate the Mexican peso or the U.S. dollar as Lynmex's functional currency, or whether the subsidiary can be treated as two separate foreign operations with different functional currencies.

### Required

Search current U.S. authoritative accounting literature to determine how the functional currency should be determined for a foreign entity that has more than one distinct and separable operation. Identify the source of guidance for answering this question.

## ACCOUNTING STANDARDS CASE 2—CHANGE IN FUNCTIONAL CURRENCY



Hughes Inc. has a wholly owned subsidiary in Canada that previously had been determined as having the Canadian dollar as its functional currency. Due to a recent restructuring, Hughes Inc.'s CFO believes that the functional currency of the Canadian company has changed to the U.S. dollar. A large cumulative translation adjustment related to the Canadian subsidiary is included in accumulated other comprehensive income on Hughes Inc.'s balance sheet. The CFO is unsure whether the cumulative translation adjustment should be removed from equity, and if so, to what other account it should be transferred. He also questions whether the change in functional currency qualifies as a change in accounting principle, which would require retrospective application of the temporal method

in translating the Canadian subsidiary's financial statements. He wonders, for example, whether the Canadian subsidiary's nonmonetary assets need to be restated as if the temporal method had been applied in previous years.

### Required

Search current U.S. authoritative accounting literature for guidance on how to handle a change in functional currency from a foreign currency to the U.S. dollar. Summarize that guidance to answer the CFO's questions. Identify the source of guidance for answering these questions.

## EXCEL CASE—TRANSLATING FOREIGN CURRENCY FINANCIAL STATEMENTS



Charles Edward Company established a subsidiary in a foreign country on January 1, 2017, by investing FC 3,200,000 when the exchange rate was \$0.50/FC. Charles Edward negotiated a bank loan of FC 3,000,000 on January 5, 2017, and purchased plant and equipment in the amount of FC 6,000,000 on January 8, 2017. It depreciated plant and equipment on a straight-line basis over a 10-year useful life. It purchased its beginning inventory of FC 1,000,000 on January 10, 2017, and acquired additional inventory of FC 4,000,000 at three points in time during the year at an average exchange rate of \$0.43/FC. It uses the first-in, first-out (FIFO) method to determine cost of goods sold. Additional exchange rates per FC 1 during the year 2017 follow:

January 1–31, 2017 .....	\$0.50
Average 2017 .....	0.45
December 31, 2017 .....	0.38

The foreign subsidiary's income statement for 2017 and balance sheet at December 31, 2017, follow:

<b>INCOME STATEMENT</b>	
<b>For the Year Ended December 31, 2017</b>	
<b>FC (in thousands)</b>	
Sales .....	FC 5,000
Cost of goods sold .....	3,000
Gross profit .....	2,000
Selling expense .....	400
Depreciation expense .....	600
Income before tax .....	1,000
Income taxes .....	300
Net income .....	700
Retained earnings, 1/1/17 .....	–0–
Retained earnings, 12/31/17 .....	FC 700

<b>BALANCE SHEET</b>	
<b>At December 31, 2017</b>	
<b>FC (in thousands)</b>	
Cash .....	FC 1,000
Inventory .....	2,000
Property, plant & equipment .....	6,000
Less: Accumulated depreciation .....	(600)
Total assets .....	FC 8,400
Current liabilities .....	FC 1,500
Long-term debt .....	3,000
Contributed capital .....	3,200
Retained earnings .....	700
Total liabilities and stockholders' equity .....	FC 8,400

As the controller for Charles Edward Company, you have evaluated the characteristics of the foreign subsidiary to determine that the FC is the subsidiary’s functional currency.

**Required**

- a. Use an electronic spreadsheet to translate the foreign subsidiary’s FC financial statements into U.S. dollars at December 31, 2017, in accordance with U.S. GAAP. Insert a row in the spreadsheet after retained earnings and before total liabilities and stockholders’ equity for the cumulative translation adjustment. Calculate the translation adjustment separately to verify the amount obtained as a balancing figure in the translation worksheet.
- b. Use an electronic spreadsheet to remeasure the foreign subsidiary’s FC financial statements in U.S. dollars at December 31, 2017, assuming that the U.S. dollar is the subsidiary’s functional currency. Insert a row in the spreadsheet after depreciation expense and before income before taxes for the remeasurement gain (loss).
- c. Prepare a report for James Benjamin, CEO of Charles Edward, summarizing the differences that will be reported in the company’s 2017 consolidated financial statements because the FC, rather than the U.S. dollar, is the foreign subsidiary’s functional currency. In your report, discuss the relationship between the current ratio, the debt-to-equity ratio, and profit margin calculated from the FC financial statements and from the translated U.S. dollar financial statements. Also discuss the meaning of the translated U.S. dollar amounts for inventory and for fixed assets.

**EXCEL AND ANALYSIS CASE—PARKER, INC., AND SUFFOLK PLC**



On January 1, 2016, Parker, Inc., a U.S.-based firm, acquired 100 percent of Suffolk PLC located in Great Britain for consideration paid of 52,000,000 British pounds (£), which was equal to fair value. The excess of fair value over book value is attributable to land (part of property, plant, and equipment) and is not subject to depreciation. Parker accounts for its investment in Suffolk at cost. On January 1, 2016, Suffolk reported the following balance sheet:

Cash . . . . .	\$ 2,000,000	Accounts payable . . . . .	\$ 1,000,000
Accounts receivable . . . . .	3,000,000	Long-term debt . . . . .	8,000,000
Inventory . . . . .	14,000,000	Common stock . . . . .	44,000,000
Property, plant, and equipment (net) . . . . .	40,000,000	Retained earnings . . . . .	6,000,000
	<u>\$59,000,000</u>		<u>\$59,000,000</u>

Suffolk’s 2016 income was recorded at \$2,000,000. It declared and paid no dividends in 2016.

On December 31, 2017, two years after the date of acquisition, Suffolk submitted the following trial balance to Parker for consolidation:

Cash . . . . .	\$ 1,500,000
Accounts Receivable . . . . .	5,200,000
Inventory . . . . .	18,000,000
Property, Plant, and Equipment (net) . . . . .	36,000,000
Accounts Payable . . . . .	(1,450,000)
Long-Term Debt . . . . .	(5,000,000)
Common Stock . . . . .	(44,000,000)
Retained Earnings, 1/1/17 . . . . .	(8,000,000)
Sales . . . . .	(28,000,000)
Cost of Goods Sold . . . . .	16,000,000
Depreciation . . . . .	2,000,000
Other Expenses . . . . .	6,000,000
Dividends (1/30/17) . . . . .	1,750,000
	<u>-0-</u>



Other than paying dividends, no intra-entity transactions occurred between the two companies. Relevant exchange rates for the British pound follow:

	January 1	January 30	Average	December 31
2016	\$1.60	\$1.61	\$1.62	\$1.64
2017	1.64	1.65	1.66	1.68

The December 31, 2017, financial statements (before consolidation with Suffolk) follow. Dividend income is the U.S. dollar amount of dividends received from Suffolk translated at the \$1.65/\$ exchange rate at January 30, 2017. The amounts listed for dividend income and all affected accounts (i.e., net income, December 31 retained earnings, and cash) reflect the \$1.65/\$ exchange rate at January 30, 2017. Credit balances are in parentheses.

Parker	
Sales	\$ (70,000,000)
Cost of goods sold	34,000,000
Depreciation	20,000,000
Other expenses	6,000,000
Dividend income	(2,887,500)
Net income	<u>\$ (12,887,500)</u>
Retained earnings, 1/1/17	\$ (48,000,000)
Net income, 2017	(12,887,500)
Dividends, 1/30/17	4,500,000
Retained earnings, 12/31/17	<u>\$ (56,387,500)</u>
Cash	\$ 3,687,500
Accounts receivable	10,000,000
Inventory	30,000,000
Investment in Suffolk	83,200,000
Plant and equipment (net)	105,000,000
Accounts payable	(25,500,000)
Long-term debt	(50,000,000)
Common stock	(100,000,000)
Retained earnings, 12/31/17	<u>(56,387,500)</u>
	<u><u>-0-</u></u>

Parker's chief financial officer (CFO) wishes to determine the effect that a change in the value of the British pound would have on consolidated net income and consolidated stockholders' equity. To help assess the foreign currency exposure associated with the investment in Suffolk, the CFO requests assistance in comparing consolidated results under actual exchange rate fluctuations with results that would have occurred had the dollar value of the pound remained constant or declined during the first two years of Parker's ownership.

### Required

Use an electronic spreadsheet to complete the following four parts:

**Part I.** Given the relevant exchange rates presented,

- Translate Suffolk's December 31, 2017, trial balance from British pounds to U.S. dollars. The British pound is Suffolk's functional currency.
- Prepare a schedule that details the change in Suffolk's cumulative translation adjustment (beginning net assets, income, dividends, etc.) for 2016 and 2017.
- Prepare the December 31, 2017, consolidation worksheet for Parker and Suffolk.
- Prepare the 2017 consolidated income statement and the December 31, 2017, consolidated balance sheet.

*Note:* Worksheets should possess the following qualities:

- Each spreadsheet should be programmed so that all relevant amounts adjust appropriately when different values of exchange rates (subsequent to January 1, 2016) are entered into it.
- Be sure to program Parker's dividend income, cash, and retained earnings to reflect the dollar value of alternative January 30, 2017, exchange rates.

**Part II.** Repeat tasks (a), (b), (c), and (d) from Part I to determine consolidated net income and consolidated stockholders' equity if the exchange rate had remained at \$1.60/\$ over the period 2016 to 2017.

**Part III.** Repeat tasks (a), (b), (c), and (d) from Part I to determine consolidated net income and consolidated stockholders' equity if the following exchange rates had existed:

	January 1	January 30	Average	December 31
2016	\$1.60	\$1.59	\$1.58	\$1.56
2017	1.56	1.55	1.54	1.52

**Part IV.** Prepare a report that provides Parker's CFO the risk assessments requested. Focus on profitability, cash flow, and the debt-to-equity ratio.



# Worldwide Accounting Diversity and International Standards

**H**istorically, considerable differences have existed across countries with respect to how financial reports are prepared and presented. For example, many European companies present intangible assets first and cash last in the balance sheet, and some include a line item in the income statement labeled “own work performed and capitalized.” A significant number of U.S. companies use LIFO in measuring inventory, whereas this method is not acceptable in most other countries in the world. The first part of this chapter presents additional evidence of accounting diversity, explores the reasons for that diversity, and describes problems historically caused by accounting diversity.

Efforts have been underway for over four decades to reduce the differences that exist in financial reporting across countries and converge on a single set of global accounting standards. The most important of these efforts has been the work that was begun by the International Accounting Standards Committee (IASC) and continues with the International Accounting Standards Board (IASB) to develop International Financial Reporting Standards (IFRS). Today, publicly traded companies in more than 100 countries around the world are using IFRS to prepare consolidated financial statements. The second part of this chapter describes the process of international convergence of financial reporting, focusing on the work of the IASB and recent efforts to converge U.S. GAAP with IFRS.

IFRS and U.S. GAAP are not fully converged, and many differences exist between these two sets of standards. Many accountants involved in the preparation of consolidated financial statements find it necessary to understand these differences to be able to convert IFRS balances to a U.S. GAAP basis, or vice versa. The latter part of this chapter focuses on differences between IFRS and U.S. GAAP and illustrates the process of converting from one set of standards to the other. The comprehensive illustration at the end of the chapter provides additional examples of this conversion process.

## Evidence of Accounting Diversity

Exhibit 11.1 presents the 2014 consolidated balance sheet for Jardine Matheson Holdings Limited, a diversified company incorporated in Bermuda with significant investments in Asia. Jardine Matheson is one of the thousands of companies around the world that prepares its consolidated

## Learning Objectives

**After studying this chapter, you should be able to:**

- LO 11-1** Explain the major factors influencing the international development of accounting systems.
- LO 11-2** Understand the problems created by differences in accounting across countries and the reasons to develop a set of internationally accepted accounting standards.
- LO 11-3** List the types of authoritative pronouncements that constitute International Financial Reporting Standards (IFRS).
- LO 11-4** Describe the ways and the extent to which IFRS are used around the world.
- LO 11-5** Explain the purpose of IFRS for SMEs and how it differs from full IFRS.
- LO 11-6** Understand the steps to be taken in preparing IFRS financial statements for the first time.
- LO 11-7** Describe the FASB–IASB convergence process and SEC recognition of IFRS.
- LO 11-8** Recognize acceptable accounting treatments under IFRS and identify key differences between IFRS and U.S. GAAP.
- LO 11-9** Determine the impact that specific differences between IFRS and U.S. GAAP have on financial statements and prepare adjustments to convert IFRS balances to U.S. GAAP.

**EXHIBIT 11.1**  
**Jardine Matheson Holdings**  
**Limited 2014 Balance Sheet**

<b>Consolidated Balance Sheet at 31st December 2014</b>			
	<b>Note</b>	<b>2014 US\$m</b>	<b>2013 US\$m</b>
<b>Assets</b>			
Intangible assets . . . . .	12	<b>2,679</b>	2,333
Tangible assets . . . . .	13	<b>6,690</b>	6,823
Investment properties . . . . .	14	<b>24,309</b>	24,088
Plantations . . . . .	15	<b>908</b>	856
Associates and joint ventures . . . . .	16	<b>8,881</b>	8,694
Other investments . . . . .	17	<b>1,354</b>	1,129
Non-current debtors . . . . .	18	<b>3,540</b>	2,811
Deferred tax assets . . . . .	19	<b>305</b>	264
Pension assets . . . . .	20	<b>23</b>	51
Non-current assets . . . . .		<b>48,689</b>	47,049
Properties for sale . . . . .	21	<b>2,953</b>	2,670
Stocks and work in progress . . . . .	22	<b>3,280</b>	3,015
Current debtors . . . . .	18	<b>6,068</b>	5,733
Current investments . . . . .	17	<b>18</b>	17
Current tax assets . . . . .		<b>133</b>	130
Bank balances and other liquid funds . . . . .	23		
– nonfinancial services companies . . . . .		<b>4,933</b>	4,930
– financial services companies . . . . .		<b>382</b>	284
		<b>5,315</b>	5,214
		<b>17,767</b>	16,779
Noncurrent assets classified as held for sale . . . . .		<b>1</b>	7
Current assets . . . . .		<b>17,768</b>	16,786
Total assets . . . . .		<b>66,457</b>	63,835
<b>Equity</b>			
Share capital . . . . .	24	<b>173</b>	170
Share premium and capital reserves . . . . .	26	<b>138</b>	119
Revenue and other reserves . . . . .		<b>22,061</b>	20,761
Own shares held . . . . .	28	<b>(3,105)</b>	(2,664)
Shareholders' funds . . . . .		<b>19,267</b>	18,386
Noncontrolling interests . . . . .	29	<b>25,538</b>	24,396
Total equity . . . . .		<b>44,805</b>	42,782
<b>Liabilities</b>			
Long-term borrowings . . . . .	30		
– nonfinancial services companies . . . . .		<b>5,240</b>	4,799
– financial services companies . . . . .		<b>2,176</b>	1,674
		<b>7,416</b>	6,473
Deferred tax liabilities . . . . .	19	<b>695</b>	733
Pension liabilities . . . . .	20	<b>350</b>	294
Noncurrent creditors . . . . .	31	<b>364</b>	390
Noncurrent provisions . . . . .	32	<b>138</b>	134
Noncurrent liabilities . . . . .		<b>8,963</b>	8,024
Current creditors . . . . .	31	<b>8,244</b>	7,921
Current borrowings . . . . .	30		
– nonfinancial services companies . . . . .		<b>2,176</b>	2,732
– financial services companies . . . . .		<b>1,892</b>	2,079
Current tax liabilities . . . . .		<b>4,068</b>	4,811
Current provisions . . . . .	32	<b>300</b>	226
Current liabilities . . . . .		<b>77</b>	71
		<b>12,689</b>	13,029
Total liabilities . . . . .		<b>21,652</b>	21,053
Total equity and liabilities . . . . .		<b>66,457</b>	63,835

financial statements in accordance with IFRS. A quick examination of this financial statement reveals several format and terminology differences compared with what is usually found in the balance sheets of U.S.-based companies. The company classifies assets as current and noncurrent but lists them in reverse order of liquidity starting with intangibles. Likewise, it lists long-term liabilities before current liabilities, both of which are reported below stockholders' equity.

Property, plant, and equipment is referred to as *tangible assets*, receivables are called *debtors*, and inventories are reported as *stocks and work in progress*. Cash and cash equivalents are called *bank balances and other liquid funds*. Accounts payable are referred to as *creditors*. *Provisions*, found in both noncurrent and current liabilities, are estimated obligations related to things such as warranties and restructuring plans. *Share capital* reflects the par value of common stock and *share premium* shows the paid-in capital in excess of par value. Retained earnings are not reported separately but are included in *revenue and other reserves*. One of the *other reserves* is related to the revaluation of assets, which is an unacceptable practice in the United States. Treasury stock is aptly called *own shares held*.

Exhibit 11.2 presents the 2014 consolidated income statement for the Dutch company Heineken N.V., the producer of one of the most popular brands of beer in the world. Heineken also uses IFRS in preparing its consolidated financial statements. Inspection of this statement reveals a significant difference in format compared with the format normally found in the United States. U.S. companies typically report operating expenses on the income statement according to their function, as follows:

Sales  
 Less: Cost of goods sold  
 Gross profit  
 Less: General, selling, and administrative expenses  
 Operating profit

**EXHIBIT 11.2**  
**Heineken N.V. 2014 Income Statement**

<b>Consolidated Income Statement</b>			
<b>in millions of euros</b>	<b>Note</b>	<b>2014</b>	<b>2013</b>
<b>Revenue</b> .....	5	<b>19,257</b>	19,203
Other income .....	8	93	226
Raw materials, consumables, and services .....	9	(12,053)	(12,186)
Personnel expenses .....	10	(3,080)	(3,108)
Amortisation, depreciation, and impairments .....	11	(1,437)	(1,581)
<b>Total expenses</b> .....		<b>(16,570)</b>	<b>(16,875)</b>
<b>Results from operating activities</b> .....		<b>2,780</b>	<b>2,554</b>
Interest income .....	12	48	47
Interest expenses .....	12	(457)	(579)
Other net finance income/(expenses) .....	12	(79)	(61)
<b>Net finance expenses</b> .....		<b>(488)</b>	<b>(593)</b>
Share of profit of associates and joint ventures and impairments thereof (net of income tax) .....	16	148	146
<b>Profit before income tax</b> .....		<b>2,440</b>	<b>2,107</b>
Income tax expense .....	13	(732)	(520)
<b>Profit</b> .....		<b>1,708</b>	<b>1,587</b>
Attributable to: .....			
Equity holders of Heineken Holding N.V. (net profit) ..		760	683
Noncontrolling interests in Heineken N.V. ....		756	681
Noncontrolling interests in Heineken N.V. group companies .....		192	223
<b>Profit</b> .....		<b>1,708</b>	<b>1,587</b>

This typical U.S. format combines manufacturing costs (materials and supplies, labor costs, and overhead) and reports them as cost of goods sold. Selling costs and administrative costs (which also consist of supplies, labor costs, and overhead) are reported separately from cost of goods sold. Gross profit is reported as the difference between sales and cost of goods sold.

Heineken does not report operating expenses on the basis of their function but on the basis of their nature. Materials costs are reported as *raw material, consumables and services*, labor costs are reported as *personnel expenses*, and overhead is reported in these line items as well as in *amortisation, depreciation, and impairments*. Each of these line items includes amounts that cut across functional areas. *Personnel expenses*, for example, includes the wages, salaries, and benefits paid to employees involved in manufacturing, selling, and administration. As a result, cost of goods sold is not reported as a separate amount and therefore gross profit cannot be calculated. The nature of expenses format used by Heineken in preparing its income statement is the format traditionally used in continental European countries. Today, however, it is common to find companies in the Netherlands, France, Germany, and other European countries using the function of expenses (or cost of goods sold) format familiar in the United States. Both formats for presenting expenses are acceptable under both IFRS and U.S. GAAP.

The examples of accounting diversity demonstrated thus far relate to differences in terminology and presentation in the financial statements. However, as already alluded to, differences also exist across countries with regard to the recognition and measurement principles followed in determining the amounts reported in financial statements.

Foreign companies whose stock is listed on a U.S. stock exchange are required to be registered and file financial statements with the U.S. Securities and Exchange Commission (SEC). Foreign registrants must file their annual report with the SEC on Form 20-F. The financial statements included in Form 20-F may be prepared in accordance with U.S. GAAP, IFRS, or some other foreign GAAP. The SEC requires companies using some other foreign GAAP to reconcile income and stockholders' equity to U.S. GAAP. Companies using IFRS are not subject to this requirement. Examination of these U.S. GAAP reconciliations provides considerable insight into the significant differences that exist in recognition and measurement principles between U.S. GAAP and accounting principles in other countries.

As an example, Exhibit 11.3 presents the reconciliation of net income provided by Ecopetrol S.A., the largest petroleum company in Colombia, in its 2014 Form 20-F. Adjustments are made for 28 differences between Colombian Government Entity GAAP and U.S. GAAP. Some of the accounting differences requiring the largest adjustments relate to deferred charges; deferred income taxes; revenue recognition; and depreciation, depletion, and amortization. Note that net income under U.S. GAAP is less than net income under Colombian GAAP in 2014, but the opposite is true in 2013 and 2012.

In addition to providing the reconciliation schedule as shown in Exhibit 11.3, Ecopetrol also provides notes that explain the accounting differences that underlie each adjustment. For example, the company provided the following disclosure related to a portion of the adjustment for depreciation, depletion, and amortization (item xv.):

Under Colombian Government Entity GAAP, all tangible equipment, including those used in crude oil and natural gas, exploration and development, are depreciated on a straight-line basis over the related estimated useful lives. . . Under U.S. GAAP, all assets, including tangible equipment, used in crude oil and natural gas producing activities are required to be depreciated or depleted using a units-of-production method, using proved reserves calculated in accordance with SEC requirements. Therefore, an adjustment to net income per U.S. GAAP has been recorded to account for the difference in depreciation, depletion and amortization expense based on the above-described differences in the methods used.<sup>1</sup>

### LO 11-1

Explain the major factors influencing the international development of accounting systems.

## Reasons for Accounting Diversity

As will be discussed later in this chapter, many countries now require publicly traded (that is, stock exchange-listed) companies to use IFRS in preparing their consolidated financial statements. However, this is a fairly recent phenomenon, which has accelerated in the 21st

<sup>1</sup>Ecopetrol S.A., 2014 Form 20-F, p. F-77.

**EXHIBIT 11.3 Ecopetrol S.A., 2014 Reconciliation of Net Income to U.S. GAAP**

	2014	2013	2012
Consolidated net income under Colombian Government Entity GAAP . . . . .	\$ 7,510,270	\$ 13,106,503	\$ 14,778,947
i. Investment securities: . . . . .			
a. Unrealized gain (loss) . . . . .	(1,608)	75,458	(45,199)
b. Impairment . . . . .	(3,197)	65,921	(34,657)
ii. Investments in nonmarketable securities: . . . . .			
a. Equity method . . . . .	240,419	66,558	(109,749)
b. Variable interest entity (VIE). . . . .	–	13	–
c. Impairment . . . . .	(294,931)	(51,664)	9
iii. Derivatives. . . . .	3,160	(3)	(4,709)
v. Deferred charges. . . . .	521,356	476,091	493,159
vi. Employee benefit plans . . . . .	(105,137)	(40,439)	(157,893)
vii. Provisions and contingencies . . . . .	273,446	802,341	141,755
viii. Assets and liabilities present value. . . . .	(1,157)	(39,029)	(99,188)
ix. Deferred income taxes . . . . .	1,076,387	(685,981)	(392,593)
x. Revenue recognition: . . . . .			
a. Cost of sales—over and under deliveries . . . . .	(29,522)	296,317	208,644
b. Other income . . . . .	(28,096)	28,242	6,100
xi. Inflation adjustment . . . . .	37,282	46,283	165,867
xii. Inventories. . . . .	(9,124)	30,289	(16,699)
xiii. Lease accounting. . . . .	(45,470)	(50,101)	(75,203)
xiv. Property, plant, and equipment: . . . . .			
a. Interest. . . . .	(272,907)	(480,513)	(607,200)
b. Impairment . . . . .	(159,300)	(188,615)	(43,609)
d. Capitalized expenses . . . . .	(39,104)	(53,987)	17,685
e. Exchange difference. . . . .	(2,366,138)	(17,953)	28,793
xv. Depreciation, depletion, and amortization . . . . .	82,035	(33,177)	239,571
xvi. Asset retirement obligations . . . . .	(46,104)	(41,964)	(117,988)
xvii. Equity contributions: . . . . .			
a. Incorporated institutional equity . . . . .	11,100	9,113	14,195
b. Reversal of concession rights contributed as capital . . . . .	1,780	2,280	2,725
xviii. Indebtedness cost. . . . .	5,131	1,385	(36)
xix. Business combinations: . . . . .			
a. Goodwill. . . . .	221,771	403,460	275,271
xx. Noncontrolling interest . . . . .	91,868	147,177	227,514
xxi. Cumulative translation adjustment . . . . .	145,340	72,850	(199,863)
Consolidated net income under U.S. GAAP attributable to Ecopetrol . . . . .	<b><u>\$6,819,550</u></b>	<b><u>\$13,946,855</u></b>	<b><u>\$14,695,649</u></b>

century. Historically, each country had its own national GAAP that was required to be used by both public and private companies and that differed from the accounting standards followed in other countries. Brazilian GAAP, Canadian GAAP, French GAAP, German GAAP, Turkish GAAP, and so on were different from one another. Indeed, many countries continue to have a national GAAP that must be used by private companies as well as by public companies in preparing separate parent company financial statements.<sup>2</sup>

What are the historical reasons for different financial reporting practices across countries? Accounting scholars have hypothesized numerous influences on the national development of accounting systems including factors as varied as the nature of the country's political system,

<sup>2</sup> Some countries require publicly traded companies to prepare two sets of financial statements. In one set, investments in subsidiaries are not consolidated but are reflected in a single line item in the balance sheet and income statement—often these are referred to as parent company financial statements. A second set of financial statements is prepared on a consolidated basis.



the stage of economic development, and the state of accounting education and research. A survey of the relevant literature identified the following five items as major factors influencing the development of a country's financial reporting practices: (1) legal system, (2) taxation, (3) financing system, (4) inflation, and (5) political and economic ties.<sup>3</sup>

## Legal System

The two major types of legal systems used around the world are common law and codified Roman law. Common law began in England and is found primarily in the English-speaking countries of the world. Common law countries rely on a limited amount of statute law interpreted by the courts. A system of code law, followed in most non-English-speaking countries, originated in the Roman *jus civile*. Code law countries tend to have relatively more statute or codified law governing a wider range of human activity.

What does a country's legal system have to do with accounting? Code law countries generally have a corporation law (sometimes called a *commercial code* or *companies act*) that establishes the basic legal parameters governing business enterprises. Corporation law often stipulates which financial statements must be published in accordance with a prescribed format. Additional accounting measurement and disclosure rules are included in an accounting law that has been debated and passed by the national legislature. The accounting profession tends to have little influence on the development of accounting standards. In countries with a tradition of common law, although a corporation law laying the basic framework for accounting might exist (such as in the United Kingdom), the profession or an independent, nongovernmental body representing a variety of constituencies establishes specific accounting rules. Thus, the type of legal system in a country historically determined whether the primary source of accounting rules was the government or the accounting profession or other nongovernmental body.

In code law countries, the accounting law tends to be rather general and does not provide much guidance regarding specific accounting practices. Germany is a good example of a code law country. Its accounting law (*Bilanzrichtliniengesetz*), passed in 1985, was only 47 pages long and was silent with regard to issues such as leases, foreign currency translation, and a cash flows statement.<sup>4</sup> In those situations for which the law provided no guidance, German companies found it necessary to refer to other sources, including tax law and opinions of the German auditing profession, to decide how to do their accounting. Although publicly traded companies in Germany now must use IFRS in preparing consolidated financial statements, these same companies must comply with German accounting law in their parent company statements, as must private companies in Germany. Historically, common law countries, where a nongovernment organization developed accounting standards, have had much more detailed rules. The extreme case might be the FASB in the United States. The FASB *Accounting Standards Codification*<sup>®</sup> provides much more guidance than the German accounting law, and the FASB has been described as producing overly rules-based standards.

## Taxation

In some countries, parent company financial statements are the basis for taxation. Continuing to focus on Germany, its so-called reverse conformity principle (*umgekehrte Massgeblichkeitsprinzip*) required that, in most cases, an expense had to be recognized in accounting income to be deductible for tax purposes. Well-managed German companies attempted to minimize income for tax purposes, for example, by using accelerated depreciation to reduce their tax liability. As a result of the reverse conformity principle, accelerated depreciation also had to be recognized in calculating accounting income. As part of the accounting modernization law (*Bilanzrechtsmodernisierungsgesetz*), passed in 2009, the reverse conformity requirement was removed, thereby reducing the influence that taxation has on financial reporting in Germany.

<sup>3</sup> Gary K. Meek and Sharokh M. Saudagaran, "A Survey of Research on Financial Reporting in a Transnational Context," *Journal of Accounting Literature*, 1990, pp. 145–82.

<sup>4</sup> Jermyn Paul Brooks and Dietz Mertin, *Neues Deutsches Bilanzrecht* (Düsseldorf: IDW-Verlag GmbH, 1986).

In the United States, on the other hand, conformity between the tax statement and financial statements is required only for the use of the LIFO inventory cost-flow assumption. U.S. companies are allowed, for example, to use accelerated depreciation for tax purposes and straight-line depreciation in the financial statements. All else being equal, prior to 2009, the reverse conformity principle in Germany was likely to result in a U.S. company reporting a larger net income than its German counterpart.

### Financing System

It has been argued that differences in the purpose for financial reporting across countries is the major reason for international differences in financial reporting, and that the most relevant factor in determining the purpose of financial reporting is the nature of a country's financing system.<sup>5</sup> Specifically, whether or not a country has a strong equity financing system with large numbers of outside shareholders determines the type of financial reporting system a country uses. Countries with a strong equity-outsider financing system use a so-called Class A accounting system, which is less conservative, provides more disclosure, and does not follow tax rules. Australia, the U.S., and the U.K. are examples of countries with strong equity-outsider financing systems. Countries with a weak equity-outsider financing system have a Class B accounting system, which is more conservative; disclosure is not as extensive and financial reporting more closely follows tax rules. France, Germany, and Italy are examples of countries with weak equity-outsider financing systems.

### Inflation

Historically, countries with chronically high rates of inflation were compelled to develop accounting rules that required the inflation adjustment of historical cost amounts. This was especially true in Latin America, which as a region has had more inflation than any other part of the world. For example, prior to economic reform in the mid-1990s, Brazil regularly experienced annual inflation rates exceeding 100 percent. Double- and triple-digit inflation rates render historical costs meaningless. Historically, this factor primarily distinguished accounting in Latin America from the rest of the world. However, inflation has been brought under control in most countries and inflation accounting has been abandoned throughout Latin America.

### Political and Economic Ties

Accounting is a technology that can be borrowed relatively easily from or imposed on another country. Through political and economic linkages, accounting rules historically have been conveyed from one country to another. For example, through previous colonialism, both England and France transferred their accounting frameworks to a variety of countries around the world. British style accounting systems can be found in countries as far-flung as Australia and Zimbabwe. French accounting is prevalent in the former French colonies of western Africa. More recently, the member nations of the European Union (which is a political and economic union) have adopted a common set of accounting standards (IFRS) for publicly traded companies.

#### LO 11-2

Understand the problems created by differences in accounting across countries and the reasons to develop a set of internationally accepted accounting standards.

## Problems Caused by Diverse Accounting Practices

Diversity in accounting across countries causes problems for both preparers and users of financial statements. One problem relates to the preparation of consolidated financial statements by companies with foreign operations. Consider The Coca-Cola Company, which has subsidiaries in more than 40 countries around the world. Each subsidiary incorporated in the country in which it is located is required to prepare financial statements in accordance with local regulations. These regulations usually require companies to keep books in the local currency and follow local accounting principles. Thus, Coca-Cola Italia S.r.L. prepares financial

<sup>5</sup> Christopher W. Nobes, "Towards a General Model of the Reasons for International Differences in Financial Reporting," *Abacus*, September 1998, pp. 162–87.

statements in euros using Italian accounting rules (that is, IFRS), and Coca-Cola India Private Limited prepares financial statements in Indian rupees using Indian accounting standards. To prepare consolidated financial statements in the United States, in addition to translating the foreign currency balances into U.S. dollars, the parent company also must convert the financial statements of its foreign subsidiaries into U.S. GAAP. Each foreign subsidiary must either maintain two sets of books prepared in accordance with both local and U.S. GAAP or, as is more common, convert local GAAP financial statements to U.S. GAAP at the balance sheet date. In either case, considerable effort and cost are involved; company personnel must develop an expertise in more than one set of accounting standards.

A second problem relates to companies gaining access to foreign capital markets. If a company desires to obtain capital by selling stock or borrowing money in a foreign country, it might be required to present a set of financial statements prepared in accordance with the accounting standards in the country in which the capital is being obtained. For example, to have stock listed on a U.S. stock exchange, prior to 2008, foreign companies were required to reconcile their local-GAAP financial statements to U.S. accounting standards. Preparation of a U.S. GAAP reconciliation can be quite costly. For example, to prepare for a New York Stock Exchange (NYSE) listing in 1993, the German automaker Daimler-Benz estimated it spent \$60 million to prepare U.S. GAAP financial statements.<sup>6</sup> Since 2008, foreign companies listed on a U.S. stock exchange that use IFRS to prepare financial statements are no longer required to provide a reconciliation to U.S. GAAP. However, foreign companies using a local GAAP other than IFRS continue to be required to provide a U.S. GAAP reconciliation. As an example, in conjunction with the Colombian energy company Ecopetrol S.A.'s listing on the New York Stock Exchange in 2014, the company provided a note in the financial statements it filed with the U.S. Securities and Exchange Commission (SEC) that was 50 pages in length. A portion of this note was shown earlier in this chapter in Exhibit 11.3.

A third problem arising from accounting diversity relates to the lack of comparability of financial statements between companies using different accounting standards. This complicates international investors' job of deciding which foreign companies to invest in. It is very difficult, if not impossible, for a potential investor to directly compare the financial position and performance of, for example, automobile manufacturers in Germany (BMW), Japan (Toyota), and the U.S. (Ford) because these three countries have different financial accounting and reporting standards.

Because of the problems associated with worldwide accounting diversity, work to reduce accounting differences across countries and establish a single set of global accounting standards has been ongoing for more than four decades. The ultimate goal is to have all companies in the world following one set of accounting standards. While numerous organizations have been involved in the international convergence of financial reporting over the years, the most important players in this effort have been the International Accounting Standards Board and its predecessor, the International Accounting Standards Committee.

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## International Accounting Standards Committee

In hopes of eliminating the diversity of principles used throughout the world, the International Accounting Standards Committee (IASC) was formed in June 1973 by accountancy bodies in Australia, Canada, France, Germany, Japan, Mexico, the Netherlands, the United Kingdom and Ireland, and the United States. The IASC operated until April 1, 2001, when it was succeeded by the International Accounting Standards Board (IASB).

Based in London, the IASC's primary objective was to develop international accounting standards (IASs). The IASC had no power to require the use of its standards, but member accountancy bodies pledged to work toward adoption of IASs in their countries. IASs were approved by a board consisting of representatives from 14 countries. The part-time board members normally met only three times a year for three or four days. The publication of a final IAS required approval of at least 11 of the 14 board members.

<sup>6</sup> Allan B. Afterman, *International Accounting, Financial Reporting, and Analysis* (New York: Warren, Gorham & Lamont, 1995), pp. C1-17 and C1-22.

Early IASs tended to follow a lowest common denominator approach and often allowed at least two methods for dealing with a particular accounting issue. For example, *IAS 2*, originally issued in 1975, allowed the use of specific identification, FIFO, LIFO, average cost, and the base stock method for valuing inventories, effectively sanctioning most of the alternative methods in worldwide use. For the same reason, the IASC initially allowed both the traditional U.S. treatment of expensing goodwill over a period of up to 40 years and the U.K. approach of writing off goodwill directly to stockholders' equity. Although perhaps necessary from a political perspective, such compromise brought the IASC under heavy criticism.

### The IOSCO Agreement

In 1987, the International Organization of Securities Commissions (IOSCO) became a member of the IASC's Consultative Group. IOSCO is composed of the stock exchange regulators in more than 100 countries, including the U.S. SEC. As one of its objectives, IOSCO works to facilitate cross-border securities offerings and listings by multinational issuers. To this end, IOSCO supported the IASC's efforts at developing IASs that foreign issuers could use in lieu of local accounting standards when entering capital markets outside of their home country. "This could mean, for example, that if a French company had a simultaneous stock offering in the United States, Canada, and Japan, financial statements prepared in accordance with international standards could be used in all three nations."<sup>7</sup>

IOSCO supported the IASC's Comparability Project (begun in 1987) "to eliminate most of the choices of accounting treatment currently permitted under International Accounting Standards."<sup>8</sup> As a result of the Comparability Project, 10 revised IASs were approved in 1993 to become effective in 1995. In 1993, IOSCO and the IASC agreed upon a list of "core" standards to use in financial statements of companies involved in cross-border securities offerings and listings. Upon their completion, IOSCO agreed to evaluate the core standards for possible endorsement for cross-border listing purposes.

The IASC accelerated its pace of standards development, issuing or revising 16 standards in the period 1997–1998. With the publication of *IAS 39* in December 1998, the IASC completed its work program to develop the core set of standards. In 2000, IOSCO's Technical Committee recommended that securities regulators permit foreign issuers to use IASC standards to gain access to a country's capital market as an alternative to using local standards, and many stock exchanges around the world implemented this recommendation.

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## International Accounting Standards Board and IFRS

On completion of its core set of standards, the IASC proposed a new structure that would allow it and national standard setters to better work together toward global harmonization. The restructuring created the International Accounting Standards Board (IASB), which is governed by the IFRS Foundation. In April 2001, the IASB assumed accounting standard-setting responsibilities from its predecessor body, the IASC.

The IFRS Foundation's Constitution indicates that the IASB shall comprise 16 members, up to 3 of whom may be part-time. To ensure the IASB's independence, all full-time members are required to sever their employment relationships with former employers and are not allowed to hold any position giving rise to perceived economic incentives that might call their independence into question. The primary qualifications for IASB membership are professional competence and practical experience. To ensure a broad international representation, normally there should be four IASB members from Europe; four from North America; four from the Asia/Oceania region; one from Africa; one from South America; and two from any area to achieve geographic balance. Passage of a new standard requires affirmation of at least 10 IASB members. However, the Constitution notes that at any point in time the IASB might have fewer than 16 members, in which case nine yes votes are required to approve a standard.

<sup>7</sup> Stephen H. Collins, "The SEC on Full and Fair Disclosure," *Journal of Accountancy*, January 1989, p. 84.

<sup>8</sup> International Accounting Standards Committee, *International Accounting Standards 1990* (London: IASC, 1990), p. 13.

## LO 11-3

List the types of authoritative pronouncements that constitute International Financial Reporting Standards (IFRS).

## International Financial Reporting Standards (IFRS)

In April 2001, the IASB adopted all international accounting standards (IASs) issued by the IASC and announced that its accounting standards would be called *international financial reporting standards* (IFRS). *IAS 1*, “Presentation of Financial Statements,” was amended in 2003 and defines IFRS as standards and interpretations adopted by the IASB. The authoritative pronouncements that make up IFRS consist of these:

- International Financial Reporting Standards (IFRSs) issued by the IASB.
- International Accounting Standards (IASs) issued by the IASC (and adopted by the IASB).
- Interpretations issued by the International Financial Reporting Interpretations Committee (IFRICs).
- Interpretations issued by the Standing Interpretations Committee (SICs) (and adopted by the IASB)

The IASC issued 41 IASs from 1975 to 2001, and the IASB had issued 16 IFRSs as of January 2016. Several IASs have been withdrawn or superseded by subsequent standards. For example, later standards dealing with property, plant, and equipment and intangible assets have superseded *IAS 4*, “Depreciation Accounting,” originally issued in 1976. Other IASs have been revised one or more times since their original issuance. For example, *IAS 2*, “Inventories,” was originally issued in 1975 but was revised in 1993 and updated in 2003. Of the 41 IASs issued by the IASC, only 26 were still in force as of January 2016. One of these, *IAS 17*, “Leases,” will be superseded when the new standard (*IFRS 16*, “Leases”) goes into effect in 2019. The IASB issued the first IFRS in 2003; it deals with the important question of how a company should restate its financial statements when it adopts IFRS for the first time.

Exhibit 11.4 provides a complete list of the IASs still in effect and the IFRSs issued as of January 2016. In addition, 21 Interpretations (14 IFRICs and 7 SICs) were in effect on that date. Together, the two sets of standards and two sets of interpretations comprise what the IASB refers to as IFRS and what can be thought of as International GAAP. IFRSs constitute a comprehensive set of financial reporting standards that covers most major accounting issues. In addition, the IASB’s *Conceptual Framework for Financial Reporting*, which is very similar in scope to the FASB’s conceptual framework, provides a basis for determining the appropriate accounting treatment for items not covered by a specific standard or interpretation. As was true for its predecessor, the IASB does not have the ability to enforce its standards. It develops IFRSs for the public good and makes them available to any organization or nation that wishes to use them.

The IASB *Conceptual Framework* states that the “the objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity.”<sup>9</sup> The framework further states that “other parties, such as regulators and members of the public other than investors, lenders and other creditors, may also find general purpose financial reports useful. However, those reports are not primarily directed to these other groups.”<sup>10</sup>

### Use of IFRS

A country can use IFRS in a number of different ways. For example, a country could (1) adopt IFRS as its national GAAP, (2) *require* domestic listed companies to use IFRS in preparing their *consolidated* financial statements, (3) *permit* domestic listed companies to use IFRS, and/or (4) require or allow *foreign* companies listed on a domestic stock exchange to use IFRS. See Exhibit 11.5 for a summary of the extent to which IFRS are required or permitted to be used by domestic listed companies in preparing consolidated financial statements in countries around the world.

Of the 139 countries included in Exhibit 11.5, as of June 2015, 115 required all or most domestic listed companies to use IFRS. Most significant among this group of IFRS users are

<sup>9</sup> IASB, *Conceptual Framework for Financial Reporting*, Chapter 1, para. OB2.

<sup>10</sup> *Ibid.*, para. OB10.

## LO 11-4

Describe the ways and the extent to which IFRS are used around the world.

**EXHIBIT 11.4**  
**International Financial**  
**Reporting Standards as of**  
**January 2016**

	Title	Originally Issued
IAS 1	Presentation of Financial Statements	1975
IAS 2	Inventories	1975
IAS 7	Statement of Cash Flows	1977
IAS 8	Accounting Policies, Changes in Accounting Estimates and Errors	1978
IAS 10	Events after the Reporting Period	1978
IAS 12	Income Taxes	1979
IAS 16	Property, Plant, and Equipment	1982
IAS 17	Leases (to be superseded by IFRS 16 Leases in 2019)	1982
IAS 19	Employee Benefits	1983
IAS 20	Accounting for Government Grants and Disclosure of Government Assistance	1983
IAS 21	The Effects of Changes in Foreign Exchange Rates	1983
IAS 23	Borrowing Costs	1984
IAS 24	Related Party Disclosures	1984
IAS 26	Accounting and Reporting by Retirement Benefit Plans	1987
IAS 27	Separate Financial Statements	1989
IAS 28	Investments in Associates and Joint Ventures	1989
IAS 29	Financial Reporting in Hyperinflationary Economies	1989
IAS 32	Financial Instruments: Presentation	1995
IAS 33	Earnings per Share	1997
IAS 34	Interim Financial Reporting	1998
IAS 36	Impairment of Assets	1998
IAS 37	Provisions, Contingent Liabilities and Contingent Assets	1998
IAS 38	Intangible Assets	1998
IAS 39	Financial Instruments: Recognition and Measurement	1998
IAS 40	Investment Property	2000
IAS 41	Agriculture	2001
IFRS 1	First-Time Adoption of IFRS	2003
IFRS 2	Share-Based Payment	2004
IFRS 3	Business Combinations	2004
IFRS 4	Insurance Contracts	2004
IFRS 5	Noncurrent Assets Held for Sale and Discontinued Operations	2004
IFRS 6	Exploration for and Evaluation of Mineral Resources	2004
IFRS 7	Financial Instruments: Disclosures	2005
IFRS 8	Operating Segments	2006
IFRS 9	Financial Instruments	2009
IFRS 10	Consolidated Financial Statements	2011
IFRS 11	Joint Arrangements	2011
IFRS 12	Disclosure of Interests in Other Entities	2011
IFRS 13	Fair Value Measurement	2011
IFRS 14	Regulatory Deferral Accounts	2014
IFRS 15	Revenue from Contracts with Customers	2014
IFRS 16	Leases	2016

the 28 countries of the European Union (EU). All publicly traded companies in the EU have been required to use IFRS to prepare their consolidated financial statements since January 1, 2005. In some EU countries, such as France and Germany, publicly traded companies continue to use domestic GAAP to prepare separate parent-company financial statements, which often serve as the basis for taxation. With the EU's adoption of IFRS, the IASB gained a substantial amount of legitimacy as the global accounting standard setter.

By 2015, most countries of economic importance required or permitted domestic listed companies to use IFRS in preparing consolidated financial statements (or were in the process of doing so). The most important exceptions were China and the United States, the two largest economies in the world. In recent years, China developed a completely new set of Accounting

**EXHIBIT 11.5****Use of IFRS in Preparing Consolidated Financial Statements June 2015**

<b>IFRS Required for All or Most Domestic Listed Companies</b>			
Afghanistan	Cyprus*	Latvia*	Rwanda
Albania	Czech Republic*	Lesotho	Saint Lucia
Angola	Denmark*	Liechtenstein	Serbia
Anguilla	Dominica	Lithuania*	Sierra Leone
Antigua and Barbuda	Dominican Republic	Luxembourg*	Singapore
Argentina	Ecuador	Macedonia	Slovakia*
Armenia	El Salvador	Malaysia	Slovenia*
Australia	Estonia*	Maldives	South Africa
Austria*	Fiji	Malta*	Spain*
Azerbaijan	Finland*	Mauritius	Sri Lanka
Bahamas	France*	Mexico	St. Kitts and Nevis
Bahrain	Georgia	Moldova	St. Vincent and the Grenadines
Bangladesh	Germany*	Mongolia	Swaziland
Barbados	Ghana	Montserrat	Sweden*
Belarus	Greece*	Myanmar	Syria
Belgium*	Grenada	Nepal	Taiwan
Belize	Guyana	Netherlands*	Tanzania
Bhutan	Hong Kong	New Zealand	Trinidad and Tobago
Bosnia & Herzegovina	Hungary*	Nigeria	Turkey
Botswana	Iceland	Norway	Uganda
Brazil	Iraq	Oman	Ukraine
Brunei	Ireland*	Pakistan	United Arab Emirates
Bulgaria*	Israel	Palestine	United Kingdom*
Cambodia	Italy*	Peru	Uruguay
Canada	Jamaica	Philippines	Venezuela
Chile	Jordan	Poland*	Yemen
Colombia	Kenya	Portugal*	Zambia
Costa Rica	Korea (South)	Romania*	Zimbabwe
Croatia	Kosovo	Russia	
<b>IFRS Required for Financial Institutions Only</b>			
Saudi Arabia	Uzbekistan		
<b>IFRS Permitted for Domestic Listed Companies</b>			
Bermuda	Honduras	Madagascar	Paraguay
Cayman Islands	India	Nicaragua	Suriname
Guatemala	Japan <sup>§</sup>	Panama	Switzerland <sup>§</sup>
<b>IFRS Not Permitted for Domestic Listed Companies</b>			
Bolivia	Guinea-Bissau	Niger	Vietnam
China <sup>‡</sup>	Indonesia <sup>#</sup>	Thailand <sup>†</sup>	
Egypt	Macao	United States	

\*Denotes EU membership. The EU has not adopted portions of IAS 39.

<sup>§</sup> Japan and Switzerland allow the use of IFRS, U.S. GAAP, or local (Japanese or Swiss, respectively) GAAP.

<sup>‡</sup> While not IFRS, China's standards are substantially converged with IFRS.

<sup>#</sup> Indonesia is in the process of converging its national standards substantially with IFRS.

<sup>†</sup> Thailand is in the process of adopting IFRS in full.

Source: IFRS Foundation, *Financial Reporting Standards for the World Economy*, June 2015.

Standards for Business Enterprises (ASBE), which, while not IFRS, is substantially converged with IFRS. In addition, Chinese companies listed on the Hong Kong stock exchange are permitted to use either Hong Kong GAAP or IFRS. More than 250 Chinese companies listed in Hong Kong prepare IFRS financial statements in addition to financial reports prepared in accordance with ASBE for their listing in China. (The process of IFRS convergence in the United States is described in the next section of this chapter.)

There are two primary methods used by countries to incorporate IFRS into their financial reporting requirements for listed companies: (1) full adoption of IFRS as issued by the IASB, without any intervening review or approval by a local body and (2) adoption

of IFRS after some form of jurisdictional review and approval process. As an example, Mexico has followed the first method by requiring companies listed on the Mexican stock exchange (*Bolsa Mexicana de Valores*) to apply the official English version of IFRS as issued by the IASB. In contrast, the EU follows the second method with individual IFRSs going through a multistep process of review and formal endorsement by the European Commission (EC). The EC has adopted all IFRSs as issued by the IASB without modification, with one exception. Certain provisions on hedge accounting in *IAS 39*, “Financial Instruments: Recognition and Measurement,” have been carved out from the standard endorsed by the EC. Typically, auditor reports of EU-based companies are careful to state that the company’s consolidated financial statements comply with IFRS *as adopted by the European Union*.

### LO11-5

Explain the purpose of *IFRS for SMEs* and how it differs from full IFRS.

## IFRS for SMEs

The vast majority of companies in the world are *not* publicly traded. The 52 largest stock exchanges globally are estimated to have about 45,000 listed companies. In contrast, there are approximately 28 million private (non-publicly traded) companies in Europe and another 25 million in the United States, not to mention other parts of the world.<sup>11</sup> Nonpublic companies often are referred to as small and medium-sized entities (SMEs). Full IFRS are primarily designed to meet the needs of public companies. To meet the needs of nonpublic companies, the IASB created a less complex set of standards in 2009. *IFRS for SMEs* is a self-contained book of standards less than 250 pages in length that differs from full IFRS in the following ways:

- Topics in full IFRS not deemed to be relevant for private companies are omitted. Examples include earnings per share, interim reporting, and segment reporting.
- Significantly fewer disclosures are required. There are approximately 300 disclosures in *IFRS for SMEs* compared to around 3,000 in full IFRS.
- Some principles for recognizing and measuring assets, liabilities, income, and expenses in full IFRS are simplified. Examples include:
  - Borrowing costs: all borrowing costs are expensed as incurred (full IFRS requires some borrowing costs to be capitalized).
  - Development costs: all development costs are expensed as incurred (full IFRS requires some development costs to be capitalized).
  - Goodwill: amortized over useful life (full IFRS requires testing goodwill for impairment without amortization).
  - Property, plant, and equipment: cost model must be used (full IFRS allows choice between cost and revaluation models).
  - Defined benefit plans: actuarial gains and losses are recognized immediately (full IFRS allows choice between immediate recognition or deferral and amortization).

*IFRS for SMEs* is available for any country to adopt, regardless of whether it has adopted full IFRS. To date, a smaller number of countries has opted to require private companies to use *IFRS for SMEs* than the number of countries that requires public companies to use full IFRS. The 2015 IFRS Foundation study identified 73 jurisdictions out of 139 surveyed that require or permit the use of IFRS for SMEs by private companies. Of these jurisdictions:

- Five require *IFRS for SMEs* for all private companies that are not required to use full IFRS,
- 50 allow a choice between full IFRS or *IFRS for SMEs*,
- 17 allow a choice to use either full IFRS or local GAAP instead of *IFRS for SMEs*, and
- One requires an SME to use local GAAP if it does not choose *IFRS for SMEs*.<sup>12</sup>

<sup>11</sup> IFRS Foundation, *The IFRS for SMEs: A Resource for Accounting Educators*, presented by Paul Pacter in Santiago, Chile, December 5, 2011.

<sup>12</sup> IFRS Foundation, *Financial Reporting Standards for the World Economy*, June 2015, page 17.



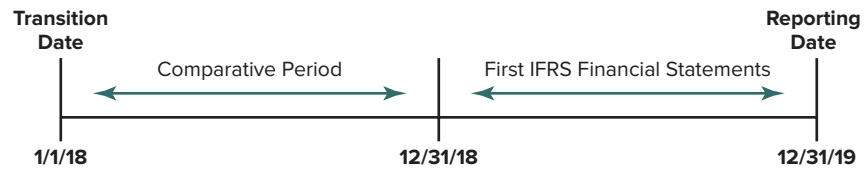
## LO 11-6

Understand the steps to be taken in preparing IFRS financial statements for the first time.

## First-Time Adoption of IFRS

Publicly traded companies in more than 100 countries around the world have been required to discontinue using their old accounting standards and adopt IFRS in preparing their consolidated financial statements. The process of converting from one set of accounting standards to another is quite complex and there are many questions to be answered. To provide guidance on this issue, the first standard developed by the IASB was *IFRS 1*, “First-Time Adoption of IFRS.” *IFRS 1* establishes the procedures to be followed in converting from previously used accounting standards to IFRS for the first time, and introduces the concept of the “opening balance sheet.”

*IFRS 1* requires companies transitioning to IFRS to prepare an *opening balance sheet* at the “date of transition.” The transition date is the beginning of the earliest period for which an entity presents full comparative information under IFRS. The following timeline shows how the transition date is determined:



If a company is preparing financial statements using IFRS for the first time for the year ended December 31, 2019, under *IFRS 1* it also must provide comparative financial statements for the year ended December 31, 2018. January 1, 2018, is the beginning of the earliest period for which the comparative information must be provided, and therefore is the transition date. This means that a company must begin using IFRS prior to January 1, 2018, to be able to prepare IFRS financial statements for 2019.

An entity must complete the following steps to prepare the opening IFRS balance sheet:

### *Step 1—Determine Applicable IFRS Accounting Policies Based on Standards in Force on the Reporting Date.*

This requirement implies that companies must know on the transition date what the applicable standards will be on the reporting date. For example, in preparing the opening balance sheet at January 1, 2018, a company would need to determine what IFRS policies will be in effect on December 31, 2019. As a result, companies adopting IFRS must keep track of the date on which new standards go into effect.

### *Step 2—Recognize Assets and Liabilities Required to Be Recognized under IFRS That Were Not Recognized under Previous GAAP and Derecognize Assets and Liabilities Previously Recognized That Are Not Allowed to Be Recognized under IFRS.*

Let's assume that a company previously using U.S. GAAP is adopting IFRS. *Deferred development costs* is an example of an intangible asset recognized under IFRS that is not recognized as an asset under U.S. GAAP. A U.S.-GAAP company transitioning to IFRS on January 1, 2018, would be required to assess whether development costs incurred in prior years met the criteria for capitalization in *IAS 38*, “Intangible Assets.” If so, then the costs previously expensed would be reversed and recognized on the opening balance sheet as an asset. The counterpart would be an adjustment to stockholders' equity. Restructuring of operations is an area in which a U.S. company might need to derecognize a liability because a restructuring charge and related liability can be recognized at an earlier date under U.S. GAAP than under IFRS. Going forward, new IFRS adopters need to amend their asset and liability recognition policies to make sure that they are in compliance with IFRS. For example, development costs incurred after the transition date of January 1, 2018, would have to be evaluated for possible capitalization.

### *Step 3—Measure Assets and Liabilities Recognized on the Opening Balance Sheet in Accordance with IFRS.*

An entity must retrospectively apply applicable IASB standards to each asset and liability reported on the opening balance sheet. As an example, a U.S.-GAAP company previously

using LIFO to measure inventory would have to select a method acceptable under IFRS (FIFO or weighted average cost) and retroactively apply that method to the inventory carried on the opening balance sheet. This represents a change in accounting principle. *IFRS 1* indicates that the effect of the change should be recognized in stockholders' equity on the opening balance sheet, and not in net income.

In preparing the opening balance sheet, *IFRS 1* provides several optional exemptions from complying with IFRS where retrospective application would be extremely difficult and the informational benefit to users is unlikely to exceed the cost. First-time adopters of IFRS have an option *not* to (a) adjust the carrying amount of goodwill recognized under previous GAAP, (b) restate a business combination originally accounted for under the pooling method, (c) retrospectively apply *IFRS 2* to stock options, or (d) recognize any cumulative translation adjustment for foreign subsidiaries.

*Step 4—Reclassify Items Previously Classified in a Different Manner from What Is Acceptable under IFRS.*

There are several situations in which accounting elements are classified differently under IFRS and U.S. GAAP. For example, U.S.-GAAP companies classify bank overdrafts as a current liability. *IAS 7*, "Statement of Cash Flows" stipulates that bank overdrafts that form an integral part of an entity's cash management should be classified as a reduction in cash and cash equivalents. In this case, to comply with IFRS, bank overdrafts classified as a current liability under U.S. GAAP would have to be reclassified as a reduction in cash and cash equivalents on the IFRS opening balance sheet. As another example, in some cases, a portion of the fair value of convertible debt that is classified as a liability under U.S. GAAP would have to be reclassified as equity under IFRS.

*Step 5—Comply with All Presentation and Disclosure Requirements.*

First-time adopters of IFRS must be careful to comply with all presentation and disclosure requirements, especially those contained in *IAS 1*, "Presentation of Financial Statements." As an example, *IAS 1*, para. 113, requires companies to cross-reference each item in each of the financial statements to any related information in the notes. A similar presentation requirement does not exist in U.S. GAAP. Several public accounting firms provide IFRS disclosure checklists that can be used by IFRS adopters for the purpose of determining whether applicable presentation and disclosure requirements have been met.<sup>13</sup>

Once the opening IFRS balance sheet has been prepared (for example, on January 1, 2018), the company continues to use IFRS for the next two years so that comparative information can be included in the first set of annual financial statements prepared under IFRS (for example, for the year ended December 31, 2019). *IFRS 1* also requires a company to provide the following reconciliations in its first set of IFRS financial statements:

1. Reconciliation of total equity measured under previous GAAP to total equity measured under IFRS at:
  - (a) the date of transition (e.g., January 1, 2018), and
  - (b) the end of the comparative period (e.g., December 31, 2018).
2. Reconciliation of net income measured under previous GAAP to net income measured under IFRS for the comparative period (e.g., for the year ended December 31, 2018).

*IFRS 1* also requires disclosures explaining the company's adoption of IFRS, including notes to accompany the IFRS reconciliations.

Exhibit 11.6 presents Note 4 from the 2005 Annual Report of the Spanish airline company Iberia, Líneas Aéreas de España, S.A. In accordance with European Union regulations, Iberia adopted IFRS in 2005, with January 1, 2004, as the transition date. Note 4 provides the reconciliation of equity and net income from Spanish GAAP to IFRS for the comparative period 2004, and explains the major adjustments made. The notes indicate that Iberia opted

<sup>13</sup> For example, KPMG's International Standards Group prepared a "Guide to Annual Financial Statements - Disclosure Checklist" dated September 2015, which is available for download at [www.kpmg.com/ifrs](http://www.kpmg.com/ifrs).

**EXHIBIT 11.6**  
**Iberia Group 2005 Annual**  
**Report**

**4. Reconciliation of the Beginning and Ending Balances for 2004 per Spanish GAAP and IFRS**

**Reconciliation of equity at 1 January 2004 and at 31 December 2004**

Concept	(Thousands of Euros)	
	Equity at 1 January 2004	Equity at 31 December 2004
Balance per Spanish GAAP in force at that date <sup>a</sup>	1,432,760	1,645,765
Impacts due to transition to IFRS <sup>b</sup>		
Derecognition of amortisation of goodwill	(98,098)	(91,485)
Reversal of provisions and other contingent liabilities	116,682	124,507
Derecognition of deferred income	19,090	1,981
Reversal of provision for major repairs	5,114	—
Conversion to IFRSs of financial statements of companies accounted for using the equity method	4,618	2,262
Derecognition of negative consolidation differences	1,494	998
Derecognition of deferred charges and start-up expenses	(1,905)	(5,189)
Other	—	6
Total impact on equity	46,995	33,080
Minority interests	9,204	5,324
Balance per IFRSs	1,488,959	1,684,169

<sup>a</sup>Obtained from the consolidated financial statements at the date shown, as approved by the shareholders at the related Annual General Meetings.

<sup>b</sup>Taking into consideration tax effects.

**Reconciliation of profit for 2004**

Concept	(Thousands of Euros)
	Increase/ (Reduction) 2004 Profit
Balance per Spanish GAAP in force at that date*	218,402
Impacts due to transition to IFRS:	
Amortisation of goodwill	6,613
Provisions and other contingent liabilities	7,825
Derecognition of deferred income	(17,109)
Reversal of provision for major repairs	(3,521)
Conversion to IFRSs of financial statements of companies accounted for using the equity method	(2,356)
Share options	(4,969)
Derecognition of negative consolidation differences	(496)
Derecognition of deferred charges and start-up expenses	(3,284)
Other	6
Total impact on equity/profit	(17,291)
Balance per IFRSs	201,111

\*Obtained from the consolidated financial statements at the date shown, as approved by the shareholders at the related Annual General Meeting.

The main changes arose in the following items:

**Goodwill**

Goodwill was calculated as the positive difference between the amount paid by Iberia, Líneas Aéreas de España, S.A. for the acquisition of 67% of Aviación y Comercio, S.A. and the related underlying carrying amount at 31 December 1997. This goodwill was attributed basically to the value of the market presence, size and image of Aviación y Comercio, S.A.

(continued)

**EXHIBIT 11.6**  
**(Continued)**

at that date. Since it was not possible to reasonably allocate these items to a single cash-generating unit on the basis of which to evaluate possible changes in value in the future, the Company opted to write this goodwill off against the reserves for first-time application of IFRSs. Also, the Group reversed EUR 6,613 thousand relating to the amortisation recognised in 2004 in accordance with Spanish GAAP.

**Provisions and Other Contingent Liabilities**

The Group reversed, with a credit to reserves, certain provisions recorded to cover potential contingencies which do not meet all the requirements under IAS 37 to be recognised in the financial statements.

**Deferred Income**

In accordance with IAS 17, the gains recognised as a result of a sale and operating lease-back transaction, which until 2004 were recognised over the subsequent lease term, must be recognised in the income statement at the moment when the transaction is arranged. The Group therefore eliminated the deferred income gains with a charge to reserves on first-time application of IFRSs. Also, the deferred income credited to the income statement in this connection in 2004 was reversed.

not to restate goodwill and instead wrote existing goodwill off against equity on the opening balance sheet. In addition, the notes explain that the company retroactively applied IFRS to remeasure the amounts reported on the opening balance sheet for provisions and other contingent liabilities, and deferred income.

### IFRS Accounting Policy Hierarchy

With respect to the issue of determining appropriate accounting policies to use in preparing IFRS financial statements, IAS 8, “Accounting Policies, Changes in Accounting Estimates and Errors,” establishes the following hierarchy that firms must follow:

1. Apply specifically relevant standards (IASs, IFRSs, SICs, or IFRICs) dealing with an accounting issue.
2. Refer to other IASB standards dealing with similar or related issues.
3. Refer to the definitions, recognition criteria, and measurement concepts in the IASB Conceptual Framework.
4. Consider the most recent pronouncements of other standard-setting bodies that use a similar conceptual framework, other accounting literature, and accepted industry practice to the extent that these do not conflict with sources in items 2 and 3 above.

Two aspects of this hierarchy are noteworthy. First, the Conceptual Framework is specifically listed as part of the hierarchy and must be consulted before considering sources of guidance listed in item 4. In contrast, the FASB’s concepts statements are not a part of U.S. GAAP. Second, because the FASB and IASB conceptual frameworks are similar, step 4 provides an opportunity for entities to adopt FASB standards in dealing with accounting issues where steps 1 through 3 are not helpful.

In establishing accounting policies to be followed under IFRS, the two extreme approaches that companies can follow are

1. *Minimize change.* Under this approach a company would adopt accounting policies consistent with IFRS that are most consistent with the company’s current accounting policies.
2. *Fresh start.* Under this approach a company would ignore its current accounting policies and adopt accounting policies consistent with IFRS that best reflect economic reality.

The first approach is likely to be less costly than the second approach. However, many commentators encourage companies to take advantage of the opportunity to start from a clean slate and adopt a fresh start approach.

## LO 11-7

Describe the FASB–IASB convergence process and SEC recognition of IFRS.

## FASB–IASB Convergence

At a joint meeting in Norwalk, Connecticut, in September 2002, the FASB and IASB agreed to “use their best efforts to (a) make their existing financial reporting standards fully compatible as soon as is practicable and (b) to coordinate their work program to ensure that once achieved, compatibility is maintained.”<sup>14</sup> This so-called “Norwalk Agreement” set the FASB and IASB along the path of convergence of accounting standards. Convergence can occur by the FASB adopting an existing IASB standard, the IASB adopting an existing FASB standard, or the two Boards working together to develop a new standard. The idea behind convergence is to have similar, but not necessarily identical, standards. Indeed, the Boards acknowledge that the issuance of identical standards, even if jointly developed, is not realistic.

The FASB–IASB convergence process has resulted in changes made to U.S. GAAP, IFRS, or both in a number of important areas. Exhibit 11.7 summarizes some of the key accomplishments from this process. As shown in this exhibit, in many cases convergence did not result in complete elimination of differences between the applicable IFRS and U.S. GAAP. For example, although both standard setters adopted the acquisition method for business combinations and require noncontrolling interest to be classified as equity, *IFRS 3* allows companies to choose from two different methods to measure noncontrolling interest whereas *SFAS 141 (ASC Topic 805)* only allows one method. As a result, both noncontrolling interest and goodwill can be measured two different ways under IFRS but only one way under U.S. GAAP.

Another example of the difficulty the Boards have had in developing a common standard relates to leases. In 2006, the FASB and IASB added a joint project on leases to their agendas. This project was intended to develop a principle-based model to replace the rule-based lease classification model used in both IFRS and U.S. GAAP at the time. After years of joint work, the Boards issued an exposure draft in 2010 proposing a new standard that would require lessees to capitalize all leases. Based on comments received, the Boards made changes to their proposal and issued a revised exposure draft in 2013. Subsequently, the FASB decided to retain a version of the existing model in which lessees capitalize some leases but treat others as operating leases. The IASB, on the other hand, continued to support a model in which lessees would capitalize all leases. This joint project was concluded with the IASB issuing *IFRS 16*, “Leases,” and the FASB issuing *Accounting Standards Update 2016-02*, “Leases,” in 2016. While the new standards are substantially similar with respect to lessor accounting, essentially retaining the existing accounting requirements, lessee accounting will differ between IFRS and U.S. GAAP once the new standards go into effect. Under IFRS, lessees will treat all leases as finance leases both on the balance sheet and in the measurement of net income. Under U.S. GAAP, lessees will continue to classify leases as either finance or operating. The major difference from prior lease accounting requirements is that operating leases will be reflected on the balance sheet as both an asset and a liability, similar to a finance lease, but will continue to be treated as a traditional operating lease in the measurement of net income.

Perhaps the most significant successful FASB–IASB joint project was the development of a new revenue recognition model embodied in “Revenue from Contracts with Customers” issued simultaneously by the two Boards in 2014. The new revenue recognition standard was issued by the IASB as *IFRS 15* and by the FASB as *ASC Topic 606*. Other successful convergence projects of particular importance include business combinations and fair value measurement.

Areas in which the Boards tried but were unable to agree on a common approach include impairment, derecognition, income taxes, research and development, post-employment benefits, and insurance contracts. By 2016, the FASB and IASB had completed work on their joint projects and had no plans to add future projects to their work agendas.

<sup>14</sup> FASB–IASB, *Memorandum of Understanding*, “The Norwalk Agreement,” available at [www.iasplus.com](http://www.iasplus.com).

**EXHIBIT 11.7 Successful FASB-IASB Convergence Projects**

<b>Issue</b>	<b>Year - New Standard(s)</b>	<b>Remaining Differences</b>
Share-based payment	2004 - IASB issued <i>IFRS 2</i> "Share-based Payment" and FASB revised <i>SFAS 123</i> "Share-based Payment"	Some differences in the measurement of share-based payment expense
Discontinued operations	2004 - IASB issued <i>IFRS 5</i> "Noncurrent Assets Held for Sale and Discontinued Operations" to converge with <i>SFAS 144</i> (issued in 2001)	Some differences in the definition of a discontinued operation and its presentation on the income statement
Segment reporting	2006 - IASB issued <i>IFRS 8</i> "Operating Segments" to converge with <i>SFAS 133</i> (issued in 1997)	Minor differences in identification of operating segments and required disclosures
Business combinations	2007 - IASB revised <i>IFRS 3</i> "Business Combinations" and FASB revised <i>SFAS 141</i> "Business Combinations" to converge on a common method of accounting for business combinations	Differences in the measurement of noncontrolling interest and goodwill with IFRS allowing choices; difference in the level at which goodwill impairment testing is conducted
Fair value option	2007 - FASB issued <i>SFAS 159</i> "The Fair Value Option for Financial Assets and Financial Liabilities" to converge with <i>IAS 39</i> (revised in 2003)	Some differences in the financial instruments eligible for the fair value option
Borrowing costs	2009 - IASB amended <i>IAS 23</i> "Borrowing Costs" to require capitalization of borrowing costs and converge with <i>SFAS 34</i> (issued in 1979)	Some differences in the definition of borrowing costs that are eligible for capitalization
Comprehensive income	2011 - IASB revised <i>IAS 1</i> "Presentation of Financial Statements" and FASB issued <i>ASU 2011-05</i> to amend Comprehensive Income (ASC Topic 220) to reduce options for presentation of comprehensive income	Some differences in the requirements for reclassifying other comprehensive income items into net income
Joint ventures	2011 - IASB issued <i>IFRS 11</i> "Joint Arrangements," which eliminates the option of proportionate consolidation for joint ventures	Complete convergence on use of the equity method for joint ventures
Fair value measurement	2011 - IASB issued <i>IFRS 13</i> "Fair Value Measurement" and FASB issued <i>ASU 2011-04</i> to amend Fair Value Measurement (ASC Topic 820)	Essentially word-for-word convergence
Revenue recognition	2014 - IASB issued <i>IFRS 15</i> "Revenue from Contracts with Customers" and FASB issued <i>ASU 2014-09</i> (same title) creating ASC Topic 606	Essentially word-for-word convergence
Leases	2016 - IASB issued <i>IFRS 16</i> "Leases" and FASB issued <i>ASU 2016-02</i> "Leases"	Convergence on lessees bringing all leases onto the balance sheet but IASB adopted a single model for income recognition whereas FASB adopted a dual model

Although the formal FASB–IASB convergence project has come to an end, each Board is likely to continue to refer to the other’s standards when making improvements and convergence is likely to continue on a less formal basis. Evidence of this can be found in three Accounting Standards Updates (ASU) issued by the FASB in 2015:

- *ASU 2015-01* “Income Statement—Extraordinary and Unusual Items (Subtopic 225-20)—Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items,” eliminates the classification of income statement items as extraordinary.
- *ASU 2015-11* “Inventory (Topic 330)—Simplifying the Measurement of Inventory,” requires inventory to be measured at the lower of cost or net realizable value (rather than at the lower of cost or market).
- *ASU 2015-17* “Income Taxes (Topic 740)—Balance Sheet Classification of Deferred Taxes,” requires all deferred taxes to be classified as noncurrent (rather than being classified as current or noncurrent depending on the classification of the item creating the deferred tax).

Each of these changes stemmed from the FASB’s Simplification Initiative, the objective of which is to identify areas in U.S. GAAP where cost and complexity can be reduced while maintaining or improving the usefulness of information provided to financial statement users. In each case, however, the ASU not only simplifies U.S. GAAP, but also converges U.S. GAAP with IFRS. The FASB acknowledges this in each of these updates. For example, in partial answer to the question posed in the Summary in *ASU 2015-01*, “Why is the FASB issuing this Accounting Standards Update?” the FASB responded:

This Update will align more closely GAAP income statement presentation guidance with IAS 1, Presentation of Financial Statements, which prohibits the presentation and disclosure of extraordinary items.<sup>15</sup>

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## SEC Recognition of IFRS

As a result of the IOSCO agreement discussed earlier, the SEC’s early focus on international accounting standards related to whether it should allow foreign companies to use IFRS without reconciliation to U.S. GAAP. The SEC began formal consideration of this question in 2000 and finally issued a rule in 2007 aptly titled “Acceptance from Foreign Private Issuers of Financial Statements Prepared in Accordance with International Financial Reporting Standards without Reconciliation to U.S. GAAP.” Beginning with financial statements filed for fiscal years ending after November 15, 2007, foreign companies using IFRS no longer provide U.S. GAAP information in their annual reports filed with the SEC. However, foreign companies using foreign GAAP other than IFRS must continue to provide a U.S. GAAP reconciliation in their Form 20-F.

Elimination of the U.S. GAAP reconciliation requirement for foreign filers using IFRS resulted in an asymmetric situation for U.S. domestic companies that are required to use U.S. GAAP. To level the playing field, the SEC issued a Concept Release in July 2007 to solicit public comment on the idea of allowing U.S. companies to choose between U.S. GAAP and IFRS. A majority of comment letters were not in favor of allowing a *choice* between IFRS or U.S. GAAP, but instead recommended that the SEC *require* the use of IFRS by U.S. companies. Even the chairmen of the FASB and the Financial Accounting Foundation (FAF), which oversees the FASB, expressed approval for a move toward the use of IFRS in the United States. They concluded that: “Investors would be better served if all U.S. public companies used accounting standards promulgated by a single global standard setter as the basis for preparing their financial reports. This would be best accomplished by *moving U.S. public companies to an improved version of International Financial Reporting Standards (IFRS)*” (emphasis

<sup>15</sup> FASB Accounting Standards Update No. 2015-01, “Income Statement - Extraordinary and Unusual Items (Subtopic 225-20) - Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items,” January 2015, p. 2.

added).<sup>16</sup> However, they also noted that the switch to IFRS would be a complex, multiyear process that would involve significant changes to the U.S. financial reporting system, including changes in auditing standards, licensing requirements, and how accountants are educated.

### IFRS Roadmap

In reaction to the support expressed for IFRS, the SEC issued a proposed rule for the potential use of IFRS by U.S. public companies in November 2008.<sup>17</sup> This so-called IFRS Roadmap sets forth several milestones that, if achieved, could lead to the *required* use of IFRS by U.S. issuers. The SEC indicated that it would monitor these milestones until 2011, and if significant progress had been made at that time the SEC would then require the mandatory adoption of IFRS by U.S. public companies over a 3-year phase-in period. The roadmap indicated 2014 as the first year of IFRS adoption, but a subsequent SEC Release in February 2010 pushed that date back to “approximately 2015 or 2016.”<sup>18</sup>

### A Possible Framework for Incorporating IFRS into U.S. Financial Reporting

As the self-imposed deadline for monitoring roadmap milestones approached, the SEC staff published a discussion paper in May 2011 that suggested a possible alternative framework for incorporating IFRS into the U.S. financial reporting system.<sup>19</sup> This framework combined the existing FASB–IASB convergence project with the endorsement process followed in many countries and the EU. Some refer to this method as “condorsement.” The framework would retain both U.S. GAAP and the FASB as the U.S. accounting standard setter. At the end of a transition period, a U.S. company following U.S. GAAP also would be able to represent that its financial statements are in compliance with IFRS.

The proposed condorsement framework was not adopted. The 2011 deadline established by the SEC in its IFRS Roadmap came and went without the Commission making a decision whether to require the use of IFRS in the U.S. In July 2012, the SEC staff issued a Final Staff Report<sup>20</sup> that identified several unresolved issues related to the possible use of IFRS by U.S. companies including:

1. The diversity in how IFRS are interpreted, applied and enforced in various jurisdictions,
2. The potential cost to U.S. issuers of adopting or incorporating IFRS, and
3. Investor education.

The Final Staff Report did not include conclusions or recommendation for action by the Commission with regard to adoption of IFRS and did not provide insight into the nature or timetable for next steps.

Since 2012, several public statements made by SEC Chief Accountant James Schnurr suggest that the SEC is unlikely to require U.S. public companies to adopt IFRS in the foreseeable future. In May 2015, Schnurr said that he probably would not recommend that U.S. companies be required or allowed to use IFRS in preparing financial statements. In November 2015, he stated that he instead planned to recommend that U.S. companies be allowed to use

<sup>16</sup> Letter to Ms. Nancy M. Morris, Securities and Exchange Commission, signed by Robert E. Denham, Chairman, Financial Accounting Foundation, and Robert H. Herz, Chairman, Financial Accounting Standards Board, dated November 7, 2007 (accessed December 6, 2007, at [www.fasb.org/FASB\\_FAF\\_Response\\_SEC\\_Release\\_msw.pdf](http://www.fasb.org/FASB_FAF_Response_SEC_Release_msw.pdf)).

<sup>17</sup> The SEC’s “Roadmap for the Potential Use of Financial Statements Prepared in Accordance with International Financial Reporting Standards by U.S. Issuers” is available at [www.sec.gov/rules/proposed/2008/33-8982.pdf](http://www.sec.gov/rules/proposed/2008/33-8982.pdf).

<sup>18</sup> SEC Release Nos. 33-9109; 34-61578, “Commission Statement in Support of Convergence and Global Accounting Standards,” February 2010, p. 15, available at [www.sec.gov](http://www.sec.gov).

<sup>19</sup> SEC, “Work Plan for the Consideration of Incorporating International Financial Reporting Standards into the Financial Reporting System for U.S. Issuers: Exploring a Possible Method of Incorporation,” SEC Staff Paper, May 26, 2011, available at <http://www.sec.gov/spotlight/globalaccountingstandards/ifrs-work-plan-paper-052611.pdf>.

<sup>20</sup> SEC, “Work Plan for Consideration of Incorporating International Financial Reporting Standards into the Financial Reporting System for U.S. Issuers” Final Staff Report,” July 13, 2012, available at <http://www.sec.gov/spotlight/globalaccountingstandards/ifrs-work-plan-final-report.pdf>



IFRS to provide supplemental information, in addition to filing their financial statements in accordance with U.S. GAAP.

### Relevance of IFRS for U.S. Accountants

Notwithstanding the fact that it appears unlikely that the SEC will require or even allow U.S. public companies to use IFRS in preparing financial statements, a working knowledge of IFRS is still important for many U.S. accountants. In response to the question “Where do entry-level CPAs currently work with IFRS?” the American Institute of Certified Public Accountants (AICPA) responded as follows:

In many settings. For example, in US companies that are owned by international entities, entry-level CPAs use IFRS in preparing reporting packages; in US companies that own international entities, entry-level CPAs work on converting IFRS financials to US GAAP. In addition, entry-level CPA auditors use IFRS when auditing companies or subsidiaries that report in IFRS.<sup>21</sup>

Because of the relevance of IFRS for many entry level accountants, the AICPA began testing IFRS on the Uniform CPA Examination in 2011. More specifically, the AICPA indicates that CPA exam candidates will be expected to be able to

Identify and understand the differences between financial statements prepared on the basis of accounting principles generally accepted in the United States of America (U.S. GAAP) and International Financial Reporting Standards (IFRS).<sup>22</sup>

#### LO 11-8

Recognize acceptable accounting treatments under IFRS and identify key differences between IFRS and U.S. GAAP.

## Differences between IFRS and U.S. GAAP

IFRS and U.S. GAAP share a similar conceptual framework and are designed to provide useful information to providers of financing. Moreover, the IASB and FASB worked for over a decade to converge IFRS and U.S. GAAP. As a result, there are more similarities than differences between the two sets of standards. However, as the adage goes, “the devil is in the details,” and numerous differences between the two sets of standards continue to exist. Exhibit 11.8 summarizes some of the key differences between IFRS and U.S. GAAP. These are only a few of the differences that remain.

The types of differences that exist between IFRS and U.S. GAAP can be generally classified as follows:

1. Recognition differences.
2. Measurement differences.
3. Classification, presentation, and disclosure differences.

Examples of each type of difference are described next.

### Recognition Differences

Several differences between IFRS and U.S. GAAP relate to (1) whether an item is recognized or not, (2) how it is recognized, or (3) when it is recognized. A prime example of this type of difference relates to the accounting for research and development (R&D) costs. Under U.S. GAAP, R&D costs must be expensed immediately. The only exception relates to costs incurred in developing computer software, which must be capitalized as an intangible asset when several restrictive criteria are met. *IAS 38*, “Intangible Assets,” also requires immediate expensing of all research costs. Development costs, on the other hand, must be recognized as an internally generated intangible asset when certain criteria are met. Deferred development cost (an intangible asset) is amortized over its useful life but not to exceed 20 years. Development costs include all costs directly attributable to or that can be reasonably allocated to development activities including personnel costs, materials and services costs, depreciation

<sup>21</sup> American Institute of Certified Public Accountants, “Uniform CPA Examination FAQs - International Financial Reporting Standards (IFRS),” undated, accessed January 22, 2016 at [www.aicpa.org](http://www.aicpa.org).

<sup>22</sup> American Institute of Certified Public Accountants, “Content and Skill Specifications for the Uniform CPA Examination,” approved May 28, 2015, unpaginated, accessed January 22, 2016 at [www.aicpa.org](http://www.aicpa.org).

**EXHIBIT 11.8 Some Key Differences between IFRS and U.S. GAAP**

<b>Accounting Item</b>	<b>IFRS</b>	<b>U.S. GAAP</b>
<i>Cash and cash equivalents</i>		
Bank overdrafts that are an integral part of cash management	Report as a reduction in cash and cash equivalents	Report as a current liability
<i>Inventory</i>		
Subsequent measurement	LIFO not allowed	LIFO allowed
Reversal of inventory write-down	Required if certain criteria are met	Not allowed
<i>Property, plant, and equipment</i>		
Subsequent measurement	Based on historical cost or a revalued amount	Based on historical cost
Component depreciation	Required when an asset comprises components	Permitted, but not commonly used
Major inspection or overhaul costs	Generally capitalized	Either capitalized or expensed
<i>Impairment</i>		
Indication of impairment	Asset's carrying value exceeds the higher of its (1) value in use (discounted expected future cash flows) or (2) fair value less costs to sell	Asset's carrying value exceeds the undiscounted expected future cash flows from the asset
Subsequent reversal of an impairment loss	Required if certain criteria are met	Not allowed
<i>Research and development costs</i>		
Development costs	Capitalized if certain criteria are met	Expensed immediately (except computer software development)
<i>Defined benefit plans</i>		
Recognition of past (prior) service cost*	Recognized immediately in net income	Amortized to net income over the remaining service period or life expectancy of affected employees
Measurement of net defined benefit asset	Lesser of (a) FVPA less PVDBO or (b) "asset ceiling" <sup>†</sup>	Fair value of plan assets (FVPA) less present value of defined benefit obligation (PVDBO)
<i>Income taxes</i>		
Recognition of deferred tax assets	Recognized only if realization of tax benefit is probable	Always recognized but a valuation allowance is provided
Tax laws and rates used to measure current and deferred taxes	Enacted or substantively enacted tax laws and rates	Enacted tax laws and rates only
<i>Leases</i>		
Lessee accounting	All leases treated as finance (capital) leases on both balance sheet and income statement	Leases classified as finance or operating. Operating leases treated as such in the income statement but capitalized on the balance sheet
Gain on sale and leaseback	Recognized immediately in net income (if operating lease)	Deferred and amortized over lease term (generally)
<i>Compound financial instruments</i>		
Convertible debt	Split into debt and equity components	Treated as debt only
<i>Preferred shares</i>		
Redeemable at the option of the shareholder	Classified as a liability	Classified as equity

*(continued)*

**EXHIBIT 11.8** Continued

Accounting Item	IFRS	U.S. GAAP
<i>Loss Contingencies</i>		
Criterion for financial statement recognition of a contingent liability and loss	An outflow of resources is probable, which is defined as "more likely than not"	An outflow of resources is "probable," which is undefined
Measurement of recognized contingent liability and loss when range of outcomes is possible	Midpoint of range	Minimum amount in range
<i>Consolidated financial statements</i>		
Model for determining whether an entity must be consolidated	Single model for determining control for all entities	Separate models for determining control of (a) voting interest entity or (b) variable interest entity
Different accounting policies of parent and subsidiaries	Must conform policies	No requirement to conform policies
<i>Foreign currency translation</i>		
Financial statements of foreign operations in highly inflationary environment	Remeasured for local inflation and then translated into the parent's reporting currency using an all current rate approach	Translated into the parent's reporting currency using the temporal method
<i>Definition of a discontinued operation</i>		
	A reportable business or geographic segment	A reportable segment, operating segment, reporting unit, subsidiary, or asset group
<i>Interim reporting</i>		
	Interim period treated as discrete accounting period	Interim period treated as integral part of full year
<i>Statement of cash flows</i>		
Classification of:		
• Interest paid	Operating or financing	Operating
• Interest received	Operating or investing	Operating

\*IFRS uses the term *past* service cost, whereas U.S. GAAP calls this *prior* service cost.

†The "asset ceiling" is the present value of any economic benefits available in the form of refunds from the defined benefit plan or reduction in future contributions to the plan.

on fixed assets, amortization of patents and licenses, and overhead costs other than general administration. The types of development costs that might qualify as an internally generated intangible asset under *IAS 38* include computer software costs, patents and copyrights, customer or supplier relationships, market share, fishing licenses, and franchises. Brands, advertising costs, training costs, and customer lists that are internally generated are specifically excluded from recognition as an intangible asset.

Other recognition differences relate to (1) gains on sale and leaseback transactions, (2) past service costs related to defined benefit plans, (3) deferred tax assets, and (4) loss contingencies (refer to Exhibit 11.8).

### Measurement Differences

Measurement differences result in the recognition of different amounts in the financial statements under IFRS and U.S. GAAP. In some cases, these differences result from different measurement methods required under the two sets of standards. For example, when a contingent liability meets the criteria to be recognized as a liability on the balance sheet and a range of possible cash outflows exists, IFRS requires the liability to be measured at the midpoint of the range of cash outflows when all points in the range are equally likely. In contrast, U.S. GAAP requires use of the low end of the range rather than the midpoint to measure the liability.

In other cases, measurement differences can exist because of alternatives allowed by one set of standards but not the other. Permitting the use of LIFO under U.S. GAAP but not allowing its use under IFRS is an example of this type of difference.



## Discussion Question

### WHICH ACCOUNTING METHOD REALLY IS APPROPRIATE?

In this era of rapidly changing technology, research and development (R&D) expenditures represent one of the most important factors in the future success of many companies. Organizations that spend too little on R&D risk being left behind by the competition. Conversely, companies that spend too much may waste money or not be able to make efficient use of the results.

In the United States, except for costs related to computer software development, all R&D expenditures are expensed as incurred. However, expensing all R&D costs is not an approach used in much of the world. Firms using IFRS must capitalize development costs as an intangible asset when they can demonstrate (1) the technical feasibility of completing the project, (2) the intention to complete the project, (3) the ability to use or sell the intangible asset, (4) how the intangible asset will generate future benefits, (5) the availability of adequate resources to complete the asset, and (6) the ability to measure development costs associated with the intangible asset.

Should any portion of R&D costs be capitalized? Is expensing all R&D expenditures the best method of reporting these costs? Is the U.S. approach better than the international standard? Which approach provides the best representation of the company's activities?

One of the greatest potential differences between the application of IFRS and U.S. GAAP is found in *IAS 16*, "Property, Plant, and Equipment." In measuring fixed assets subsequent to acquisition, *IAS 16* allows companies to choose between two approaches: (1) the cost model and (2) the revaluation model. Under the cost model, property, plant, and equipment is measured and carried on the balance sheet at cost less accumulated depreciation and any impairment losses. This is consistent with U.S. GAAP. Under the revaluation model, property, plant, and equipment is carried on the balance sheet subsequent to acquisition at a revalued amount, which is measured as fair value at the date of revaluation less any subsequent accumulated depreciation and impairment losses. If a company adopts the revaluation model, it must make revaluations regularly enough that the carrying value reported on the balance sheet does not differ materially from fair value. Companies following the revaluation model need not adopt this treatment for all classes of property, plant, and equipment. However, they must apply it to all items within a class of assets. A company could choose to revalue land but not buildings, for example, but it would need to revalue each and every parcel of land it owns at the same time.

### Classification, Presentation, and Disclosure Differences

Classification, presentation, and disclosure differences relate to the manner in which items are classified or presented on the financial statements or disclosed in the notes to the financial statements. Splitting convertible debt into separate liability and equity components under IFRS but reporting this item as a liability only under U.S. GAAP is one example. Another example is the classification of bank overdrafts as a liability under U.S. GAAP; bank overdrafts that are part of an entity's cash management are classified as a reduction in cash and cash equivalents under IFRS. A third difference relates to what is considered a discontinued operation and therefore presented separately on the income statement. The U.S. GAAP definition of a discontinued operation is less restrictive than the definition in IFRS.

Perhaps the greatest difference between IFRS and U.S. GAAP with respect to presentation is the fact that IFRS contain a single standard—*IAS 1*, "Presentation of Financial Statements"—that governs the presentation of financial statements. U.S. GAAP has no equivalent to *IAS 1*.

## IAS 1, “Presentation of Financial Statements”

IAS 1, “Presentation of Financial Statements,” provides guidance with respect to the following issues:

1. *Purpose of financial statements:* Financial statements provide information about the financial position, financial performance, and cash flows useful to a wide range of users in making economic decisions.
2. *Overriding principle of fair presentation:* Financial statements should present fairly an entity’s financial position, financial performance, and cash flows. Compliance with IFRS generally ensures fair presentation. In extremely rare circumstances, an entity might need to depart from IFRS to ensure fair presentation.
3. *Basic principles and assumptions:* IAS 1 emphasizes the going concern assumption, the accrual basis of accounting, the consistency principle, the principle of comparative information, and the separate presentation of material items. The standard also precludes the offsetting of assets and liabilities and of revenues and expenses unless specifically permitted by another standard.
4. *Components of financial statements:* IAS 1 requires a complete set of financial statements to include
  - a. A statement of financial position (balance sheet).
  - b. A statement of comprehensive income (or a separate income statement and statement of comprehensive income).
  - c. A statement of changes in equity.
  - d. A statement of cash flows.
  - e. Accompanying notes, including a summary of significant accounting policies.
5. *Structure and content of financial statements:* IAS 1 also provides guidance with respect to the structure of each financial statement and prescribes items that must be presented (a) on the face of financial statements and (b) either on the face of financial statements or disclosed in the notes.

IAS 1 requires an entity to classify assets and liabilities as current and noncurrent unless presentation according to liquidity provides more reliable information. The income statement can be presented using either a *function of expenses* (cost of sales) format or a *nature of expenses* format. See Exhibit 11.9 for illustrations of the alternative formats for classifying expenses on the income statement. Note that the amount reported as *operating income (loss)*, and all line items below operating income (loss), are the same under both formats. Additional required disclosures must be made either on the face of the income statement or in the notes. For example, a company using the function of expenses format must disclose additional information on the nature of expenses, including depreciation and amortization expense and employee benefits expense. For both formats, the total amount distributed as dividends as well as dividends per share must be disclosed. In addition, IAS 33, “Earnings per Share,” requires basic and diluted earnings per share to be reported on the face of the income statement.

### LO 11-9

Determine the impact that specific differences between IFRS and U.S. GAAP have on financial statements, and prepare adjustments to convert IFRS balances to U.S. GAAP.

## Conversion of IFRS Financial Statements to U.S. GAAP

Several thousand U.S.-based companies have subsidiaries overseas that must be included in consolidated financial statements. Many of these foreign subsidiaries use IFRS in preparing their financial statements. For U.S. public companies, the IFRS financial statements of foreign subsidiaries must be converted to a U.S. GAAP basis before they can be consolidated. As a result, many U.S. accountants involved in the preparation of consolidated financial statements need to be “bilingual” in both U.S. GAAP and IFRS. Accountants and other finance professionals involved in cross-border merger and acquisition decisions also find it important to be able to convert IFRS balances to U.S. GAAP as part of the due diligence process. Using IFRS-based financial statement amounts as inputs into valuation models that have been developed for U.S. GAAP can result in suboptimal investment decisions.<sup>23</sup>

<sup>23</sup> For a discussion of this issue, see PricewaterhouseCoopers, The Importance of Being Financially Bilingual: How Financial Reporting Differences Can Affect Cross-Border Deal Value, May 2013, available online at <http://www.pwc.com/us/en/audit-assurance-services/accounting-advisory/publications/cross-border-transaction-financial-reporting-implications.html>.

**EXHIBIT 11.9**  
**Illustrative IFRS Income**  
**Statements**

<b>IFRS COMPANY</b>	
<b>Income Statement for the Year Ended</b>	
<b>December 31, Year 1 (in thousands of currency units)</b>	
<b><i>Nature of Expenses Format</i></b>	<b><i>Function of Expenses Format</i></b>
<b>Revenue</b>	<b>Revenue</b>
Other income	Cost of sales
Changes in inventories of finished goods and work in progress	<b>Gross profit</b>
Raw materials and consumables used	Other income
Employee benefits expense	Distribution costs
Depreciation and amortization expense	Administrative expenses
Other expenses	Other expenses
<b>Operating income (loss)</b>	<b>Operating income (loss)</b>
Finance costs	Finance costs
Equity method income (loss)	Equity method income (loss)
<b>Profit (or loss) before tax</b>	<b>Profit (or loss) before tax</b>
Income tax expense	Income tax expense
<b>Profit (loss) for the period</b>	<b>Profit (loss) for the period</b>
Attributable to:	Attributable to:
Parent company shareholders	Parent company shareholders
Noncontrolling interest	Noncontrolling interest

Source: *IAS 1*, "Presentation of Financial Statements," paras. 102, 103.

Unfortunately, converting IFRS-based amounts to U.S. GAAP is not as easy as, say, converting kilometers to miles. It is not possible to employ a simple decision rule such as "take IFRS net income and add 10 percent" to approximate U.S. GAAP net income. Converting financial statements from IFRS to U.S. GAAP requires not only an expertise in both sets of accounting standards, but also the analytical ability to determine how to get from point A (IFRS) to point B (U.S. GAAP). This section demonstrates the process for determining the adjustments needed to convert IFRS amounts to U.S. GAAP focusing on differences that exist between the two sets of standards with regard to the recognition and measurement of loss contingencies. The comprehensive illustration at the end of this chapter provides additional examples of this process.

***Illustrative Example—Loss Contingency (First Year)***

Amarcord Corporation (a U.S.-based company) owns 100 percent of Moravia SE, which is located in a foreign country that uses IFRS. At the beginning of 2017, Moravia had assets of 1,000,000, liabilities of 400,000, capital stock of 100,000, and retained earnings of 500,000. (All amounts in this illustrative example are in euros, Moravia's reporting currency.)

Early in 2017, Moravia acquired a piece of land in a neighboring country that was the site of a former manufacturing facility. In October 2017, Moravia was informed by the Ministry for Environment in the neighboring country that the land Moravia now owns is contaminated and that Moravia is legally obligated to remediate the environmental contamination. Moravia hired a team of environmental engineers to assess the extent of contamination and estimate the cost to remediate the situation. The engineers estimate that the cost could be as low as 50,000 and as high as 150,000, with all amounts in that range being equally likely. Moravia plans to appeal the Ministry for Environment's ruling and has engaged a law firm in the neighboring country to provide an opinion on the likelihood that Moravia will be successful in this matter. In late December 2017, the law firm provides its opinion that it is more likely than not (about 60 percent probable) that Moravia will lose the appeal and that the company will be required to clean up the environmental contamination.

***IFRS Treatment***

In preparing financial statements for the year ended December 31, 2017, Moravia's accountants applied relevant IFRS guidance to determine the appropriate financial reporting treatment for this environmental remediation loss contingency. In loss contingency situations, *IAS 37*, "Provisions, Contingent Liabilities and Contingent Assets," requires recognition of a

provision (liability) and a loss when it is *probable* that an outflow of resources will be required to settle the obligation. To implement this principle, *IAS 37*, para. 23 defines probable as “more likely than not,” which is interpreted as a probability of more than 50 percent. A loss and provision must be recognized at the best estimate of the expenditure that will be required to settle the obligation. *IAS 37*, para. 39 indicates: “Where there is a continuous range of possible outcomes, and each point in that range is as likely as any other, the mid-point of the range is used.” Applying this guidance, Moravia’s accountants recognized a provision and a loss on December 31, 2017, in the amount of 100,000, which is the midpoint in the 50,000 to 150,000 range of cost estimated by the environmental engineers. The journal entry was as follows:

Environmental Remediation Loss . . . . .	100,000	
Provision for Environmental Remediation (liability) . . . . .		100,000

The environmental remediation loss reduced Moravia’s 2017 pretax income, which resulted in a reduction in income tax expense of 25,000 (the corporate income tax rate in Moravia’s home country is 25 percent). Because the loss contingency was not deductible for tax purposes, a temporary tax difference exists and a deferred tax asset of 25,000 was recognized. The journal entry to reflect this was:

Deferred Tax Asset . . . . .	25,000	
Income Tax Expense . . . . .		25,000

For consolidation purposes, Moravia’s accountants have provided Amarcord, its parent company, with IFRS financial statements for the year ended December 31, 2017. Exhibit 11.10 presents the worksheet used by Amarcord’s accountants to convert Moravia’s IFRS financial statements to U.S. GAAP. The IFRS column in Exhibit 11.10 shows the balances provided by Moravia’s accountants. Amounts in parentheses have credit balances; amounts without parentheses have debit balances. The accounts affected by the above journal entries are highlighted in **bold**.

### ***U.S. GAAP Treatment***

FASB ASC 450, “Contingencies,” requires the accrual of a contingent loss when it is *probable* that an outflow of resources will occur (ASC450-20-25-2). However, probable is not specifically defined, and it is common for companies to use a threshold of 70 percent or more in determining whether a contingency should be recognized. Accordingly, Amarcord Corporation has adopted a corporate policy of recognizing loss contingencies when the probability of a negative outcome exceeds 70 percent. Consistent with this policy, Amarcord’s accountants have determined that Moravia’s environmental remediation contingency would not have been recognized in 2017 under U.S. GAAP.

### ***Conversion from IFRS to U.S. GAAP***

From a U.S. GAAP perspective, Moravia’s December 31, 2017, financial statements

- a. Overstate environmental remediation loss by 100,000,
- b. Overstate provision for environmental remediation by 100,000,
- c. Overstate deferred tax asset by 25,000, and
- d. Understate income tax expense by 25,000.

The net effect of (a) and (d) is that Net Income is understated by 75,000 (100,000 - 25,000), and therefore Retained Earnings at December 31, 2017, is understated by 75,000. The U.S. GAAP column in Exhibit 11.10 shows the balances that would be reported by Moravia under U.S. GAAP.

**EXHIBIT 11.10**  
**Moravia SE's IFRS to**  
**U.S. GAAP Conversion**  
**Worksheet for the Year**  
**Ending December 31, 2017**

<b>MORAVIA SE</b>				
<b>IFRS to U.S. GAAP Conversion Worksheet</b>				
<b>For the Year Ending December 31, 2017</b>				
(amounts in euros)		Conversion Entries		
Accounts	IFRS	Debit	Credit	U.S. GAAP
<b>Income Statement</b>				
Revenues	(3,000,000)			(3,000,000)
Expenses	2,000,000			2,000,000
<b>Environmental remediation loss</b>	<b>100,000</b>		(1) 100,000	<b>-0-</b>
Income before tax	(900,000)			(1,000,000)
<b>Income tax expense</b>	<b>225,000</b>	(2) 25,000		<b>250,000</b>
Net income	<u>(675,000)</u>			<u>(750,000)</u>
<b>Statement of Retained Earnings</b>				
Retained earnings, 1/1	(500,000)			(500,000)
Net income (from above)	<u>(675,000)</u>			<u>(750,000)</u>
Retained earnings, 12/31	<u>(1,175,000)</u>			<u>(1,250,000)</u>
<b>Balance Sheet</b>				
Assets	1,750,000			1,750,000
<b>Deferred tax asset</b>	<b>25,000</b>		(2) 25,000	<b>-0-</b>
Total assets	<u>1,775,000</u>			<u>1,750,000</u>
Liabilities	(400,000)			(400,000)
<b>Provision for environmental remediation</b>	<b>(100,000)</b>	(1) 100,000		<b>-0-</b>
Total liabilities	(500,000)			(400,000)
Capital stock	(100,000)			(100,000)
Retained earnings, 12/31 (from above)	<u>(1,175,000)</u>			<u>(1,250,000)</u>
Total liabilities and equity	<u>(1,775,000)</u>			<u>(1,750,000)</u>
		<u>125,000</u>	<u>125,000</u>	

To restate from IFRS to U.S. GAAP, Amarcord's accountants would simply reverse the loss contingency recognition entries made by Moravia's accountants as follows:

<b>Conversion Entry (1)</b>		
Provision for Environmental Remediation (liability) .....	100,000	
Environmental Remediation Loss .....		100,000
<b>Conversion Entry (2)</b> .....		
Income Tax Expense .....	25,000	
Deferred Tax Asset .....		25,000

Exhibit 11.10 shows that these conversion entries eliminate the loss on environmental Remediation from the Income Statement, and the Provision for Environmental Remediation and Deferred Tax Asset from the balance sheet. There is a net increase of 75,000 in 2017 Net Income and in the December 31, 2017, balance in Retained Earnings.

***Illustrative Example—Loss Contingency (Second Year)***

In January 2018, Moravia appealed the Department for Environment's ruling to the regional judicial body in the neighboring country. On March 15, 2018, the regional judicial body informed Moravia that its appeal had been denied and that the company must remediate the



environmental contamination by June 15, 2018. Moravia's environmental engineers conduct a more extensive study of the situation and now estimate that the cost of remediation will be somewhere between 90,000 and 190,000, with all amounts in that range being equally likely.

### ***IFRS Treatment***

In preparing the company's interim financial statements for the quarter ending March 31, 2018, Moravia's accountants applied relevant guidance in IFRS to determine the appropriate financial reporting treatment for its Provision for Environmental Remediation. *IAS 37*, para. 59 states: "Provisions shall be reviewed at the end of each reporting period and adjusted to reflect the current best estimate." Consistent with this guidance, Moravia's accountants increased the Provision for Environmental Remediation to 140,000, which is the new midpoint  $[(90,000 + 190,000) / 2]$  in the estimated range of cleanup cost. An additional Environmental Remediation Loss of 40,000 also was recognized. The journal entry to achieve this was:

Environmental Remediation Loss . . . . .	40,000	
Provision for Environmental Remediation . . . . .		40,000

The additional environmental remediation loss reduces first quarter 2018 pre-tax income by 40,000 and income tax expense by \$10,000  $[40,000 \times 25\% \text{ tax rate}]$ . Because the remediation loss is not tax deductible, a temporary tax difference arises and an additional deferred tax asset is recognized. The tax effect of the loss is reflected in the following entry:

Deferred Tax Asset . . . . .	10,000	
Income Tax Expense . . . . .		10,000

Moravia's accountants have provided Amarcord with IFRS financial statements for consolidation purposes for the quarter ending March 31, 2018. The IFRS column in Exhibit 11.11 shows these financial statements.

### ***U.S. GAAP Treatment***

At March 31, 2018, given the negative ruling by the regional judicial body, Amarcord's accountants now believe it is probable (more than 70 percent likely) that Moravia will incur costs to remediate the environmental damage and a loss contingency should be recognized. *FASB ASC 450-20-30-1* states: "If some amount within a range of loss appears at the time to be a better estimate than any other amount within the range, that amount shall be accrued. When no amount within the range is a better estimate than any other amount, however, the minimum amount in the range shall be accrued." Following this guidance, Amarcord's accountants determine that Moravia should report a loss and a liability in the amount of 90,000, which is the minimum amount in the range of the cleanup cost estimate. The loss would reduce income tax expense by 22,500  $(90,000 \times 25\%)$ , and a deferred tax asset of 22,500 must be recognized. The journal entries to recognize the loss contingency on March 31, 2018, under U.S. GAAP are as follows:

Environmental Remediation Loss . . . . .	90,000	
Environmental Remediation Liability . . . . .		90,000

Deferred Tax Asset . . . . .	22,500	
Income Tax Expense . . . . .		22,500

### ***Conversion from IFRS to U.S. GAAP***

From a U.S. GAAP perspective, Moravia's March 31, 2018, IFRS financial statements:

- a. Understate Environmental Remediation Loss by 50,000  $(90,000 - 40,000)$ ,
- b. Overstate Provision for Environmental Remediation by 50,000  $(90,000 - 140,000)$ ,

**EXHIBIT 11.11**  
**Moravia SE's IFRS to**  
**U.S. GAAP Conversion**  
**Worksheet for the Quarter**  
**Ending March 31, 2018**

<b>MORAVIA SE</b>				
<b>IFRS to U.S. GAAP Restatement Worksheet</b>				
<b>For the Quarter Ending March 31, 2018</b>				
(amounts in euros)		Restatement Entries		
Accounts	IFRS	Debit	Credit	U.S. GAAP
<b>Income Statement</b>				
Revenues	(1,000,000)			(1,000,000)
Expenses	600,000			600,000
<b>Environmental remediation loss</b>	<b>40,000</b>	(1) 50,000		<b>90,000</b>
Income before tax	(360,000)			(310,000)
<b>Income tax expense</b>	<b>90,000</b>		(1) 12,500	<b>77,500</b>
Net income	<u>(270,000)</u>			<u>(232,500)</u>
<b>Statement of Retained Earnings</b>				
Retained earnings, 1/1	(1,175,000)		(1) 75,000	(1,250,000)
Net income	<u>(270,000)</u>			<u>(232,500)</u>
Retained earnings, 12/31	<u>(1,445,000)</u>			<u>(1,482,500)</u>
<b>Balance Sheet</b>				
Assets	2,050,000			2,050,000
<b>Deferred tax asset</b>	<b>35,000</b>		(1) 12,500	<b>22,500</b>
Total assets	<u>2,085,000</u>			<u>2,072,500</u>
Liabilities	(400,000)			(400,000)
<b>Provision for environmental remediation</b>	<b>(140,000)</b>	(1) 50,000		<b>(90,000)</b>
Total liabilities	(540,000)			(490,000)
Capital stock	(100,000)			(100,000)
Retained earnings, 12/31	<u>(1,445,000)</u>			<u>(1,482,500)</u>
Total liabilities and equity	<u>(2,085,000)</u>			<u>(2,072,500)</u>
		<u>100,000</u>	<u>100,000</u>	

- c. Overstate Deferred Tax Asset by 12,500 (22,500 - 35,000),
- d. Overstate Income Tax Expense by 12,500, and
- e. Understate the January 1, 2018, balance in Retained Earnings by 75,000.

The net effect of (a) and (d) above is that Net Income in the first quarter 2018 is overstated by 37,500. The balance in Retained Earnings at March 31, 2018, is understated by 37,500.

To convert from IFRS to U.S. GAAP, Amarcord's accountants made the following entry in the March 31, 2018, conversion worksheet (see Exhibit 11.11):

<b>Conversion Entry (1)</b>	
Environmental Remediation Loss.....	50,000
Provision for Environmental Remediation.....	50,000
Retained Earnings, 1/1/18 .....	75,000
Deferred Tax Asset .....	12,500
Income Tax Expense .....	12,500

The U.S. GAAP column in Exhibit 11.11 shows that this entry results in the correct amounts being reported in Moravia's first quarter 2018 financial statements in accordance with U.S. GAAP. Environmental Remediation Loss and Provision for Environmental Remediation are reported at 90,000. Deferred Tax Asset is reported at 22,500, and net income is 37,500 smaller than under IFRS.

## Obstacles to Worldwide Comparability of Financial Statements

Comparability of financial statements across countries is one of the goals of a common set of global accounting standards. IFRS is the dominant set of accounting standards used in the world. Does that mean that the goal of comparability across companies using IFRS has been achieved? The use of a common set of accounting standards is a necessary but perhaps not a sufficient condition for ensuring worldwide comparability. Several obstacles stand in the way of a common set of standards being interpreted and applied in a consistent manner across all countries.<sup>24</sup>

### Translation of IFRS into Other Languages

IFRS are written in English and therefore must be translated into other languages for use by non-English-speaking accountants. The IASB created an official translation process in 1997, and by 2016, IFRS had been translated into more than 40 other languages. Most translations are into European languages because of the European Union's required usage of IFRS. However, IFRS also have been translated into Chinese, Japanese, and Arabic, among other languages. Despite the care the IASB took in the translation process, several research studies suggest that certain English-language expressions used in IFRS are difficult to translate without some distortion of meaning. In one study, Canadian researchers examined English-speaking and French-speaking students' interpretations of probability expressions such as *probable*, *not likely*, and *reasonable assurance* used to establish recognition and disclosure thresholds in IASs.<sup>25</sup> English-speaking students' interpretations of these expressions differed significantly from the interpretations made by French-speaking students of the French-language translation. In another study, German accountants fluent in English assigned values to both the English original and the German translation of probability expressions used in IFRS.<sup>26</sup> For several expressions, the original and translation were interpreted differently, suggesting that the German translation distorted the original meaning.

The SEC implicitly acknowledged the potential problem in translating IFRS to other languages in its rule eliminating the U.S. GAAP reconciliation requirement for foreign registrants. That rule applies only to those foreign companies that prepare financial statements in accordance with the *English language version* of IFRS.

### The Impact of Culture on Financial Reporting

Even if translating IFRS into languages other than English was not difficult, differences in national culture values could lead to differences in the interpretation and application of IFRS. In 1988, Gray proposed a model that hypothesizes a relationship between cultural values, accounting values, and the financial reporting rules developed in a country.<sup>27</sup> More recently, Gray's model was extended to hypothesize that accounting values affect not only a country's accounting rules but also the manner in which those rules are applied.<sup>28</sup> This hypothesis has important implications for a world in which countries with different national cultures use the same accounting standards. It implies that for accounting issues in which accountants must use their judgment in applying an accounting principle, culturally based biases could cause accountants in one country to apply the standard differently from accountants in another country.

<sup>24</sup> The following discussion is based on George T. Tsakumis, David R. Campbell Sr., and Timothy S. Douppnik, "IFRS: Beyond the Standards," *Journal of Accountancy*, February 2009, pp. 34–39.

<sup>25</sup> Ronald A. Davidson and Heidi Hadlich Chrisman, "Interlinguistic Comparison of International Accounting Standards: The Case of Uncertainty Expressions," *The International Journal of Accounting* 28 (1993), pp. 1–16.

<sup>26</sup> Timothy S. Douppnik and Martin Richter, "Interpretation of Uncertainty Expressions: A Cross-National Study," *Accounting, Organizations and Society* 28 (2003), pp. 15–35.

<sup>27</sup> Sidney J. Gray, "Towards a Theory of Cultural Influence on the Development of Accounting Systems Internationally," *Abacus*, March 1988, pp. 1–15.

<sup>28</sup> Douppnik and Tsakumis, "A Critical Review of Tests of Gray's Theory."

Several research studies support this hypothesis.<sup>29</sup> For example, one study found that, given the same set of facts, accountants in France and Germany estimated higher amounts of warranty expense than did accountants in the United Kingdom.<sup>30</sup> This result was consistent with differences in the level of the accounting value of conservatism across these countries resulting from differences in their cultural values.

Auditors, both internal and external, who are auditing financial statements prepared in different countries under IFRS should be aware of the inherent biases that national culture might introduce into application of the standards. Financial statement users need to be aware that the use of a common set of accounting standards (that is, IFRS) might not necessarily result in complete financial statement comparability across countries. However, a greater degree of comparability exists than if each country were to continue to use a different set of standards.

## Summary

1. Historically, considerable diversity existed with respect to financial reporting across countries. Differences include the format and presentation of financial statements, the measurement and recognition rules followed in preparing financial statements, disclosures provided in the notes to financial statements, and even the terminology used to describe items reported on financial statements.
2. Accounting systems differ across countries partially because of differences in environmental factors such as the type of legal system followed in the country, the importance of equity as a source of financing, and the extent to which accounting statements serve as the basis for taxation.
3. The worldwide diversity in accounting practices causes problems that can be quite serious for some parties. Parent companies with foreign subsidiaries must convert from foreign GAAP to parent company GAAP to prepare worldwide consolidated financial statements. To gain access to a foreign capital market, companies often find it necessary to prepare information based on foreign GAAP. Accounting diversity makes it difficult for potential investors to compare financial statements between companies from different countries in making international investment decisions.
4. The International Accounting Standards Committee (IASC) was formed in 1973 to develop international accounting standards (IASs) universally acceptable in all countries. The so-called IOSCO agreement significantly enhanced the IASC's legitimacy as the international accounting standard setter.
5. In 2001, the International Accounting Standards Board (IASB) replaced the IASC and adopted the IASs developed by its predecessor. The IASB creates its own international financial reporting standards (IFRSs). Together, IASs, IFRSs, and Interpretations make up IASB GAAP and are referred to collectively as IFRS.
6. The IASB does not have the ability to require the use of its standards. However, more than 100 countries either require or allow publicly traded domestic companies to use IFRS. Since 2005, all publicly traded companies in the European Union have been required to use IFRS in preparing their consolidated financial statements.
7. The IASB created a simplified version of full IFRS in 2009 for use by small and medium-sized entities called *IFRS for SMEs*.
8. *IFRS 1* establishes procedures to be followed in the first-time adoption of IFRS. *IFRS 1* requires the preparation of an opening IFRS balance sheet two years prior to when a company publishes its first set of IFRS financial statements. In preparing the opening IFRS balance sheet, a company would need to (a) recognize assets and liabilities required by IFRS but not by previous GAAP and derecognize items previously recognized that are not allowed under IFRS, (b) measure assets and liabilities in accordance with IFRS, (c) reclassify items previously classified in a different manner from what it required by IFRS, and (d) comply with all presentation and disclosure requirements.
9. In 2002, the FASB and the IASB announced the Norwalk Agreement to converge their financial reporting standards as soon as is practicable. Convergence involves the IASB adopting an FASB standard, the FASB adopting an IASB standard, or the two boards jointly developing a new standard. Several joint projects have resulted in new standards being issued simultaneously by the IASB and FASB. Formal FASB–IASB convergence concluded in 2016.

<sup>29</sup> See Joseph J. Schultz and Thomas J. Lopez, "The Impact of National Influence on Accounting Estimates: Implications for International Accounting Standard-Setters," *The International Journal of Accounting* 36 (2001), pp. 271–90; Timothy S. Douplik and Martin Richter, "The Impact of Culture on the Interpretation of 'In Context' Verbal Probability Expressions," *Journal of International Accounting Research* 3, no. 1 (2004), pp. 1–20; and George T. Tsakumis, "The Influence of Culture on Accountants' Application of Financial Reporting Rules," *Abacus*, March 2007, pp. 27–48.

<sup>30</sup> Schultz and Lopez, "The Impact of National Influence on Accounting Estimates."

10. In 2007, the U.S. SEC eliminated the U.S. GAAP reconciliation requirement for foreign companies that use IFRS, and in 2008 it issued an IFRS Roadmap that proposed the use of IFRS by U.S. companies. In 2011, the SEC staff suggested a “condorsement” approach to incorporating IFRS into U.S. financial reporting. More recently, however, the SEC’s chief accountant has indicated that the SEC is not likely to require or allow the use of IFRS by U.S. publicly traded companies.
11. Although IFRS and U.S. GAAP are similar in many ways, numerous differences continue to exist between the two sets of standards. These differences can be categorized as relating to (a) recognition, (b) measurement, and (c) classification, presentation, or disclosure. Recognizing development costs as an asset when certain criteria are met under IFRS while requiring they be expensed under U.S. GAAP is an example of a recognition difference. Carrying property, plant, and equipment on the balance sheet at revalued amounts under IFRS versus depreciated historical cost under U.S. GAAP is a measurement difference. Classifying convertible bonds as both debt and equity under IFRS but only as equity under U.S. GAAP is a classification difference.
12. Many foreign subsidiaries of U.S. parent companies use IFRS. To prepare consolidated financial statements, a foreign subsidiary’s IFRS financial statements must be restated to U.S. GAAP. As a result, many U.S. accountants involved in the preparation of consolidated financial statements must have an expertise in both U.S. GAAP and IFRS.
13. The use of the same set of accounting standards by all companies is a necessary but possibly insufficient condition for achieving the goal of worldwide comparability of financial statements. Translation and culture are two obstacles in achieving this goal. It might not be possible to translate IFRS into non-English languages without some distortion of meaning. Differences in societal values across countries might lead to culturally determined biases in interpreting and applying a common set of standards. However, although these obstacles exist, worldwide adoption of a single set of standards results in a greater degree of comparability than existed when a different set of standards was used by each country.

## Comprehensive Illustration

### Problem

(Estimated Time: 120 to 180 minutes) Jameson Company is a U.S.-based company that prepares consolidated financial statements in accordance with U.S. GAAP. At the beginning of 2017, Jameson paid cash for all of the outstanding common stock of Ammer Limited. In accordance with the financial reporting requirements of its home country, Ammer uses IFRS to prepare its financial statements. Jameson’s CFO has given you the task of converting Ammer’s financial statements from IFRS to U.S. GAAP to be able to consolidate the two companies. Based on information provided by Ammer’s accountants, you have identified the following areas in which Ammer’s accounting principles based on IFRS differ from U.S. GAAP.

- **Cash and cash equivalents**— classification of bank overdraft
- **Property, plant, and equipment** – component depreciation, revaluation
- **Intangible assets** – impairment, research and development expenditures
- **Compound financial instruments** – convertible bonds
- **Defined benefit pension plan** – past service cost
- **Leases** – gain on sale and leaseback
- **Business combination** – noncontrolling interest and goodwill

### Required

Based upon information provided, use your knowledge of IFRS and U.S. GAAP to determine the adjustments needed to convert Ammer’s financial statements to a U.S. GAAP basis on December 31, 2017, and December 31, 2018. For each item, determine (a) the appropriate accounting treatment under IFRS, (b) the appropriate accounting treatment under U.S. GAAP, (c) the debit/credit entry needed to convert Ammer’s financial statement balances from IFRS to U.S. GAAP, and (d) summarize the impact each adjustment has on Ammer’s financial statements.

Additional information:

- Because there is no corporate income tax in Ammer’s home country, there are no tax implications associated with the adjustments made to convert the financial statements from IFRS to U.S. GAAP.
- Ammer’s financial statement balances are reported in dollars (\$).

## Solution

**Cash and Cash Equivalents - Bank Overdraft**

On December 31, 2017, Ammer had an overdraft of \$8,000 on one of its bank accounts. Bank overdrafts are an integral part of the company's cash management, with the bank account fluctuating from having a positive balance to being overdrawn over time. On December 31, 2018, the company had a positive balance in its bank account.

**IFRS Treatment**

IAS 7, "Statement of Cash Flows," states that bank overdrafts that are an integral part of an entity's cash management should be included as a component of cash and cash equivalents, rather than being treated as a borrowing. Therefore, Ammer has deducted the \$8,000 bank overdraft from the balance in Cash and Cash Equivalents on its December 31, 2017, balance sheet.

**U.S. GAAP Treatment**

Under U.S. GAAP, bank overdrafts are treated as a short-term borrowing (current liability).

**Conversion from IFRS to U.S. GAAP—2017**

To reclassify the bank overdraft as a short-term borrowing, the following entry must be made in an IFRS-to-U.S. GAAP conversion worksheet on December 31, 2017:

Cash and Cash Equivalents.....	8,000
Short-term Borrowings.....	8,000

This adjustment has no impact on net income or retained earnings. Total assets and total liabilities both increase by \$8,000.

**Conversion from IFRS to U.S. GAAP—2018**

Because Ammer's bank account has a positive balance on December 31, 2018, no overdraft exists and there is no classification difference between IFRS and U.S. GAAP on that date. Therefore, no adjustment is needed to convert from IFRS to U.S. GAAP on December 31, 2018.

**Property, Plant, and Equipment—Component Depreciation**

Ammer acquired a major piece of manufacturing machinery on January 1, 2017, at an original cost of \$1,000,000. The machinery has an overall estimated useful life of 20 years and no salvage value. However, individual components in the machinery will need to be replaced periodically for the machinery to achieve its estimated useful life. The company has determined that the machinery comprises three significant components with the following original costs and estimated useful lives (each component has zero salvage value):

Component	Cost	Useful Life
Housing	\$ 200,000	20 years
Control unit	300,000	5 years
Motor	500,000	10 years
Total	<u>\$1,000,000</u>	

**IFRS Treatment**

IAS 16, "Property, Plant and Equipment," indicates that when an item of property, plant, and equipment is made up of individual components for which different depreciation methods or useful lives are appropriate, each component must be depreciated separately. This is commonly referred to as *component depreciation*. Because the machinery acquired on January 1, 2017, comprises three separate components

with significantly different useful lives, Ammer appropriately calculates depreciation expense for 2017 as \$120,000, as shown below:

Component	Cost	Useful Life	Depreciation
Housing	\$ 200,000	20 years	\$ 10,000
Control unit	300,000	5 years	60,000
Motor	500,000	10 years	50,000
Total	<u>\$1,000,000</u>		<u>\$120,000</u>

The journal entries Ammer prepared in 2017 related to the machinery are:

**January 1, 2017**

Machinery .....	1,000,000	
Cash .....		1,000,000
To recognize the cash purchase of machinery.		

**December 31, 2017**

Depreciation Expense .....	120,000	
Accumulated Depreciation—Machinery .....		120,000
To recognize depreciation expense on machinery using the component method.		

These entries result in a decrease in net income and retained earnings of \$120,000, as well as a decrease in total assets of the same amount (+\$1,000,000 – \$1,000,000 – \$120,000).

**U.S. GAAP Treatment**

U.S. GAAP allows but does not require component depreciation. Jameson has a corporate policy of using straight-line depreciation for machinery and equipment and plans to extend this policy to Ammer Limited. On a straight-line basis, the depreciation recognized in 2017 related to the manufacturing machinery would be \$50,000 (\$1,000,000 original cost / 20-year estimated useful life). The appropriate journal entries under U.S. GAAP would be:

**January 1, 2017**

Machinery .....	1,000,000	
Cash .....		1,000,000

**December 31, 2017**

Depreciation Expense .....	50,000	
Accumulated Depreciation—Machinery .....		50,000

These entries result in a decrease in net income and retained earnings of \$50,000, as well as a \$50,000 decrease in total assets.

**Conversion from IFRS to U.S. GAAP—2017**

Depreciation expense and accumulated depreciation must be reduced by \$70,000 to convert Ammer's financial statements from IFRS to U.S. GAAP. The conversion entry is:

Accumulated Depreciation—Machinery .....	70,000	
Depreciation Expense .....		70,000

The December 31, 2017, partial conversion worksheet (focusing on component depreciation) shown below isolates the effect machinery depreciation has on Ammer's financial statements. (Note that worksheet amounts in parentheses indicate credit balances; amounts without parentheses are debits. Accounts affected by the conversion entry are highlighted in **bold**.)

Account	IFRS	Conversion Entry		U.S. GAAP
		Debit	Credit	
<b>Depreciation expense</b>	<b>120,000</b>		70,000	<b>50,000</b>
Net income (negative)	120,000			50,000
Retained earnings, 1/1	-0-			-0-
Retained earnings, 12/31 (negative)	120,000			50,000
Cash	(1,000,000)			(1,000,000)
Machinery	1,000,000			1,000,000
<b>Accumulated Depreciation—Machinery</b>	<b>(120,000)</b>	70,000		<b>(50,000)</b>
Total assets	(120,000)			(50,000)
Total liabilities	-0-			-0-
Retained earnings, 12/31 (above)	120,000			50,000
Total liabilities and equity	120,000			50,000
		<u>70,000</u>	<u>70,000</u>	

The IFRS column in the December 31, 2017, partial conversion worksheet (component depreciation) shows that component depreciation expense of \$120,000 has a negative effect on net income (debit balance), which in turn has a negative impact on ending retained earnings (debit balance). The payment of \$1,000,000 cash for machinery has a zero net effect on total assets. However, accumulated depreciation on the machinery results in a negative impact (credit) on total assets of \$120,000.

The U.S. GAAP column in the above worksheet shows that straight-line depreciation has a negative impact on net income of \$50,000. Ending retained earnings and total assets also are negatively affected by \$50,000. The worksheet clearly demonstrates that adjusting the balances in the IFRS column by the debit/credit conversion entry results in the appropriate amounts being reported in the U.S. GAAP column.

### Conversion from IFRS to U.S. GAAP—2018

In 2018, depreciation expense of \$120,000 is recognized under IFRS but only \$50,000 of depreciation would be recognized under U.S. GAAP. Therefore, the IFRS-to-U.S. GAAP conversion entry at December 31, 2018, should once again credit depreciation expense by \$70,000. Accumulated depreciation at December 31, 2018, is now \$140,000 ( $\$70,000 \times 2$  years) higher under IFRS than it would be under U.S. GAAP. A debit of \$140,000 to accumulated depreciation is required to convert to U.S. GAAP. Because IFRS net income in 2017 was understated from a U.S. GAAP perspective by \$70,000, the January 1, 2018, IFRS balance in retained earnings also is understated by the same amount. A credit of \$70,000 to January 1 retained earnings is needed to increase the balance in this account from negative \$120,000 to negative \$70,000 on that date. The conversion entry at December 31, 2018 is:

Accumulated Depreciation—Machinery	140,000	
Depreciation Expense		70,000
Retained Earnings, 1/1/18		70,000

The December 31, 2018, partial conversion worksheet (component depreciation) below shows that this entry results in the correct amounts being reported under U.S. GAAP.



<b>Partial Conversion Worksheet, 12/31/18 (Component Depreciation)</b>				
<b>Account</b>	<b>IFRS</b>	<b>Conversion Entry</b>		<b>U.S. GAAP</b>
		<b>Debit</b>	<b>Credit</b>	
<b>Depreciation expense</b>	<b>120,000</b>		70,000	<b>50,000</b>
Net income (negative)	120,000			50,000
<b>Retained earnings, 1/1</b> (negative)	<b>120,000</b>		70,000	<b>50,000</b>
Retained earnings, 12/31 (negative)	240,000			100,000
Cash	(1,000,000)			(1,000,000)
Machinery	1,000,000			1,000,000
<b>Accumulated Depreciation—Machinery</b>	<b>(240,000)</b>	140,000		<b>(100,000)</b>
Total assets	(240,000)			(100,000)
Total liabilities	–0–			–0–
Retained earnings, 12/31 (above)	240,000			100,000
Total liabilities and equity	240,000			100,000
		140,000	140,000	

### Property, Plant, and Equipment—Revaluation

Ammer acquired a building at the beginning of 2016 at a cost of \$500,000. The building has an estimated useful life of 25 years and an estimated residual value of \$100,000 and is depreciated on a straight-line basis. The company recorded \$16,000  $[(\$500,000 - \$100,000) / 25 \text{ years}]$  of depreciation on the building in 2016, and the building had a carrying amount of \$484,000 (\$500,000 cost less \$16,000 of accumulated depreciation) on December 31, 2016. At the beginning of 2017, the building was appraised and determined to have a fair value of \$700,000, an estimated residual value of \$100,000, and a remaining useful life of 24 years.

#### IFRS Treatment

*IAS 16*, “Property, Plant and Equipment,” requires entities to choose between (a) the *cost model* or (b) the *revaluation model* to determine the carrying amount of property, plant, and equipment (PPE) subsequent to acquisition. The cost model carries an item of PPE at its cost less accumulated depreciation and any accumulated impairment losses. The revaluation model carries an item of PPE at a revalued amount, which is its fair value at the date of the revaluation, less any subsequent accumulated depreciation and subsequent accumulated impairment losses. Revaluations must be made with sufficient regularity to ensure that the *carrying amount* is not materially different from *fair value*. If an item of PPE is revalued, the entire class of assets to which that asset belongs must be revalued. The amount by which assets are revalued is recorded as a *revaluation surplus*, which is a component of accumulated other comprehensive income (AOCI).

Ammer has elected to use the revaluation model in measuring the carrying amount of its building, but uses the cost model for machinery and equipment. Therefore, Ammer revalued the building at the beginning of 2017. The company made the following journal entries related to revaluation of buildings in 2017:

#### January 1, 2017

Accumulated Depreciation—Buildings . . . . .	16,000	
Buildings . . . . .		16,000
To eliminate accumulated depreciation on the building to be revalued, reducing the balance in Buildings to \$484,000 (\$500,000 – \$16,000).		
Buildings	216,000	
Revaluation Surplus (AOCI)		216,000
To revalue buildings to fair value on the revaluation date (\$700,000 – \$484,000 = \$216,000) and recognize an increase in AOCI.		

**December 31, 2017**

Depreciation Expense .....	25,000	
Accumulated Depreciation—Buildings .....		25,000
To recognize annual depreciation based on the revalued amount of buildings [(\$700,000 – \$100,000 salvage value) / 24-year remaining life].		

As a result of applying the revaluation model, Ammer includes depreciation expense of \$25,000 in 2017 net income, a revaluation surplus of \$216,000 in AOCI, and carries the building on its December 31, 2017, balance sheet at \$675,000 (\$700,000 – \$25,000).

**U.S. GAAP Treatment**

The revaluation of property, plant, and equipment is not allowed under U.S. GAAP. In 2017, the original cost of the building would continue to be depreciated at the rate of \$16,000 per year, and the carrying amount of the building at December 31, 2017, would be \$468,000 (\$500,000 cost – \$32,000 accumulated depreciation).

**Conversion from IFRS to U.S. GAAP—2017**

From a U.S. GAAP perspective, the revaluation model overstates 2017 depreciation expense by \$9,000 (\$25,000 – \$16,000), overstates AOCI by \$216,000, and overstates the carrying amount of buildings by \$207,000 (\$675,000 – \$468,000). The following adjustment is needed to convert from IFRS to U.S. GAAP:

Revaluation Surplus (AOCI) .....	216,000	
Buildings .....		200,000
Accumulated Depreciation—Buildings .....		7,000
Depreciation Expense .....		9,000

As shown in the December 31, 2017, partial conversion worksheet (revaluation of buildings) below, this conversion entry increases net income and retained earnings by \$9,000 (from negative \$25,000 to negative \$16,000) and decreases AOCI by \$216,000. This results in a net decrease in equity of \$207,000 (from positive \$175,000 to negative \$32,000). The net decrease in equity is offset on the other side of the balance sheet by an equal decrease in total assets of \$207,000.

**Partial Conversion Worksheet, 12/31/17 (Revaluation of Buildings)**

Account	IFRS	Conversion Entry		U.S. GAAP
		Debit	Credit	
<b>Depreciation expense</b>	<b>25,000</b>		9,000	<b>16,000</b>
Net income, 2017 (negative)	25,000			16,000
Retained earnings, 1/1/17* (negative)	16,000			16,000
Retained earnings, 12/31/17 (negative)	41,000			32,000
<b>Revaluation surplus</b>	<b>(216,000)</b>	216,000		<b>–0–</b>
AOCI, 1/1/17	–0–			–0–
AOCI, 12/31/17	(216,000)			–0–
Cash	(500,000)			(500,000)
<b>Buildings</b>	<b>700,000</b>		200,000	<b>500,000</b>
<b>Accumulated depreciation-buildings</b>	<b>(25,000)</b>		7,000	<b>(32,000)</b>
Total assets	175,000			(32,000)
Total liabilities	–0–			–0–
Retained earnings, 12/31/17 (above)	41,000			–0–
AOCI, 12/31/17 (above)	(216,000)			–0–
Total liabilities and equity	(175,000)			32,000
		216,000	216,000	

\*This reflects depreciation expense of \$16,000 recognized in 2016.

### Conversion from IFRS to U.S. GAAP—2018

In 2018, Ammer recognizes an additional \$25,000 in depreciation expense on the revalued building. As a result, the building's carrying amount under IFRS on December 31, 2018, is \$650,000 [\$700,000 – \$50,000 (= \$25,000 × 2 years)]. Under U.S. GAAP, depreciation expense on the building would be \$16,000, resulting in a carrying amount for the building on December 31, 2018, of \$452,000 [(\$500,000 – \$48,000 (= \$16,000 × 3 years))]. The difference in carrying amount for the building is \$198,000, composed of a \$200,000 difference between cost and the revaluation amount, and a \$2,000 difference in accumulated depreciation.

From a U.S. GAAP perspective, Ammer's beginning retained earnings in 2018 under IFRS is understated by \$9,000, which is the difference in net income reported under the two sets of standards in 2017. In addition, the beginning balance in AOCI is overstated by \$216,000 from a U.S. GAAP perspective. To convert from IFRS to U.S. GAAP, the worksheet entry at December 31, 2018 is:

AOCI, 1/1/18 .....	216,000	
Accumulated Depreciation .....	2,000	
Equipment .....		200,000
Depreciation Expense .....		9,000
Retained Earnings, 1/1/18 .....		9,000

The following December 31, 2018, partial conversion worksheet (revaluation of buildings) shows the amounts reported by Ammer under IFRS and the amounts that would be reported under U.S. GAAP. Posting the conversion entry above to this worksheet results in the correct U.S. GAAP balances being reported.

Partial Conversion Worksheet, 12/31/18 (Revaluation of Buildings)				
Account	IFRS	Conversion Entry		U.S. GAAP
		Debit	Credit	
<b>Depreciation expense</b>	<b>25,000</b>		9,000	<b>16,000</b>
Net income, 2018 (negative)	25,000			16,000
<b>Retained earnings, 1/1/18 (negative)</b>	<b>41,000</b>		9,000	<b>32,000</b>
Retained earnings, 12/31/18 (negative)	66,000			48,000
<b>AOCI, 1/1/18</b>	<b>(216,000)</b>	216,000		<b>–0–</b>
AOCI, 12/31/18	(216,000)			–0–
Cash	(500,000)			(500,000)
<b>Buildings</b>	<b>700,000</b>		200,000	<b>500,000</b>
<b>Accumulated depreciation-equipment</b>	<b>(50,000)</b>	2,000		<b>(48,000)</b>
Total assets	150,000			(48,000)
Total liabilities	–0–			–0–
AOCI, 12/31/18 (above)	(216,000)			–0–
Retained earnings, 12/31/18 (above)	66,000			48,000
Total liabilities and equity	(150,000)			48,000
		<u>218,000</u>	<u>218,000</u>	

### Intangible Assets—Impairment

Ammer owns a brand (an indefinite-lived intangible asset) that it acquired for \$440,000. On December 31, 2017, the brand is expected to generate future cash flows of \$450,000 and it is estimated to have a fair value, after deducting costs to sell, of \$360,000. The present value of expected future cash flows is \$375,000.

### IFRS Treatment

Under IAS 36, "Impairment of Assets," an asset is impaired when its carrying amount exceeds its recoverable amount. The *recoverable amount* of an asset is the *higher* of (a) its fair value less costs of disposal

and (b) its value in use. *Value in use* is defined as the present value of the future cash flows expected to be derived from an asset.

The brand has a value in use of \$375,000 and its fair value less costs of disposal is \$360,000, so the recoverable amount is \$375,000. Ammer recognized an impairment loss of \$65,000 (\$440,000 – \$375,000) in determining 2017 net income, with a corresponding reduction in the carrying amount for the brand. The journal entry to record this is:

Impairment Loss .....	65,000
Brand. ....	65,000
To recognize the impairment of a brand.....	

### U.S. GAAP Treatment

An asset is impaired under U.S. GAAP when its carrying amount exceeds its expected future cash flows, undiscounted to present value. Because the future cash flows expected to be generated by the brand of \$450,000 exceeds the carrying amount of \$440,000, the brand is not impaired under U.S. GAAP, and no journal entry would be recorded.

### Conversion from IFRS to U.S. GAAP—2017

To convert from IFRS to U.S. GAAP, the impairment loss recognized by Ammer must be reversed, and the carrying amount of the brand increased by \$65,000. The conversion entry at December 31, 2017, is as follows:

Brand. ....	65,000
Impairment Loss .....	65,000

This entry increases assets, net income, and retained earnings by \$65,000.

### Conversion from IFRS to U.S. GAAP—2018

The impairment loss recognized by Ammer in 2017 was closed to retained earnings. From a U.S. GAAP perspective, Ammer's January 1, 2018, balance in retained earnings is understated, as is the carrying amount for the brand. The conversion entry needed at December 31, 2018, to convert from IFRS to U.S. GAAP is:

Brand. ....	65,000
Retained Earnings, 1/1/18 .....	65,000

## Intangible Assets—Research and Development Expenditures

Ammer incurred the following costs in 2017 related to the research and development of a new product.

• Research expenditures, January–April .....	\$8,000
• Development expenditures, May–June .....	8,000
• Development expenditures, July .....	4,000
• Development expenditures, August–October.....	5,000
• Construction of prototype, November.....	3,000
• Testing of prototype, December .....	2,000

The technical feasibility of the product was demonstrated on July 1, and a business plan detailing the feasibility of producing, financing, and selling the new product was written by August 1. The new product was brought to market at the beginning of 2018 and is expected to generate sales for five years.

### IFRS Treatment

*IAS 38*, “Intangible Assets,” requires *research expenditures* to be expensed as incurred. *Development expenditures*, on the other hand, are recognized as an intangible asset when an entity can demonstrate all of the following:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale.
- Its intention to complete the intangible asset and use or sell it.

- c. Its ability to use or sell the intangible asset.
- d. How the intangible asset will generate probable future economic benefits. Among other things, the enterprise should demonstrate the existence of a market for the output of the intangible asset or the existence of the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset.
- e. The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset.
- f. Its ability to measure the expenditure attributable to the intangible asset during its development reliably.

Ammer determined that all of the criteria for recognition of development expenditures as an intangible asset were met once the company finished its business plan related to the new product. Therefore, the company expensed the research and development costs incurred January–July (\$20,000), and recognized an intangible asset for the development expenditures and prototype construction and testing costs incurred August–December (\$10,000). Because Ammer had not yet begun sale of the new product, no amortization of the intangible asset was necessary in 2017. The company prepared the following journal entry in 2017:

Research and Development Expense . . . . .	20,000	
Deferred Development Costs (intangible assets) . . . . .	10,000	
Cash . . . . .		30,000
To recognize a portion of research and development expenditures as expense and capitalize a portion as an intangible asset.		

### U.S. GAAP Treatment

Other than computer software development costs, all research and development costs must be expensed immediately under U.S. GAAP. Thus, the entire \$30,000 of research and development costs would be recognized as expense in 2017.

### Conversion from IFRS to U.S. GAAP—2017

The following conversion worksheet entry is needed to derecognize the development costs deferred as an intangible asset under IFRS and recognize additional research and development expense under U.S. GAAP:

Research and Development Expense . . . . .	10,000	
Deferred Development Costs (intangible assets) . . . . .		10,000

This adjustment results in a decrease in net income and retained earnings of \$10,000, offset by an equal decrease in assets.

### Conversion from IFRS to U.S. GAAP—2018

Under IFRS, the deferred development cost intangible asset must be amortized over its useful life of five years (the number of years it is expected to generate sales). In 2018, Ammer recognizes amortization expense of \$2,000, and the intangible asset has a carrying amount of \$8,000 on December 31, 2018. From a U.S. GAAP perspective, neither the intangible asset nor its amortization should be recognized. In addition, Ammer's January 1, 2018, retained earnings balance is overstated by \$10,000, the difference in 2017 net income under IFRS and U.S. GAAP. The December 31, 2018, entry necessary to convert IFRS balances to U.S. GAAP is:

Retained earnings, 1/1/18 . . . . .	10,000	
Intangible Assets (deferred development costs) . . . . .		8,000
Amortization Expense . . . . .		2,000

### Compound Financial Instruments—Convertible Bonds

Ammer issued \$200,000 of convertible bonds at face value at the end of 2017. The bonds have a 10-year life with interest payable annually at an interest rate of 5 percent. Each bond has a face value of \$1,000 and can be converted into 200 shares of common stock at any time up to maturity. At the date of issue, the prevailing rate for similar debt without a conversion feature is 6 percent and the fair value of Ammer's common stock is \$20 per share.

**IFRS Treatment**

Convertible bonds are a compound financial instrument, which IAS 32, “Financial Instruments: Presentation,” requires to be split into a liability component and an equity component. The liability component is measured as the fair value of similar bonds that do not have an equity component. The equity component is the residual amount after subtracting the liability component from the fair value of the compound financial instrument as a whole. Applying this methodology, Ammer splits the \$200,000 fair value of the convertible bonds into liability and equity components as follows:

Fair value of convertible bonds (original selling price) . . . . .	\$ 200,000
Liability component* . . . . .	(185,280)
Equity component . . . . .	<u>\$ 14,720</u>

\* Present value of \$200,000 face value bonds with 10-year life paying 5% annual interest (\$10,000), discounted at 6%:  $[\$200,000 \times (1/1.06)^{10}] + \{[\$10,000 \times (1 - (1/1.06)^{10}) / .06]\}$

Ammer prepared the following journal entry to record the issuance of convertible bonds:

Cash . . . . .	200,000	
Bonds Payable . . . . .		185,280
Additional Paid-in Capital—Convertible Bonds . . . . .		14,720
To recognize the issuance of convertible bonds as separate liability and equity components.		

**U.S. GAAP Treatment**

Split accounting for convertible debt is not allowed under U.S. GAAP. The entire face value of the bonds (\$200,000) must be recognized as a noncurrent liability, as follows:

Cash . . . . .	200,000	
Bonds Payable . . . . .		200,000

**Conversion from IFRS to U.S. GAAP—2017 and 2018**

The following conversion worksheet entry must be made on December 31, 2017, to reclassify the equity component of the convertible bonds recognized under IFRS as a liability under U.S. GAAP:

Additional Paid-in Capital—Convertible Bonds . . . . .	14,720	
Bonds Payable . . . . .		14,720

This adjustment has no effect on net income or retained earnings; noncurrent liabilities increase by \$14,720 and stockholders’ equity decreases by the same amount. The same conversion entry would be made at December 31, 2018.

**Defined Benefit Pension Plan—Past Service Cost**

At the beginning of 2017, Ammer amended its defined benefit pension plan creating a past service cost of \$120,000. The average remaining number of years to be worked by the employees affected by the plan amendment is 15 years. The company has no retired employees.

**IFRS Treatment**

IAS 19, “Employee Benefits,” requires past service cost to be recognized as expense when the plan amendment occurs. Therefore, in 2017, Ammer increased its defined benefit pension obligation and recognized past service cost expense in the amount of \$120,000, as follows:

Past Service Cost Expense . . . . .	120,000	
Defined Benefit Obligation . . . . .		120,000
To recognize past service cost expense and an increase in defined benefit obligation resulting from a defined benefit plan amendment.		

**U.S. GAAP Treatment**

Under U.S. GAAP, past service cost (referred to as prior service cost by the FASB) must be amortized to expense over the remaining service life of those employees affected by the plan amendment. As a result, only \$8,000 [ $\$120,000 / 15$  years] of past service cost expense would be recognized in net income in 2017. The remaining \$112,000 of past service cost to be recognized in net income over the next 14 years is treated as a component of accumulated other comprehensive income (AOCI) in 2017. The defined benefit pension obligation is increased by \$120,000. The following journal entries would be made under U.S. GAAP:

**January 1, 2017**

Deferred Past Service Costs (AOCI) .....	120,000	
Defined Benefit Obligation .....		120,000

**December 31, 2017**

Past Service Cost Expense .....	8,000	
Deferred Past Service Costs (AOCI) .....		8,000

**Conversion from IFRS to U.S. GAAP—2017**

To convert to U.S. GAAP, \$112,000 of past service cost expense recognized under IFRS must be deferred in AOCI. The following entry makes this conversion:

Deferred Past Service Costs (AOCI) .....	112,000	
Past Service Cost Expense .....		112,000

The December 31, 2017, partial conversion worksheet (past service cost) is shown below. The entry to convert from IFRS to U.S. GAAP increases net income and ending retained earnings by \$112,000 (from negative \$120,000 to negative \$8,000). The conversion entry also decreases AOCI by the same amount (from \$0 to negative \$112,000). The increase in retained earnings and decrease in AOCI offset such that total equity is unaffected by this adjustment. Total assets and total liabilities also are unaffected.

**Partial Conversion Worksheet, 12/31/17 (Past Service Cost)**

Account	IFRS	Conversion Entries		U.S. GAAP
		Debit	Credit	
<b>Past service cost expense</b>	<b>120,000</b>		112,000	<b>8,000</b>
Net income, 2017 (negative)	120,000			8,000
Retained earnings, 1/1/17	<u>-0-</u>			<u>-0-</u>
Retained earnings, 12/31/17 (negative)	<u>120,000</u>			<u>8,000</u>
<b>Deferred past service cost (AOCI)</b>	<b>-0-</b>	112,000		<b>112,000</b>
AOCI, 1/1/17	<u>-0-</u>			<u>-0-</u>
AOCI, 12/31/17	<u>-0-</u>			<u>112,000</u>
Total assets	<u>-0-</u>			<u>-0-</u>
Defined benefit obligation	<u>(120,000)</u>			<u>(120,000)</u>
Total liabilities	<u>(120,000)</u>			<u>(120,000)</u>
AOCI, 12/31/17 (above)	<u>-0-</u>			<u>112,000</u>
Retained earnings, 12/31/17 (above)	<u>120,000</u>			<u>8,000</u>
Total liabilities and equity	<u>-0-</u>			<u>-0-</u>
		<u>112,000</u>	<u>112,000</u>	

**Conversion from IFRS to U.S. GAAP—2018**

Because the entire amount of past service cost was expensed in 2017, no further entries are needed in 2018 under IFRS. Under U.S. GAAP, an additional \$8,000 of past service cost expense must be recognized in 2018 with an offsetting reduction in the deferred past service cost (AOCI). The following entry would be made under U.S. GAAP at December 31, 2018:

Past Service Cost Expense .....	8,000	
Deferred Past Service Cost (AOCI) .....		8,000

This entry reduces the carrying amount of deferred past service cost (a debit balance in AOCI) to \$104,000 [ $\$120,000 - \$16,000 (= \$8,000 \times 2 \text{ years})$ ].

From a U.S. GAAP perspective, the IFRS balances understate 2018 past service cost expense by \$8,000 and beginning retained earnings by \$112,000 (the difference in 2017 net income between IFRS and U.S. GAAP). In addition, AOCI is overstated by \$104,000 (AOCI has a zero balance under IFRS but has a debit balance of \$104,000 under U.S. GAAP). The conversion entries needed at December 31, 2018, to convert from IFRS to U.S. GAAP are:

AOCI, 1/1/18 .....	112,000	
Retained Earnings, 1/1/18 .....		112,000

Past Service Cost Expense .....	8,000	
Deferred Past Service Cost (AOCI) .....		8,000

The December 31, 2018, partial conversion worksheet (past service cost) presented below reflects Ammer's account balances under IFRS and shows that the above conversion entries result in the correct balances being reported under U.S. GAAP.

<b>Partial Conversion Worksheet, 12/31/18 (Past Service Cost)</b>				
<b>Account</b>	<b>IFRS</b>	<b>Conversion Entries</b>		<b>U.S. GAAP</b>
		<b>Debit</b>	<b>Credit</b>	
<b>Past service cost expense</b>	<u>-0-</u>	8,000		<u><b>8,000</b></u>
Net income, 2018 (negative)	-0-			8,000
<b>Retained earnings, 1/1/18</b> (negative)	<u><b>120,000</b></u>		112,000	<u><b>8,000</b></u>
Retained earnings, 12/31/18 (negative)	<u>120,000</u>			<u>16,000</u>
<b>Deferred past service cost (AOCI)</b>	<u>-0-</u>		8,000	<u><b>(8,000)</b></u>
<b>AOCI, 1/1/18</b>	<u>-0-</u>	112,000		<u><b>112,000</b></u>
AOCI, 12/31/18	<u>-0-</u>			<u>104,000</u>
Total assets	<u>-0-</u>			<u>-0-</u>
Defined benefit obligation	(120,000)			(120,000)
Total liabilities	(120,000)			(120,000)
AOCI, 12/31/18 (above)	-0-			104,000
Retained earnings, 12/31/18 (above)	<u>120,000</u>			<u>16,000</u>
Total liabilities and equity	<u>-0-</u>			<u>-0-</u>
		<u>120,000</u>	<u>120,000</u>	

**Leases—Gain on Sale and Leaseback**

On July 1, 2017, Ammer sold an office building with a carrying amount of \$900,000 to a local bank and immediately leased it back for a term of 10 years. The lease is accounted for as an operating lease. The selling price was equal to the building's fair value and Ammer realized a gain on the sale and leaseback



in the amount of \$100,000. By selling the building and then leasing it back, Ammer retains complete use of the building for the next 10 years.

### IFRS Treatment

When the selling price is equal to the fair value of the asset being sold and leased back, *IAS 17*, “Leases,” requires gains and losses on the sale to be recognized immediately in net income. Accordingly, Ammer recognized a gain on sale and leaseback in net income in the amount of \$100,000 in 2017. The journal entry to record this was:

#### July 1, 2017

Cash .....	1,000,000	
Building (net) .....		900,000
Gain on Sale of Building .....		100,000
To recognize the sale of a building and the related gain on the sale.		

This entry results in an increase in net income, retained earnings, and total assets of \$100,000 under IFRS.

### U.S. GAAP Treatment

Classification of the lease does not affect the treatment of gains/losses on sale and leaseback transactions under U.S. GAAP. Recognition of the gain or loss depends on whether the seller-lessee relinquishes (a) substantially all, (b) more than a minor part but less than substantially all, or (c) less than a minor part of the use of the asset. In the last case (c), a gain is deferred and amortized over the life of the lease whereas a loss is recognized immediately. Applying this rule, the gain on the sale would be deferred at July 1, 2017, because Ammer has relinquished “less than a minor part” of the use of the building. At the end of 2017, 5 percent (10% amortization per year  $\times$   $\frac{1}{2}$  year) of the deferred gain (\$5,000) would be recognized in net income. The journal entries that would reflect this treatment are:

#### July 1, 2017

Cash .....	1,000,000	
Building (net) .....		900,000
Deferred Gain on Sale of Building (liability) .....		100,000
To recognize the sale of a building with deferral of the related gain on the sale.		

#### December 31, 2017

Deferred Gain on Sale of Building (liability) .....	5,000	
Gain on Sale of Building .....		5,000
To amortize the deferred gain on sale of building over the term of the lease.		

These entries result in an increase in net income and retained earnings of \$5,000, an increase in total liabilities of \$95,000, and an increase in total assets of \$100,000.

### Conversion from IFRS to U.S. GAAP—2017

To convert from IFRS to U.S. GAAP, \$95,000 of the gain on the sale of the building recognized under IFRS in 2017 must be reversed and deferred as a liability. The conversion entry is:

Gain on Sale of Building .....	95,000	
Deferred Gain on Sale of Building (liability) .....		95,000

This entry decreases net income and retained earnings, and increases total liabilities by \$95,000. The December 31, 2017, partial conversion worksheet (gain on sale and leaseback) below shows that this entry results in the correct amount being reported under U.S. GAAP.

**Partial Conversion Worksheet, 12/31/17 (Gain on Sale and Leaseback)**

Account	IFRS	Conversion Entries		U.S. GAAP
		Debit	Credit	
<b>Gain on sale of building</b>	<b>( 100,000)</b>	95,000		<b>(5,000)</b>
Net income (positive)	(100,000)			(5,000)
Retained earnings, 1/1/17	<u>-0-</u>			<u>-0-</u>
Retained earnings, 12/31/17	<u>(100,000)</u>			<u>(5,000)</u>
Cash	1,000,000			1,000,000
Buildings	<u>(900,000)</u>			<u>(900,000)</u>
Total assets	<u>100,000</u>			<u>100,000</u>
<b>Deferred gain on sale of building (liability)</b>	<b>-0-</b>		95,000	<b>(95,000)</b>
Total liabilities	-0-			(95,000)
Retained earnings, 12/31/17 (above)	<u>(100,000)</u>			<u>(5,000)</u>
Total liabilities and equity	<u>(100,000)</u>			<u>(100,000)</u>
		<u>95,000</u>	<u>95,000</u>	

**Conversion from IFRS to U.S. GAAP—2018**

Because the entire gain on sale of building was recognized in 2017, no further entries are needed in 2018 under IFRS. Under U.S. GAAP, an additional \$5,000 of gain on sale of building must be recognized with an offsetting reduction in the deferred gain. The journal entry to record this is:

Deferred Gain on Sale of Building (liability) .....	5,000	
Gain on Sale of Building .....		5,000

This entry results in the deferred gain having a credit balance of \$90,000 under U.S. GAAP on December 31, 2018.

From a U.S. GAAP perspective, the 2018 IFRS balances understate gain on sale of building by \$5,000, and understate deferred gain by \$90,000. In addition, the January 1, 2018, balance in retained earnings is overstated by \$95,000, the difference in 2017 net income recognized under IFRS and U.S. GAAP. The conversion entry at December 31, 2018, is as follows:

Retained Earnings, 1/1/18 .....	95,000	
Gain on Sale of Building .....		5,000
Deferred Gain on Sale of Building (liability) .....		90,000

The December 31, 2018, partial conversion worksheet (gain on sale and leaseback) presented below shows that this entry appropriately converts IFRS balances to U.S. GAAP.

**Partial Conversion Worksheet, 12/31/18 (Gain on Sale and Leaseback)**

Account	IFRS	Conversion Entries		U.S. GAAP
		Debit	Credit	
<b>Gain on sale of building</b>	<b>-0-</b>		5,000	<b>(5,000)</b>
Net income	-0-			(5,000)
Retained earnings, 1/1/18	<u>(100,000)</u>	95,000		<u>(5,000)</u>
Retained earnings, 12/31/18	<u>(100,000)</u>			<u>(10,000)</u>
Cash	1,000,000			1,000,000

(continued)

(continued)

Account	Conversion Entries			U.S. GAAP
	IFRS	Debit	Credit	
Building	(900,000)			(900,000)
Total assets	100,000			100,000
<b>Deferred gain on sale of building</b>	<b>-0-</b>		90,000	<b>(90,000)</b>
Total liabilities	-0-			(90,000)
Retained earnings, 12/31/18 (above)	(100,000)			(10,000)
Total liabilities and equity	(100,000)			(100,000)
		95,000	95,000	

### Business Combination—Noncontrolling Interest and Goodwill

Ammer acquired 90 percent of the outstanding shares of Ober AG at the end of 2017 by paying \$360,000 in cash. At the date of acquisition, the book value of Ober's assets was \$320,000, which was equal to fair value. The book value of Ober's liabilities was \$40,000, which also was equal to fair value. Ammer must measure noncontrolling interest and goodwill at the date of acquisition.

#### IFRS Treatment

IFRS 3, "Business Combinations," allows noncontrolling interest to be measured either at (a) fair value (including goodwill) or (b) the proportionate interest in the values assigned to the assets acquired (excluding goodwill) and liabilities assumed. The acquirer can choose which of these treatments to follow. The amount recognized as goodwill depends upon the method selected to determine noncontrolling interest.

Ammer elected to measure noncontrolling interest in Ober using the "proportionate interest" approach. The acquisition-date amount of noncontrolling interest and goodwill were calculated as follows:

Fair value of net assets (excluding any goodwill) [\$320,000 – \$40,000] . . . . .	\$280,000
Noncontrolling interest % . . . . .	×10%
Fair value of noncontrolling interest . . . . .	<u>\$ 28,000</u>
Fair value of consideration transferred by Ammer (cash paid)	360,000
Plus: Fair value of noncontrolling interest . . . . .	<u>28,000</u>
Subtotal . . . . .	388,000
Less: Fair value of Ober's net assets (excluding goodwill) . . . . .	<u>280,000</u>
Goodwill . . . . .	<u>\$108,000</u>

Under this approach, Ammer recognized noncontrolling interest in Ober of \$28,000. Goodwill is measured as \$108,000, which is the amount of goodwill deemed to have been acquired by Ammer in the business combination.

#### U.S. GAAP Treatment

Under U.S. GAAP, noncontrolling interest must be measured at fair value. Jameson's accountants have determined that this can best be measured based on the fair value of consideration transferred by Ammer to acquire a 90 percent interest in Ober. Because Ammer paid \$360,000 for 90 percent of Ober, 100 percent of Ober has a fair value of \$400,000 (\$360,000 / 90%). Therefore, 10 percent of Ober has a fair

value of \$40,000 ( $\$400,000 \times 10\%$ ). This is the amount at which noncontrolling interest is measured. Accordingly, goodwill is determined as follows:

Fair value of controlling interest (cash paid by Ammer) . . . . .	\$360,000
Plus: Fair value of noncontrolling interest . . . . .	40,000
Total fair value of Ober AG . . . . .	<u>400,000</u>
Less: Fair value of Ober's net assets (excluding goodwill) . . . . .	<u>280,000</u>
Goodwill . . . . .	<u>\$120,000</u>

Under this approach, goodwill of \$120,000 comprises \$108,000 (90%) paid for by Ammer plus \$12,000 (10%) attributed to the noncontrolling interest.

### Conversion from IFRS to U.S. GAAP—2017 and 2018

To convert from IFRS to U.S. GAAP, both goodwill and noncontrolling interest must be increased on Ammer's consolidated balance sheet. This is accomplished with the following entry made on the December 31, 2017, conversion worksheet:

Goodwill . . . . .	12,000	
Noncontrolling Interest . . . . .		12,000

This adjustment has no effect on net income or retained earnings; total assets and total equity both increase by \$12,000. A similar entry would be made on the December 31, 2018, conversion worksheet.

## Questions

- Historically, what factors contributed to the diversity of accounting systems worldwide?
- Nestlé S.A. is a very large company headquartered in a very small country (Switzerland). It has operations in more than 50 different countries around the world. Much of the company's international expansion has been through the acquisition of local (i.e., foreign) companies. What problems does worldwide accounting diversity cause for a company like Nestlé?
- Why were several original standards issued by the IASC revised in 1993?
- In what ways does the IASB differ from the IASC?
- What are the different ways a country might use IFRS?
- In general terms, how does *IFRS for SMEs* differ from full IFRS?
- Some say that IFRS are now GAAP in the European Union. How is this statement true, and how is it false?
- What are three countries that do not allow domestic publicly traded companies to use IFRS to prepare consolidated financial statements?
- What are the steps that a company must follow in preparing its initial set of IFRS financial statements upon the company's first-time adoption of IFRS?
- Under what circumstances might it be acceptable for a company preparing IFRS financial statements to follow an accounting treatment developed by the FASB?
- When should a company begin gathering information about differences between IFRS and its existing GAAP to assist in its first time adoption of IFRS?
- What are the two extreme approaches that a company might follow in determining appropriate accounting policies for preparing its initial set of IFRS financial statements?
- What did the FASB and IASB agree to do in the Norwalk Agreement?
- Has the IASB-FASB convergence process been successful?
- How are IFRS currently used in the United States?
- Why is it important for U.S. accountants to be familiar with IFRS?
- What are three differences between IFRS and U.S. GAAP with respect to the recognition of financial statement items?

18. What are three difference between IFRS and U.S. GAAP with respect to the measurement of financial statement items?
19. What are two differences between IFRS and U.S. GAAP with respect to the classification of financial statement items?
20. Even if all companies in the world were to use IFRS, what are two obstacles to the worldwide comparability of financial statements?

## Problems

LO 11-1

1. Which of the following historical reasons for accounting diversity could explain why accounting standards would be more detailed in some countries than in others?
  - a. Different rates of inflation across countries.
  - b. Different legal systems across countries.
  - c. Differences across countries in the extent to which financial statements are the basis for taxation.
  - d. Political and economic ties between countries.

LO 11-2

2. Which of the following is *not* a potential problem caused by differences in financial reporting practices across countries?
  - a. Consolidation of financial statements by firms with foreign operations is more difficult.
  - b. Firms incur additional costs when attempting to obtain financing in foreign countries.
  - c. Firms face double taxation on income earned by foreign operations.
  - d. Comparisons of financial ratios across firms in different countries may not be meaningful.

LO 11-2

3. Which of the following is *not* a reason for establishing international accounting standards?
  - a. Some countries do not have the resources to develop accounting standards on their own.
  - b. Comparability of financial reporting is needed between companies operating in different areas of the world.
  - c. It would simplify the preparation of consolidated financial statements by multinational corporations.
  - d. Demand in the United States is heavy for an alternative to U.S. generally accepted accounting principles.

LO 11-3

4. According to the IASB, IFRS comprise interpretations issued by the SIC and IFRIC, and
  - a. International financial reporting standards issued by the IASB only.
  - b. International accounting standards issued by the IASC only.
  - c. International financial reporting standards issued by the IASB and international accounting standards issued by the IASC.
  - d. International financial reporting standards issued by the IASB and statements of financial accounting standards issued by the FASB.

LO 11-4

5. Which of the following countries uses IFRS?
  - a. Canada.
  - b. Mexico.
  - c. Brazil.
  - d. All of these answer choices are correct.

LO 11-4

6. According to the IFRS Foundation, approximately how many countries either require or permit the use of IFRS by publicly traded companies?
  - a. 40 countries.
  - b. 80 countries.
  - c. 115 countries.
  - d. 195 countries.

LO 11-5

7. For which of the following types of companies is *IFRS for SMEs* intended?
  - a. Private companies.
  - b. Publicly traded companies.
  - c. Multinational corporations.
  - d. Foreign companies.

LO 11-5

8. For which of the following does *IFRS for SMEs* not provide a simplification of full IFRS?
  - a. Goodwill.
  - b. Borrowing costs.

- c. Development costs.
- d. Inventory.

## LO 11-6

9. A company must prepare IFRS financial statements for the first time on December 31, 2020. According to *IFRS 1*, what is the date of transition to IFRS for this company?
- a. January 1, 2018.
  - b. January 1, 2019.
  - c. December 31, 2019.
  - d. December 31, 2020.

## LO 11-6

10. Which of the following does *not* accurately describe a requirement that a company must fulfill when adopting IFRS for the first time?
- a. The company must prepare an opening IFRS balance sheet at the beginning of the year for which the company is preparing its first set of IFRS financial statements.
  - b. At the IFRS transition date, the company must select IFRS accounting policies based on those that will be in effect for the accounting period that will be covered by the first set of IFRS financial statements.
  - c. At the IFRS transition date, the company must derecognize assets and liabilities that were recognized under previous GAAP that are not allowed to be recognized under IFRS.
  - d. The company must provide a reconciliation of net income and stockholders' equity under previous GAAP to net income and stockholders' equity under IFRS in its first set of IFRS financial statements.

## LO 11-6

11. Which of the following statements is correct with respect to the IFRS accounting policy hierarchy in situations where a specifically relevant IASB standard dealing with an accounting issue does not exist?
- a. The IASB Conceptual Framework takes precedence over other IASB standards that deal with related issues.
  - b. The IASB Conceptual Framework takes precedence over standards developed by standard-setting bodies in other countries that deal with the specific accounting issue.
  - c. The most recent specifically relevant pronouncement of any other standard-setting body may be used when neither IASB standards nor the IASB Conceptual Framework provide helpful guidance.
  - d. IFRSs take precedence over IASs and Interpretations in identifying appropriate guidance.

## LO 11-7

12. What is the so-called Norwalk Agreement?
- a. An agreement between the FASB and SEC to allow foreign companies to use IFRS in their filing of financial statements with the SEC.
  - b. An agreement between the U.S. FASB and the U.K. Accounting Standards Board to converge their respective accounting standards as soon as practicable.
  - c. An agreement between the SEC chairman and the EU Internal Market commissioner to allow EU companies to list securities in the United States without providing a U.S. GAAP reconciliation.
  - d. An agreement between the FASB and the IASB to make their existing standards compatible as soon as practicable and to work together to ensure compatibility in the future.

## LO 11-7

13. Which of the following statements is true for a foreign company registered with the U.S. SEC to list its stock on the New York Stock Exchange?
- a. The company must file an annual report with the SEC that is prepared in accordance with U.S. GAAP.
  - b. The company may file an annual report with the SEC that is prepared in accordance with IFRS but must also provide a reconciliation of IFRS to U.S. GAAP.
  - c. The company must file an annual report with the SEC that is prepared in accordance with IFRS but must also provide a reconciliation of IFRS to U.S. GAAP.
  - d. The company may file an annual report with the SEC that is prepared in accordance with IFRS but need not also provide a reconciliation of IFRS to U.S. GAAP.

## LO 11-7

14. Which of the following best describes the extent to which the SEC requires or permits the use of IFRS by U.S. public companies?
- a. U.S. public companies are required to use IFRS.
  - b. U.S. public companies may choose between IFRS and U.S. GAAP.
  - c. U.S. public companies may use IFRS, but must also provide a reconciliation to U.S. GAAP.
  - d. U.S. public companies are neither required nor allowed to use IFRS.

## LO 11-7

15. Which companies are required to provide a U.S. GAAP reconciliation in their annual report filed with the SEC?
- All foreign companies listed on a U.S. securities exchange.
  - Foreign companies listed on a U.S. securities exchange that use IFRS in preparing financial statements.
  - Domestic U.S. companies listed on a U.S. securities exchange that use IFRS in preparing financial statements.
  - Foreign companies listed on a U.S. securities exchange that use financial reporting standards other than U.S. GAAP or IFRS in preparing financial statements.

## LO 11-8

16. Under IFRS, when an entity chooses the revaluation model as its accounting policy for measuring property, plant, and equipment, which of the following statements is correct?
- When an asset is revalued, the entire class of property, plant, and equipment (such as Land) to which that asset belongs must be revalued.
  - When an asset is revalued, it is reported on the balance sheet at its current replacement cost.
  - Revaluations of property, plant, and equipment must be made at least every three years.
  - The revalued assets must be reported in a special section of the balance sheet separate from those assets measured using the cost model.

## LO 11-8

17. In which of the following areas does the IASB *not* allow firms to choose between two acceptable treatments?
- Measuring property, plant, and equipment subsequent to acquisition.
  - Measuring noncontrolling interest in a business combination.
  - Recognizing development costs that meet criteria for capitalization as an asset.
  - Classifying interest paid in the statement of cash flows.

**Problems 18–25 assume that a foreign company using IFRS is owned by a company using U.S. GAAP. Thus, IFRS balances must be converted to U.S. GAAP to prepare consolidated financial statements. Ignore income taxes for each problem.**

## LO 11-9

18. Sorocaba Ltda. sold a building to Banco Janeiro on January 1, 2017, for 200,000 reais and then leased it back under a 10-year lease agreement, which is accounted for as an operating lease. The building had a carrying amount of 150,000 reais and a fair value of 200,000 reais on the date of sale.
- Determine the appropriate accounting for this sale and leaseback for the years ending December 31, 2017, and December 31, 2018, under (1) IFRS and (2) U.S. GAAP.
  - Prepare the entry(ies) that the U.S. parent would make on the December 31, 2017, and December 31, 2018, conversion worksheets to convert IFRS balances to U.S. GAAP.

## LO 11-9

19. Izmir A.S. issued convertible bonds at their face value of 100,000 lira on December 31, 2017. The bonds have a 10-year life with interest of 10 percent payable annually. At the date of issue, the prevailing interest rate for similar debt without a conversion option was 12 percent.
- Determine the appropriate accounting for this compound financial instrument for the year ending December 31, 2017, under (1) IFRS and (2) U.S. GAAP.
  - Prepare the entry(ies) that the U.S. parent would make on the December 31, 2017, conversion worksheet to convert IFRS balances to U.S. GAAP.

## LO 11-9

20. Surat Limited paid cash to acquire an aircraft on January 1, 2017, at a cost of 30,000,000 rupees. The aircraft has an estimated useful life of 40 years and no salvage value. The company has determined that the aircraft is composed of three significant components with the following original costs (in rupees) and estimated useful lives:

Component	Cost	Useful Life
Fuselage	10,000,000	40 years
Engines	15,000,000	30 years
Interior	5,000,000	20 years
	<u>30,000,000</u>	

The U.S. parent of Surat does not depreciate assets on a component basis, but instead depreciates assets over their estimated useful life as a whole.

- a. Determine the appropriate accounting for this aircraft for the years ending December 31, 2017, and December 31, 2018, under (1) IFRS and (2) U.S. GAAP.
- b. Prepare the entry(ies) that the U.S. parent would make on the December 31, 2017, and December 31, 2018, conversion worksheets to convert IFRS balances to U.S. GAAP.

LO 11-9

21. On January 1, 2017, Xiamen Company made amendments to its defined benefit pension plan that resulted in 60,000 yuan of past service cost. The plan has 5,000 active employees with an average expected remaining working life of 15 years. There currently are no retirees under the plan.

- a. Determine the appropriate accounting for the past service cost for the years ending December 31, 2017, and December 31, 2018, under (1) IFRS and (2) U.S. GAAP.
- b. Prepare the entry(ies) that the U.S. parent would make on the December 31, 2017, and December 31, 2018, conversion worksheets to convert IFRS balances to U.S. GAAP.

LO 11-9

22. Mikkeli OY acquired a brand name with an indefinite life in 2015 for 40,000 markkas. At December 31, 2017, the brand name could be sold for 35,000 markkas, with zero costs to sell. Expected cash flows from the continued use of the brand are 42,000 markkas, and the present value of this amount is 34,000 markkas.

- a. Determine the appropriate accounting for this brand name for the year ending December 31, 2017, under (1) IFRS and (2) U.S. GAAP.
- b. Prepare the entry(ies) that the U.S. parent would make on the December 31, 2017, conversion worksheet to convert IFRS balances to U.S. GAAP.

LO 11-9

23. Llungby AB spent 1,000,000 krone in 2017 on the development of a new product. The company determined that 25 percent of this amount was incurred after the criteria in *IAS 36* for capitalization as an intangible asset had been met. The newly developed product is brought to market in January 2018 and is expected to generate sales revenue for five years.

- a. Determine the appropriate accounting for development costs for the years ending December 31, 2017, and December 31, 2018, under (1) IFRS and (2) U.S. GAAP.
- b. Prepare the entry(ies) that the U.S. parent would make on the December 31, 2017, and December 31, 2018, conversion worksheets to convert IFRS balances to U.S. GAAP.

LO 11-9

24. Sapporo K.K. was sued by a competitor in late 2017, and company management concluded that there was a 55 percent probability that the company would lose the lawsuit. The best estimate of the loss on December 31, 2017, was 4,000,000 yen. In 2018, the lawsuit is concluded with Sapporo paying its competitor 5,000,000 yen on May 15, 2018.

- a. Determine the appropriate accounting for this lawsuit for the years ending December 31, 2017, and December 31, 2018, under (1) IFRS and (2) U.S. GAAP.
- b. Prepare the entry(ies) that the U.S. parent would make on the December 31, 2017, and December 31, 2018, conversion worksheets to convert IFRS balances to U.S. GAAP.

LO 11-9

25. Tapatio S.A. de C.V. acquired a new piece of manufacturing equipment on January 1, 2016, for a cash price of 500,000 pesos. The equipment was expected to have a useful life of 10 years and no residual value, and is being depreciated on a straight-line basis. On January 1, 2017, the equipment was appraised and determined to have a fair value of 540,000 pesos, zero salvage value, and a remaining useful life of 9 years. Tapatio uses the revaluation model in *IAS 16* to measure equipment subsequent to acquisition. Any revaluation surplus will be recycled to retained earnings when the equipment is disposed of.

- a. Determine the appropriate accounting for this equipment for the years ending December 31, 2017, and December 31, 2018, under (1) IFRS and (2) U.S. GAAP.
- b. Prepare the entry(ies) that the U.S. parent would make on the December 31, 2017, and December 31, 2018, conversion worksheets to convert IFRS balances to U.S. GAAP.

**Problems 26-30 assume that a U.S.-based company is issuing securities to foreign investors who require financial statements prepared in accordance with IFRS. Thus, adjustments to convert from U.S. GAAP to IFRS must be made. Ignore income taxes for each problem.**

LO 11-9

26. Harrington Company was sued by an employee in late 2017. General counsel concluded that there was an 80 percent probability that the company would lose the lawsuit. The range of possible loss



is estimated to be \$20,000 to \$70,000, with no amount in the range more likely than any other. The lawsuit was settled in 2018, with Harrington making a payment of \$60,000.

- a. Determine the appropriate accounting for this lawsuit for the years ending December 31, 2017, and December 31, 2018, under (1) U.S. GAAP and (2) IFRS.
- b. Prepare the entry(ies) that Harrington would make on the December 31, 2017, and December 31, 2018, conversion worksheets to convert U.S. GAAP balances to IFRS.

**LO 11-9**

27. Parnell Company acquired construction equipment on January 1, 2017, at a cost of \$78,400. The equipment was expected to have a useful life of six years and a residual value of \$10,000 and is being depreciated on a straight-line basis. On January 1, 2018, the equipment was appraised and determined to have a fair value of \$74,500, a salvage value of \$10,000, and a remaining useful life of five years. In measuring property, plant, and equipment subsequent to acquisition under IFRS, Parnell would opt to use the revaluation model in *IAS 16*.
  - a. Determine the appropriate accounting for this equipment for the years ending December 31, 2017, and December 31, 2018, under (1) U.S. GAAP and (2) IFRS.
  - b. Prepare the entry(ies) that Parnell would make on the December 31, 2017, and December 31, 2018, conversion worksheets to convert U.S. GAAP balances to IFRS.

**LO 11-9**

28. Trecek Corporation incurs research and development costs of \$650,000 in 2017, 30 percent of which relate to development activities subsequent to *IAS 36* criteria having been met that indicate an intangible asset has been created. The newly developed product is brought to market in January 2018 and is expected to generate sales revenue for 10 years.
  - a. Determine the appropriate accounting for research and development costs for the years ending December 31, 2017, and December 31, 2018, under (1) U.S. GAAP and (2) IFRS.
  - b. Prepare the entry(ies) that Trecek would make on the December 31, 2017, and December 31, 2018, conversion worksheets to convert U.S. GAAP balances to IFRS.

**LO 11-9**

29. Rawl Corporation sold a building to a bank at the beginning of 2017 at a gain of \$76,000 and immediately leased the building back for a period of four years. The lease is accounted for as an operating lease.
  - a. Determine the appropriate accounting for this sale and leaseback for the years ending December 31, 2017, and December 31, 2018, under (1) U.S. GAAP and (2) IFRS.
  - b. Prepare the entry(ies) that Rawl would make on the December 31, 2017, and December 31, 2018, conversion worksheets to convert U.S. GAAP balances to IFRS.

**LO 11-9**

30. Hirsch Company acquired equipment at the beginning of 2017 at a cost of \$135,000. The equipment has a five-year life with no expected salvage value and is depreciated on a straight-line basis. At December 31, 2017, Hirsch compiled the following information related to this equipment:

Expected future cash flows from use of the equipment . . . . .	\$116,000
Present value of expected future cash flows from use of the equipment . . . . .	100,000
Fair value (selling price less costs to dispose). . . . .	96,600

- a. Determine the appropriate accounting for this equipment for the years ending December 31, 2017, and December 31, 2018, under (1) U.S. GAAP and (2) IFRS.
- b. Prepare the entry(ies) that Hirsch would make on the December 31, 2017, and December 31, 2018, conversion worksheets to convert U.S. GAAP balances to IFRS. Ignore the possibility of any additional impairment at the end of 2018.

## Develop Your Skills

### ANALYSIS CASE 1—APPLICATION OF *IAS 16*



Abacab Company's shares are listed on the New Market Stock Exchange, which allows the use of either International Financial Reporting Standards (IFRS) or U.S. GAAP. On January 1, Year 1, Abacab Company acquired a building at a cost of \$10 million. The building has a 20-year useful life and no residual value and is depreciated on a straight-line basis. On January 1, Year 3, the company hired an appraiser who determines the fair value of the building (net of any accumulated depreciation) to be \$12 million.

*IAS 16*, "Property, Plant, and Equipment," requires assets to be initially measured at cost. Subsequent to initial recognition, assets may be carried either at cost less accumulated depreciation and any impairment losses (the cost model) or at a revalued amount equal to fair value at the date of the revaluation

less any subsequent accumulated depreciation and impairment losses (the revaluation model). If a firm chooses to use the revaluation model, the counterpart to the revaluation of the asset is recorded as an increase in Accumulated Other Comprehensive Income (stockholders' equity). Subsequent depreciation is based on the revalued amount less any residual value.

U.S. GAAP requires items of property, plant, and equipment to be initially measured at cost. U.S. GAAP does not allow property, plant, and equipment to be revalued above original cost at subsequent balance sheet dates. The cost of property, plant, and equipment must be depreciated on a systematic basis over its useful life. Subsequent to initial recognition, assets must be carried at cost less accumulated depreciation and any impairment losses.

### Required

- Determine the amount of depreciation expense recognized in Year 2, Year 3, and Year 4 under (a) the revaluation model in *IAS 16* and (b) U.S. GAAP.
- Determine the book value of the building under the two different sets of accounting rules at January 2, Year 3; December 31, Year 3; and December 31, Year 4.
- Summarize the difference in net income and in stockholders' equity over the 20-year life of the building using the two different sets of accounting rules.

## ANALYSIS CASE 2—RECONCILIATION OF IFRS TO U.S. GAAP



Quantacc Ltd. began operations on January 1, 2015, and uses IFRS to prepare its consolidated financial statements. Although not required to do so, to facilitate comparisons with companies in the United States, Quantacc reconciles its net income and stockholders' equity to U.S. GAAP. Information relevant for preparing this reconciliation is as follows:

- Quantacc carries fixed assets at revalued amounts. Fixed assets were revalued upward on January 1, 2017, by \$35,000. At that time, fixed assets had a remaining useful life of 10 years.
- On January 1, 2016, Quantacc realized a gain on the sale and leaseback of an office building in the amount of \$200,000. The lease is classified as an operating lease and has a term of 20 years.
- Quantacc capitalized development costs related to a new pharmaceutical product in 2016 in the amount of \$80,000. Quantacc began selling the new product on January 1, 2017, and expects the product to be marketable for a total of five years.

Net income under IFRS in 2017 is \$100,000 and stockholders' equity under IFRS at December 31, 2017, is \$1,000,000. Ignore income taxes.

### Required

- Prepare a schedule to reconcile Quantacc's 2017 net income and December 31, 2017, stockholders' equity under IFRS to U.S. GAAP.
- Provide a brief title/description for each reconciling adjustment made, indicate the dollar amount of the adjustment, and calculate total amounts for net income and stockholders' equity under U.S. GAAP.

## RESEARCH CASE—RECONCILIATION TO U.S. GAAP



Unless they use IFRS, foreign companies with securities listed in the United States (in the form of ADRs) are required to reconcile their net income and stockholders' equity to U.S. GAAP in the annual report (Form 20-F) they file with the Securities and Exchange Commission (SEC). Lists of foreign SEC registrants are available on-line at [www.sec.gov](http://www.sec.gov) (under Filing Type, search for 20-F). However, not all foreign registrants file their reports with the SEC electronically. Many non-U.S. companies make annual reports available on their corporate website. Access a recent annual report (Form 20-F) for a foreign company listed on the New York Stock Exchange that does not use IFRS to complete the following requirements.

### Required

- Determine the nationality of the company selected and the accounting rules and regulations it used (company GAAP) to prepare its financial statements.
- Summarize the major differences in measuring net income between company GAAP and U.S. GAAP.
- Compare the company's profitability using company GAAP and U.S. GAAP.

## INTERNET CASE 1—FOREIGN COMPANY ANNUAL REPORT



Many non-U.S. companies make annual reports available on their corporate website. Access the financial statements from the most recent annual report for a foreign company with which you are familiar to complete this assignment.

### Required

- a. Determine the set of accounting rules (GAAP) the company uses to prepare its financial statements.
- b. Determine whether the company provides a set of financial statements comparable to the set of financial statements provided by U.S. companies.
- c. List differences between the company's income statement and the income statement of a typical U.S. corporation.
- d. List differences between the company's balance sheet and the balance sheet of a typical U.S. corporation.
- e. Determine whether the scope and content of the information provided in the notes to the financial statements are comparable to the information provided in the notes to the financial statements by a typical U.S. corporation.
- f. Evaluate the overall presentation of financial statements and notes to financial statements by the company in comparison with a typical U.S. corporation.

## INTERNET CASE 2—IFRS WEBSITE



The IFRS Foundation and IASB maintain a website at [www.ifrs.org](http://www.ifrs.org). Go to this website and access "Jurisdiction Profiles" to complete this case. (Under the IFRS tab, click on "Use around the world," or under Quick Links, click on "Who uses IFRS?")

### Required

Select a country of interest and prepare a short report summarizing the extent to which full IFRS and *IFRS for SMEs* are used in that jurisdiction.

# Financial Reporting and the Securities and Exchange Commission

The Securities and Exchange Commission was born on June 6, 1934—a time of despair in the markets. Americans were still suffering from the 1929 market crash after a roaring 1920s when they bought about \$50 billion in new securities—half of which turned out to be worthless. Their confidence also was eroded by the 1932 indictment (later acquittal) of Samuel Insull for alleged wrongs in the collapse of his utility “empire,” and by the 1933–34 Senate hearings on improper market activity.<sup>1</sup>

The financing of U.S. industry depends on raising vast amounts of capital. During every business day in the United States, many billions of dollars of stocks, bonds, and other securities are sold to thousands of individuals, corporations, trust funds, pension plans, mutual funds, and other investors. Such investors cannot be expected to venture their money without forethought. They have to be able to assess the risks involved: the possibility of either a profit or loss being returned to them as well as the expected amount.

Consequently, disclosure of sufficient, accurate information is absolutely necessary to stimulate the inflow of large quantities of capital. Enough data must be available to encourage investors to consider buying and selling securities in hopes of generating profits. With inadequate or unreliable information on which to base these decisions, investing becomes little more than gambling.

## The Work of the Securities and Exchange Commission

In the United States, the responsibility for ensuring that complete and reliable information is available to investors lies with the Securities and Exchange Commission (SEC), an independent agency of the federal government created by the Securities Exchange Act of 1934. Although the SEC’s authority applies mainly to publicly held companies, the commission’s guidelines and requirements have had a major influence in the United States on the development of all generally accepted accounting principles (GAAP).

<sup>1</sup>The relative size of ownership is most often the key factor in assessing one company’s degree of influence over another. However, as discussed later in this chapter, other factors (e.g., contractual relationships between firms) can also provide influence or control over firms regardless of the percentage of shares owned.

## Learning Objectives

After studying this chapter, you should be able to:

- LO 12-1** Understand the origin and expansive role of the Securities and Exchange Commission.
- LO 12-2** Describe the purpose(s) of various federal securities laws.
- LO 12-3** Understand the Congressional rationale for enacting the Sarbanes–Oxley Act and the responsibilities of the Public Company Accounting Oversight Board.
- LO 12-4** Describe the SEC’s role in establishing generally accepted accounting principles (GAAP).
- LO 12-5** Define and describe an issuer’s filings with the Securities and Exchange Commission.
- LO 12-6** Describe an issuer’s registration process, various forms used by the issuers, and the exemption(s) from registration.

## LO 12-1

Understand the origin and expansive role of the Securities and Exchange Commission.

As described on the SEC's website:

The mission of the U.S. Securities and Exchange Commission is to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation.

As more and more first-time investors turn to the markets to help secure their futures, pay for homes, and send children to college, our investor protection mission is more compelling than ever.

As our nation's securities exchanges mature into global for-profit competitors, there is even greater need for sound market regulation.

And the common interest of all Americans in a growing economy that produces jobs, improves our standard of living, and protects the value of our savings means that all of the SEC's actions must be taken with an eye toward promoting the capital formation that is necessary to sustain economic growth.

The world of investing is fascinating and complex, and it can be very fruitful. But unlike the banking world, where deposits are guaranteed by the federal government, stocks, bonds and other securities can lose value. There are no guarantees. That's why investing is not a spectator sport. By far the best way for investors to protect the money they put into the securities markets is to do research and ask questions.

The laws and rules that govern the securities industry in the United States derive from a simple and straightforward concept: all investors, whether large institutions or private individuals, should have access to certain basic facts about an investment prior to buying it, and so long as they hold it. To achieve this, the SEC requires public companies to disclose meaningful financial and other information to the public. This provides a common pool of knowledge for all investors to use to judge for themselves whether to buy, sell, or hold a particular security. Only through the steady flow of timely, comprehensive, and accurate information can people make sound investment decisions.<sup>2</sup>

The SEC is headed by five commissioners appointed by the president of the United States (with the consent of the Senate) to serve five-year staggered terms. To ensure the bipartisan nature of this group, no more than three of these individuals can belong to the same political party. The chairman is from the same political party as the president. The commissioners provide leadership for an agency that has grown over the years into an organization with approximately 4,600 employees in 11 regional locations. Despite its importance, the SEC is a relatively small component of the federal government. However, the SEC generates significant fees primarily from issuers, relative to 8-K, 10-K, 10-Q, and registration statement fees. This results in a fully self-funded SEC.

The SEC is composed of five divisions and 23 offices including the following:

- The *Division of Corporation Finance* has responsibility to ensure that publicly held companies meet disclosure requirements. This division reviews registration statements, annual and quarterly filings, proxy materials, annual reports, and tender offers.
- The *Division of Trading and Markets* oversees the securities markets in this country and is responsible for registering and regulating brokerage firms. This division also oversees the Securities Investor Protection Corporation (SIPC), a nonprofit corporation that provides insurance for cash and securities held by customers in member brokerage firms. This insurance protects ("insures") against the failure of the member brokerage firms.
- The *Division of Enforcement* helps to ensure compliance with federal securities laws. This division investigates possible violations of securities laws and recommends appropriate remedies. The most common issues facing this division are insider trading, misrepresentation or omission of important information about securities, manipulation of the market price of a security, and issuance of securities without proper registration. According to the SEC's annual report, 807 investigations of possible violations were initiated in 2015.
- The *Division of Investment Management* oversees the \$66.8 trillion investment management industry and administers the securities laws affecting investment companies including mutual funds and investment advisers. This division also interprets laws and regulations for the public and the SEC staff.

<sup>2</sup> The U.S. Securities and Exchange Commission, SEC website, March 2016. Available at [www.sec.gov/about/whatwedo.shtml](http://www.sec.gov/about/whatwedo.shtml).

- The *Division of Economic and Risk Analysis* assists the SEC in efforts to protect investors, maintain efficient markets, and facilitate capital creation. This Division interacts with every SEC Division and office and provides access to sophisticated economic and risk analysis to help advise and inform policy makers and rule makers.
- The *Office of Information Technology* supports the SEC and its staff in all aspects of information technology. This office operates the Electronic Data Gathering Analysis and Retrieval (EDGAR) system, which electronically receives, processes, and disseminates more than half a million financial statements every year. This office also maintains a very active website that contains a tremendous amount of data about the SEC and the securities industry and free access to EDGAR.<sup>3</sup>
- The *Office of Compliance Inspections and Examinations* determines whether brokers, dealers, and investment companies and advisers comply with federal securities laws. One of the most important goals of this office is the quick and often informal correction of compliance problems.
- The *Office of the Chief Accountant* is the principal adviser to the commission on accounting and auditing matters that arise in connection with the securities laws. The office also works closely with private sector bodies such as the FASB and the AICPA that set various accounting and auditing standards.

This chapter provides an overview of the workings of the Securities and Exchange Commission as well as the agency's relationship to the accounting profession. Because complete examination of the organization is beyond the scope of this textbook, we discuss only a portion of the SEC's extensive functions here. This coverage introduces the role the agency currently plays in the world of U.S. business.

#### LO 12-2

Describe the purpose(s) of various federal securities laws.

### Purpose of the Federal Securities Laws

Before examining the SEC and its various functions in more detail, a historical perspective should be established. The development of laws regulating companies involved in interstate commerce was discussed as early as 1885. In fact, the Industrial Commission created by Congress suggested in 1902 that all publicly held companies should be required to disclose material information including annual financial reports. However, the crisis following the stock market crash of 1929 and the widespread fraud that was subsequently discovered were necessary to prompt Congress to act in hope of reestablishing the trust and stability needed for the capital markets.

Before the Great Crash of 1929, there was little support for federal regulation of the securities markets. This was particularly true during the post–World War I surge of securities activity. Proposals that the federal government require financial disclosure and prevent the fraudulent sale of stock were never seriously pursued. Tempted by promises of “rags to riches” transformations and easy credit, most investors gave little thought to the systemic risk that arose from widespread abuse of margin financing and unreliable information about the securities in which they were investing. During the 1920s, approximately 20 million large and small shareholders took advantage of post-war prosperity and set out to make their fortunes in the stock market. It is estimated that of the \$50 billion in new securities offered during this period, half became worthless. When the stock market crashed in October 1929, the fortunes of countless investors were lost. . . . When the stock market crashed in October 1929, public confidence in the markets plummeted. There was a consensus that for the economy to recover, the public's faith in the capital markets needed to be restored.<sup>4</sup>

As a result, Congress enacted two primary pieces of securities legislation designed to restore investor trust in the capital markets by providing more structure and government oversight:

- The Securities Act of 1933, often referred to as the *truth in securities law*, regulates the initial offering of securities by a company or underwriter.
- The Securities Exchange Act of 1934, which actually created the SEC, regulates the subsequent trading of securities through brokers and exchanges.

<sup>3</sup> [www.sec.gov/edgar/searchedgar/webusers.htm](http://www.sec.gov/edgar/searchedgar/webusers.htm).

<sup>4</sup> U.S. Securities and Exchange Commission, SEC website, March 2016. Available at [www.sec.gov/about/whatwedo.shtml](http://www.sec.gov/about/whatwedo.shtml).

These laws put an end to the legality of many abuses that had been common practices such as the manipulation of stock market prices and the misuse of corporate information by officials and directors (often referred to as *inside parties*<sup>5</sup>) for their own personal gain. Just as important, these two legislative actions were designed to help rebuild public confidence in the capital market system. Because of the large losses suffered during the 1929 market crash and the subsequent depression, many investors had begun to avoid buying stocks, bonds, or other securities.

This reduction in the pool of available capital dramatically compounded the economic problems of the day.

The creation of federal securities laws did not end with the 1933 Act and the 1934 Act. During the decades since the first commissioners were appointed, the SEC has administered rules and regulations created by a number of different congressional actions. Despite the passage of subsequent legislation, this organization's major objectives have remained relatively constant. Over the years, the SEC has attempted to achieve several interconnected goals including

- Ensuring that full and fair information is disclosed to all investors before the securities of a company are allowed to be bought and sold.
- Prohibiting the dissemination of materially misstated information.
- Preventing the misuse of information especially by inside parties.
- Regulating the operation of securities markets such as the New York Stock Exchange and the various over-the-counter exchanges.

In many regards, the SEC's work has been a success. The value of the securities that have been registered as well as the volume of these securities bought and sold each business day is staggering by any standard. Over the decades, the number of individuals and institutions (from both inside and outside the United States) willing to take the risk of making financial investments has grown to incredible numbers. In 2015 alone, more than 4.2 trillion shares were exchanged on just the New York Stock Exchange.<sup>6</sup> However, a cloud has rested over the entire U.S. capital market system. Since the early 2000s when a number of highly publicized corporate scandals shook public confidence in the financial information available for decision-making purposes. Where once most investors appeared to believe in the overall integrity of the stock markets, that faith clearly diminished although the problem did not reach the magnitude seen in the 1930s. This lack of confidence was a drag on the general willingness to invest and, thus, on the economy as a whole.

An unlimited number of reasons can be put forth for these scandals. Some of them are

- Greed by corporate executives.
- Failure in the corporate governance process as practiced by many boards of directors.
- Failure of public accounting firms to apply appropriate quality control measures to ensure independent judgments.
- Shortcomings in promulgated standards used to self-regulate the accounting profession.
- Unreasonable market expectations brought on by years of skyrocketing stock values fueled in part by technology stocks.
- A workload that overburdened the Securities and Exchange Commission, which the relatively small agency could not handle in an adequate fashion.

As a result, on July 30, 2002, President George W. Bush signed the Sarbanes–Oxley Act of 2002. This wide-ranging legislation was designed to end many of the problems that have

<sup>5</sup> *Inside parties* usually are identified as the officers of a company as well as its directors and any owners of more than 10 percent of any class of equity security. An individual's level of ownership is measured by a person's own holdings of equity securities as well as ownership by related parties such as a spouse, minor children, relatives living in the same house as the person in question, or a trust in which the person is the beneficiary.

<sup>6</sup> NYSE website, March 2016. Available at [www.nyxdata.com/](http://www.nyxdata.com/).

plagued corporate reporting and the securities markets in recent years in the hope of restoring public confidence. This law has had an enormous impact on public accounting as well as the reporting required in connection with the issuance of securities.

In light of additional financial market scandals, Congress passed and President Obama signed the Wall Street Reform and Consumer Protection Act of 2010.<sup>7</sup> This new legislation marks a significant expansion of the federal government's role in regulating corporate governance and provides expanded authority to the SEC to require extensive disclosures concerning corporate compensation.

### Full and Fair Disclosure

No responsibility of the SEC is more vital than that of ensuring that a company has disclosed sufficient, reliable information before its stocks, bonds, or other securities are publicly traded. The noted reporting problems that became the scandals at companies such as Enron, WorldCom, Adelphia, and Tyco still draw increased attention to this role.

Unless specifically exempted, all publicly held companies (frequently referred to as *issuers* or *registrants*) must periodically file detailed reports with the SEC. The SEC requires and regulates these filings as a result of a number of laws passed by Congress over the years:

1. *Securities Act of 1933*: Requires the registration of new securities offered for public sale so that potential investors can have adequate information. The act is also intended to prevent deceit and misrepresentation in connection with the sale of securities.<sup>8</sup>
2. *Securities Exchange Act of 1934*: Created the SEC and empowered it to require reporting by publicly owned companies and registration of securities, security exchanges, and certain brokers and dealers. This act prohibits fraudulent and unfair behavior such as sales practice abuses and insider trading.
3. *Public Utility Holding Company Act of 1935*: Requires registration of interstate holding companies of public utilities covered by this law. This act was passed because of abuses in the 1920s in which huge, complex utility empires were created to minimize the need for equity financing.
4. *Trust Indenture Act of 1939*: Requires registration of trust indenture documents and supporting data in connection with the public sale of bonds, debentures, notes, and other debt securities.
5. *Investment Company Act of 1940*: Requires registration of investment companies, including mutual funds, that engage in investing and trading in securities. This act is designed in part to minimize conflicts of interest that arise with fund management.
6. *Investment Advisers Act of 1940* and *Securities Investor Protection Act of 1970*: Require investment advisers to register and to follow certain standards created to protect investors.
7. *Foreign Corrupt Practices Act of 1977*: Affects registration indirectly through amendment to the Securities Exchange Act of 1934. This act requires the maintenance of accounting records and adequate internal accounting controls.
8. *Insider Trading Sanctions Act of 1984* and *Insider Trading and Securities Fraud Enforcement Act of 1988*: Also affect registration indirectly. Increase the penalties against persons who profit from illegal use of inside information and who are associated with market manipulation and securities fraud.
9. *Sarbanes–Oxley Act of 2002*: Designed as an answer to the numerous corporate accounting scandals that came to light in 2001 and 2002. As discussed in a later section of this chapter, this act mandated a number of reforms to bolster corporate responsibility, strengthen disclosure, and combat fraud. It also created the Public Company Accounting Oversight Board (PCAOB) to oversee the accounting profession.

<sup>7</sup>Public Law No. 111–203, 124 stat. 1376 (2010). This statute is commonly referred to as the “Dodd–Frank Act.”

<sup>8</sup>Interestingly, one of the provisions originally suggested for this act would have created a federal corps of auditors. The defeat of this proposal (after some debate) has allowed for the rise of the independent auditing profession as it is currently structured in the United States. For more information, see Mark Moran and Gary John Previts, “The SEC and the Profession, 1934–1984: The Realities of Self-Regulation,” *Journal of Accountancy*, July 1984.



### ***SEC Requirements***

As is obvious from the previous list of statutes, the SEC administers extensive filing requirements. Thus, accountants who specialize in working with the federal securities laws must develop a broad knowledge of a great many reporting rules and regulations. The SEC specifies most of these disclosure requirements in two basic documents, *Regulation S-K* and *Regulation S-X*, which are supplemented by periodic releases and staff bulletins.

*Regulation S-K* established requirements for all nonfinancial information contained in filings with the SEC. Descriptions of the registrant's business and its securities are just two items covered by these regulations. A partial list of other nonfinancial data to be disclosed includes specified data about the company's directors, officers, and other management; management's discussion and analysis of the current financial condition and the results of operations; and descriptions of both legal proceedings and the company's properties.

*Regulation S-X* prescribed the form and content of the financial statements (and the accompanying notes and related schedules) included in the various reports filed with the SEC. Thus, before being accepted, all financial information must meet a number of clearly specified requirements established by Regulation S-X.

### ***The SEC's Impact on Financial Reporting to Stockholders***

The SEC's disclosure and accounting requirements are not limited to the filings made directly with that body. *Rule 14c-3* of the 1934 Act states that the annual reports of publicly held companies should include financial statements that have been audited. This information (referred to as *proxy information* because it accompanies the management's request to cast votes for absentee stockholders at the annual shareholders meeting) must present balance sheets as of the end of the two most recent fiscal years along with income statements and cash flow statements for the three most recent fiscal years. *Rule 14c-3* also states that additional information, as specified in *Regulation S-K*, should be included in this annual report. The result has been a significant demand for CPAs to provide services as independent auditors.

Over the years, the SEC has moved toward an *integrated disclosure system*. Under this approach, much of the same reported information that the SEC requires must also go to the shareholders. Thus, the overall reporting process is simplified because only a single set of information must be generated in most cases. The integrated disclosure system is also intended as a way to improve the quality of the disclosures received directly by the shareholders.

Information required in proxy statements, which the shareholders receive directly, includes the following:

1. Five-year summary of operations including sales, total assets, income from continuing operations, and cash dividends per share.
2. Description of the business activities including principal products and sources and availability of raw materials.
3. Three-year summary of industry segments, export sales, and foreign and domestic operations.
4. List of company directors and executive officers.
5. Market price of the company's common stock for each quarterly period within the two most recent fiscal years.
6. Any restrictions on the company's ability to continue paying dividends.
7. Management's discussion and analysis of financial condition, changes in financial condition, and results of operations. This discussion should include liquidity, trends and significant events, causes of material changes in the financial statements, and the impact of inflation on the company.

In addition, even prior to passage of the Sarbanes-Oxley Act, the SEC required certain disclosures in proxy statements describing the services provided by the registrant's independent

external auditor. This information helped to ensure that true independence was not endangered. Apparently, mere disclosure was not adequate in all cases.

Such disclosure must include the following:

1. All nonaudit services provided by the independent audit firm.
2. A statement as to whether the board of directors (or its audit committee) approved all non-audit services after considering the possibility that such services might impair the external auditor's independence.
3. The percentage of nonaudit fees to the total annual audit fee. This disclosure helps indicate the importance of the audit work to the firm versus the reward from any other services provided to the registrant.
4. Individual nonaudit fees that are more than 3 percent of the annual audit fee.

### LO 12-3

Understand the Congressional rationale for enacting the Sarbanes-Oxley Act and the responsibilities of the Public Company Accounting Oversight Board.

## Corporate Accounting Scandals and the Sarbanes-Oxley Act

When William H. Donaldson entered his cavernous corner office on the sixth floor of the Securities and Exchange Commission in 2003, he headed an agency at one of its lowest points since its creation 80 years ago.<sup>9</sup>

Enron's former chairman and chief executive, Kenneth Lay, received \$152.7 million in payments and stock in the year leading up to the company's collapse amid revelations that it hid debt and inflated profit for years. Lay's take in 2001 was more than 11,000 times the maximum amount of severance paid to laid-off workers.

Former WorldCom CEO Bernard Ebbers borrowed \$408 million from the telecommunications company that had improperly accounted for \$9 billion and was forced into bankruptcy. Ebbers had pledged company shares as collateral, but with those shares, once valued at \$286 million, worthless, he was said to be considering forgoing his \$1.5 million annual pension to help settle the debt.

Adelphia Communications's founder and former CEO, John J. Rigas, allegedly conspired with four other executives to loot the company, leading prosecutors to seek the forfeiture of more than \$2.5 billion.<sup>10</sup>

Hardly a day passed during 2002 without a new revelation of corporate wrongdoing. The list of companies whose executives virtually robbed the corporate treasury or whose accounting practices ranged from dubious to outrageous is unfortunately long. Throughout this excruciating disclosure process, many in the investing public began to raise two related questions:

Why didn't the independent auditor stop these practices?

How can the SEC allow such activities to occur?

As indicated previously, a number of theories can suggest the cause of the ethical meltdown during this period, ranging from human greed to inappropriate auditing practices. In truth, as the history of this time continues to unfold, a variety of culprits share the blame for such reprehensible behavior on both the corporate and the individual levels.

Regardless of the reasons, drastic actions had to be taken to reduce or eliminate future abuses (actual and perceived) to begin restoring public confidence in publicly traded entities and their disclosed accounting information. A capitalistic economy needs readily accepted investments, and that is possible only if investors believe they can make wise decisions to buy and sell securities based on the information available. Thus, Congress passed the Sarbanes-Oxley Act in July 2002<sup>11</sup> by a virtually unanimous vote. The scope

<sup>9</sup> Stephen Labaton, "Can a Bloodied S.E.C. Dust Itself Off and Get Moving?" *The New York Times*, December 16, 2002, p. C-2.

<sup>10</sup> Brad Foss, "Unearthing of Corporate Scandals Exposed Market's Vulnerabilities," Associated Press Newswires, December 12, 2002.

<sup>11</sup> Public Law 107-204; 107th Congress, July 30, 2002.

and potential consequences of this legislation are extremely broad; the actual impact will probably not be determined for decades. “The Sarbanes–Oxley Act of 2002 is a major reform package mandating the most far-reaching changes Congress has imposed on the business world since FDR’s New Deal.”<sup>12</sup>

The act is so wide ranging that this text describes only a general overview of some of the more frequently discussed statutory provisions here.

### Creation of the Public Company Accounting Oversight Board

The public accounting profession has long taken pride in its own self-regulation. Through its major professional body, the American Institute of Certified Public Accountants (AICPA), the profession has established and enforced its own code of conduct and, through its Auditing Standards Board (ASB), created its own auditing standards for decades. The maintenance of public trust was often heard as a litany for the creation of such professional guidelines. Unfortunately, self-regulation obviously was not always successful in the public auditing arena. One of the inherent flaws in the system was that the professional body, the AICPA, was considerably smaller than many of the international audit firms that it sought to control. Discipline and conformity are simply difficult to maintain when the students are many times bigger, richer, and more powerful than the principal.

The Sarbanes–Oxley Act created the Public Company Accounting Oversight Board (PCAOB) to oversee auditors of public companies. The creation of the Oversight Board—a governmental board under the control of the SEC—effectively minimizes self-regulation in the accounting profession. The board

- Has five members appointed by the SEC to staggered five-year terms.<sup>13</sup>
- Allows only two members to be accountants, past or present.<sup>14</sup>
- Enforces auditing, quality control, and independence standards and rules.
- Is under the oversight and enforcement authority of the SEC.
- Is funded from fees levied on all publicly traded companies.

These few provisions show that this Oversight Board rather than the accounting profession is now ultimately in charge of regulating public accounting firms whose clients are publicly traded companies. Although the board itself is not a government agency, the SEC has control of it and, thus, is a much more active participant in the work of the independent auditor. For example, the SEC is to pick the five members of the board (after consultation with the chair of the Board of Governors of the Federal Reserve System and the secretary of the U.S. Department of the Treasury). The Act requires the board members to be prominent individuals of integrity and good reputation who must cease all other professional and business activities to help ensure independence and adequate time commitment.

One of the most interesting issues is how the Oversight Board interacts with the Auditing Standards Board to promulgate audit and attestation standards. While the AICPA authorizes the ASB to issue such pronouncements, the mandate of the Sarbanes–Oxley Act requires the Oversight Board to play a significant role in this process. Although directed to cooperate with the accounting profession, the PCAOB has the authority to amend, modify, repeal, or reject any auditing standard.<sup>15</sup> ASB standards, unless later modified or superseded by the PCAOB, are adopted for audits of securities issuers. The Oversight Board has since taken an active role in developing its own pronouncements and many new ASB pronouncements apply only to nonissuers.

<sup>12</sup> Richard I. Miller and Paul H. Pashkoff, “Regulations under the Sarbanes–Oxley Act,” *Journal of Accountancy*, October 2002, p. 33.

<sup>13</sup> Sarbanes–Oxley Act of 2002, Sec. 101(e)(1).

<sup>14</sup> *Ibid.*, Sec. 101(e)(2).

<sup>15</sup> *Ibid.*, Sec. 103(a)(1).

## Registration of Public Accounting Firms

Registration of public accounting firms is required only of firms that prepare, issue, or participate in preparing an audit report for an issuer—basically an entity that issues securities on a publicly traded exchange. Consequently, virtually all public accounting firms of significant size must register, but most small firms do not need to register. Even foreign firms that play a substantial role in the audit of an organization that has securities registered in the United States must register with the PCAOB and follow the rules of the Sarbanes–Oxley Act. This act has a significant impact on the activities of foreign companies that sell their securities on U.S. markets, an impact not necessarily appreciated outside the United States. “Under the law, CEOs are required to vouch for financial statements, boards must have audit committees drawn from independent directors, and companies can no longer make loans to corporate directors. All of that conflicts with some other countries’ rules and customs.”<sup>16</sup>

The application process for PCAOB registration provides the Oversight Board a significant amount of information about the audit firms. The firms must identify each of their audit clients that qualifies as an issuer and the Oversight Board then assesses an annual fee on the issuer based on the size of its market capitalization. These fees serve, in part, as the financial support for the work of the Oversight Board.<sup>17</sup>

Other information required of the accounting firms in this application process includes the following:

- A list of all accountants participating in the audit report of any client qualifying as an issuer.
- Annual fees received from each issuer with the amounts separated as to audit and nonaudit services.
- Information about any criminal, civil, or administrative actions pending against the firm or any person associated with the firm.
- Information regarding disagreements between the issuer and the auditing firm during the previous year.

### *Inspections of Registered Firms*

After registration, each audit firm is subject to periodic inspections by the PCAOB. Any firm that audits more than 100 issuers per year will be inspected annually. All other registered firms will be inspected every three years. The Oversight Board has the power to take disciplinary action as a result of the findings of these inspections. In addition, deficiencies can be made public if the firm does not address them in an appropriate fashion within 12 months.

The PCAOB’s power is not limited just to reacting to the findings of annual inspections. “The new board has a full range of sanctions at its disposal, including suspension or revocation of registration, censure, and significant fines. It has authority to investigate any act or practice that may violate the act, the new board’s rules, the provisions of the federal securities laws relating to audit reports, or applicable professional standards.”<sup>18</sup> Clearly, Congress provided the new Oversight Board extensive powers to enable it to clean up any problems discovered in public accounting.

### *Auditor Independence*

One of the most discussed issues surrounding accounting scandals is the failure of audit firms to act independently in dealing with audit clients. Not surprisingly, a significant portion of the Sarbanes–Oxley Act ensures that public accounting firms are, indeed, independent. Certain services that could previously have been provided to an audit client are now forbidden.<sup>19</sup> These

<sup>16</sup> Louis Lavelle and Mike McNamee, “Will Overseas Boards Play by American Rules?” *BusinessWeek*, December 16, 2002, p. 36.

<sup>17</sup> Sarbanes–Oxley Act of 2002, Sec. 102(b)(2).

<sup>18</sup> Miller and Pashkoff, “Regulations under the Sarbanes–Oxley Act,” pp. 35 and 36.

<sup>19</sup> Sarbanes–Oxley Act of 2002, Sec. 201.

include financial information system design and implementation as well as internal audit outsourcing. The client's audit committee must preapprove any allowed services and disclose them in reports to the SEC.

Audit committees have long been considered an important element in maintaining an appropriate distance between the external auditors and the management of the client. The committee has been composed of members of the company's board of directors and served as a liaison with the auditors. However, in actual practice, the work and the composition of the audit committee tended to vary greatly from company to company, until the Sarbanes–Oxley Act formalized the liaison role by making the audit committee responsible for the appointment and compensation of the external auditor. To help ensure impartiality, the committee must be made up of individuals who are independent from management. The Act directs the auditor to report to the audit committee rather than to company management. To further ensure independence from management, the lead partner of the audit firm must be rotated off the job after five years.<sup>20</sup>

These provisions, as well as the many other elements of the Sarbanes–Oxley Act, have changed public accounting as it was known in the past. Drastic action was needed and was taken.<sup>21</sup> This Act has strengthened the independent audit to help eliminate the dubious practices that haunted public accounting. Some of these steps may not have been necessary, but the need to reestablish public confidence in the capital market system forced the legislators to avoid any “quick-fix” solutions.

#### LO 12-4

Describe the SEC's role in establishing generally accepted accounting principles (GAAP).

## The SEC's Authority and SEC Filings

### The SEC's Authority over Generally Accepted Accounting Principles

The primary focus of the Sarbanes–Oxley Act was on the regulation of independent auditors and auditing standards. Therefore, it had little impact on accounting standards and the registration of securities. Those regulations continue to evolve over time. Because financial reporting standards can be changed merely by amending *Regulation S–X*, the SEC holds the ultimate legal authority for establishing accounting principles for most publicly held companies in this country. In the past, the SEC has usually restricted the application of this power to disclosure issues while looking to the private sector (with the SEC's oversight) to formulate accounting principles. For this reason, the FASB rather than the SEC is generally viewed as the main standards-setting body for financial accounting in the United States. “Under federal law, the SEC has the mandate to determine accounting principles for publicly traded companies. But it has generally ceded that authority to private-sector accounting bodies such as the Financial Accounting Standards Board.”<sup>22</sup>

On the accounting side of self-regulation, from its inception, the FASB has been a free-standing organization entirely separate from the AICPA. As we discuss later, the SEC has always had the ability to significantly impact accounting standards. Furthermore, the problems that led to the largest corporate scandals were less about accounting issues and more about audit failures. Some observers, however, contend that the rules-based orientation of U.S. generally accepted accounting principles encourages income manipulation, which also could encourage more investigative activity by the SEC in this area.

However, the SEC does retain the ability to exercise its power with regard to the continuing evolution of accounting principles. The chief accountant of the SEC (described earlier in this chapter) is responsible for providing the commissioners and the commission staff with

<sup>20</sup> Ibid., Sec. 203.

<sup>21</sup> The Sarbanes–Oxley Act, particularly Section 404 requirements, adds a significant cost to reporting operations for public companies. However, the SEC attempted to provide “Section 404 relief” from the “multi-million-dollar expenses,” while still ensuring proper disclosure. “Getting It Right,” *Journal of Accountancy*, March 2007, p. 29.

<sup>22</sup> Kevin G. Salwen and Robin Goldwyn Blumenthal, “Tackling Accounting, SEC Pushes Changes with Broad Impact,” *The Wall Street Journal*, September 27, 1990, p. A1.

advice on all current accounting and auditing matters and helps to draft rules for the form and content of financial statement disclosure and other reporting requirements. Because he or she is the principal adviser to the SEC on all accounting and auditing matters,<sup>23</sup> the most powerful accounting position in the United States is that of chief accountant of the SEC. The work of the chief accountant can lead the SEC to pass amendments as needed to alter various aspects of *Regulation S-X*.

The SEC had issued *Financial Reporting Releases (FRRs)* to supplement *Regulation S-X* and *Regulation S-K*. They explain desired changes in the reporting requirements. By the end of 1998, 50 FRRs had been issued.<sup>24</sup> By 2004 this number was 72. In addition, the staff of the SEC publishes a series of *Staff Accounting Bulletins (SABs)* as a means of informing the financial community of its positions.

Staff Accounting Bulletins reflect the SEC staff's views regarding accounting-related disclosure practices. They represent interpretations and policies followed by the Division of Corporation Finance and the Office of the Chief Accountant in administering the disclosure requirements of the federal securities laws.

For example, *SAB 101* was released in 1999 to provide guidance in connection with the recognition of revenue. The bulletin first stated that any transaction that fell within the scope of specific authoritative literature (e.g., a FASB statement) should be reported based on that pronouncement. *SAB 101* then established guidelines for revenue recognition situations when authoritative standards were not available. In such cases, a reporting entity should recognize revenue when realized (or realizable) and earned. However, *SAB 101* then went further to establish four criteria for revenue recognition: evidence that an arrangement exists, delivery has occurred or services have been rendered, the price is fixed or can be determined, and collectibility is reasonably assured. To help apply these criteria in actual practice, *SAB 101* included nine examples to show how to judge revenue recognition in such cases as the receipt of money in layaway programs and annual membership fees received by discount retailers.

### ***Additional Disclosure Requirements***

Historically, the SEC has restricted the use of its authority (as in *SAB 101*) to the gray areas of accounting for which official guidance is not available. New reporting problems arise each year while no authoritative body has ever completely addressed many other accounting issues, even after years of discussion. As another response to such problems, the SEC often requires the disclosure of additional data if current rules are viewed as insufficient.

It was in the 1970s that the SEC seemed to single out disclosure as the area in which it would take the standard-setting lead, leaving measurement issues to the FASB. This was when the SEC was expanding the coverage of Management's Discussion & Analysis (MD&A), an extensive narrative disclosure that is required to be appended to the financial statements.<sup>25</sup>

For example, in the early part of 1997, while the FASB worked on a project concerning the accounting for derivatives, the SEC approved rules so that more information would be available immediately. Note disclosure in financial statements had to include more information about accounting policies used. In addition, information about the risk of loss from market rate or price changes inherent in derivatives and other financial instruments was required. By means of these disclosures, the SEC enabled investors to have data about the potential consequences of the company's financial position.

<sup>23</sup> [www.sec.gov/about/whatwedo.shtml](http://www.sec.gov/about/whatwedo.shtml), March 2016.

<sup>24</sup> From 1937 until 1982, the SEC issued more than 300 *Accounting Series Releases (ASRs)* to (1) amend *Regulation S-X*, (2) express interpretations regarding accounting and auditing issues, and (3) report disciplinary actions against public accountants. The SEC codified the ASRs that dealt with financial reporting matters of continuing interest and issued it as *Financial Reporting Release No. 1*.

<sup>25</sup> Stephen A. Zeff, "A Perspective on the U.S. Public/Private-Sector Approach to the Regulation of Financial Reporting," *Accounting Horizons*, March 1995, pp. 58–59.

### ***Moratorium on Specific Accounting Practices***

The commission also can exert its power by declaring a moratorium on the use of specified accounting practices. When authoritative guidance is not present, the SEC can simply prohibit a particular method from being applied. As an example, in the 1980s, companies utilized a variety of procedures to account for internal computer software costs because no official pronouncement had yet been issued. Consequently, the SEC

imposed a moratorium that will prohibit companies that plan to go public from capitalizing the internal costs of developing computer software for sale or lease or marketed to customers in other ways. . . . The decision doesn't prevent companies currently capitalizing internal software expenses from continuing, but the companies must disclose the effect of not expensing such costs as incurred. The moratorium continues until the Financial Accounting Standards Board issues a standard on the issue.<sup>26</sup>

Two years later when the FASB eventually arrived at a resolution of this question and issued *SFAS 86*, "Accounting for the Costs of Computer Software to Be Sold, Leased, or Otherwise Marketed," the SEC dropped the moratorium. Hence, the FASB set the accounting rule, but the SEC ensured appropriate reporting until that time.

### ***Challenging Individual Statements***

As described, officially requiring additional disclosure and prohibiting the application of certain accounting practices are two methods the SEC uses to control the financial reporting process. Forcing a specific registrant to change its filed statements is another, less formal approach that can create the same control. For example,

Advanced Micro Devices, Inc., agreed to settle an investigation by the Securities and Exchange Commission of the semiconductor company's public disclosures. The SEC found AMD "made inaccurate and misleading statements" concerning development of its 486 microprocessor. In 1992 and 1993, AMD "led the public to believe that it was independently designing the microcode for its 486 microprocessor without access" to the code of its rival chipmaker, Intel Corp., the SEC said, "when, in fact, AMD had provided its engineers . . . with Intel's copyrighted 386 microcode to accelerate the company's development efforts." Without admitting or denying the commission's findings, AMD, based in Sunnyvale, California, consented to an order barring it from committing future violations of SEC rules. No fines were imposed.<sup>27</sup>

Following the SEC's action, any company involved in a similar event would certainly be well advised to provide the suggested disclosure. Failing to do so could result in the SEC's refusal to approve an issuer's future registrations.

The Dodd-Frank Act strengthens the SEC's role in challenging, or at least questioning, financial statements. The act added a new provision to the Securities Exchange Act, pursuant to which the SEC may require listed companies to adopt and publish policies by which they will disgorge or "claw back" executive compensation when restated financial statements are necessitated by executive misconduct. Failure to adopt such policies results in mandatory delisting.<sup>28</sup>

### ***Overruling the FASB***

The SEC's actions are not necessarily limited, however, to the gray areas of accounting. Although the commission generally has allowed the FASB (and previous authoritative groups) to establish accounting principles, the SEC retains the authority to override or negate any pronouncements produced in the private sector. This power was dramatically demonstrated in 1977 when the FASB issued *SFAS 19*, "Financial Accounting and Reporting by Oil and Gas Producing Companies." After an extended debate over the merits of alternative methods, the FASB issued this statement requiring oil- and gas-producing companies to apply the successful-efforts method when accounting for unsuccessful exploration and drilling costs.

<sup>26</sup> "SEC Imposes 'Software Costs' Moratorium," *Journal of Accountancy*, September 1983, p. 3.

<sup>27</sup> "SEC Inquiry on Disclosure to Public Is Being Settled," *The Wall Street Journal*, October 1, 1996, p. B4.

<sup>28</sup> Dodd-Frank §954.

In response, the SEC almost immediately invoked a moratorium on the use of this practice until an alternative approach could be evaluated. Thus, companies filing with the SEC were not allowed to follow the method established by the FASB (after years of formal study and deliberation by that body). Although the commission's reaction toward the accounting profession was a unique instance, the handling of this one issue clearly demonstrates the veto power that the SEC maintains over the work of the FASB.<sup>29</sup>

### LO 12-5

Define and describe an issuer's filings with the Securities and Exchange Commission.

## Filings with the SEC

Because of legislation and regulations, registrants may be required to make numerous different filings with the SEC. The SEC actually receives hundreds of thousands of filings per year. However, for the overview presented here, the reporting process is divided into two very broad categories:

1. Registration statements.
2. Periodic filings.

Registration statements ensure the disclosure of sufficient, relevant financial data before either a company or its underwriters can *initially offer* a security to the public. The Securities Act of 1933 mandates dissemination of such information. Registration is necessary except in certain situations described at a later point in this chapter. The SEC charges a registration fee based on the value of the securities offered.<sup>30</sup> This fee is a very small fraction of the value of the securities being issued. In 2013, it was \$136.40 for each \$1 million of security offering. The SEC collects fees vastly in excess of its operating costs and, in fact, has a net position at the end of most fiscal years.

For years, the existence of this surplus has caused debate. Some view it as a source of general revenue for the federal government, and others have argued that it indicated that corporations were being overcharged for the registration process. However, another possibility emerged as a result of the corporate accounting scandals in 2001 and 2002: The surplus probably meant that the resources being invested in the SEC's work were not adequate. In other words, the agency could simply not meet its responsibilities with the money allotted. Not surprisingly, the Sarbanes–Oxley Act authorized a 77 percent increase in the agency's budget as well as a substantial increase in the size of its staff. However, this authorization did not necessarily mean that the SEC would actually receive more money in the budgeting process.

Instead of supporting the 77 percent budget hike promised by Congress, the White House wants the SEC to make do with a more modest \$568 million next year. The Commission's 2002 budget was \$438 million. While this might seem like a lot, Harvey Goldschmid [SEC Commissioner] said that it is not enough to pay for the effective policing of 17,000 companies, 34,000 investment portfolios, and 7,500 financial advisers, especially in a climate where so much emphasis is placed on the quality of oversight.<sup>31</sup>

After initial registration, a number of federal laws, the most important of which is the Securities Exchange Act of 1934, require registrants to provide periodic filings. This legislation has resulted in the *continual reporting of specified data* by all companies that have securities publicly traded on either a national securities exchange or an over-the-counter market.

For registration statements as well as periodic filings, the SEC has established forms that give the format and content to be followed in providing required information. "These

<sup>29</sup> For a detailed account of the activities surrounding the SEC's rejection of SFAS 19, see Donald Gorton, "The SEC Decision Not to Support SFAS 19: A Case Study of the Effect of Lobbying on Standard Setting," *Accounting Horizons*, March 1991.

<sup>30</sup> Self-Regulatory Organizations also impose similar fees. For instance, the National Association of Security Dealers imposes a .01 percent initial filing fee (with a \$75,000.00 cap) based on the proposed maximum aggregate offering price. This permits the NASD to fulfill its functions in regard to its role with the SEC. SEC Release No. 34-50984, File No. SR-NASD-2004-177.

<sup>31</sup> Howard Stock, "Don't Short-Change SEC, Goldschmid Tells Bush," *Investors Relations Business*, December 16, 2002.



forms contain no blanks to be filled in as do tax forms. Instead, they are narrative in character, giving general instructions about the items of information to be furnished. Detailed information must be assembled by the companies using the form designed for the type of security being offered as well as the type of company making the offer.”<sup>32</sup>

### **Registration Statements (1933 Act)**

As indicated, a registration statement must be filed with and made effective by the Securities and Exchange Commission before a company can offer a security publicly. A security is very broadly defined to include items such as a note, stock, treasury stock, bond, debenture, investment contract, evidence of indebtedness, or transferable share.

The SEC’s role is not to evaluate the quality of the investment. Rather, the SEC seeks to ensure that the content and disclosure of the filing comply with all applicable regulations. The responsibility for the information always rests with corporate officials. The SEC is charged with ensuring full and fair disclosure of relevant financial information. The registrant has the responsibility to provide such data, but the decision to invest must remain with the public.

A number of different forms are available for this purpose, depending on the specific circumstances. Some of the most commonly encountered registration statement forms follow:<sup>33</sup>

- S-1 Used when no other form is prescribed. Usually used by new registrants or by companies that have been filing reports with the SEC for less than 36 months.
- S-3 Used by companies that are large and already have a significant following in the stock market (at least \$75 million of the voting stock is held by nonaffiliates). Disclosure is reduced for these organizations because the public is assumed to already have access to a considerable amount of information. Form F-3 is used if registration is by a foreign issuer.
- S-4 Used for securities issued in connection with business combination transactions.
- S-8 Used as a registration statement for employee stock plans.
- S-11 Used for the registration of securities by certain real estate companies.

The use of several of these forms, especially Form S-3, offers a distinct advantage to established companies that are issuing securities. Rather than duplicate voluminous information already disclosed in other filings with the SEC—frequently the annual report to shareholders—the registrant can simply indicate the location of the data in these other documents, a process referred to as *incorporation by reference*.

### **Registration Procedures**

The actual registration process is composed of a series of events leading up to the SEC’s permission to “go effective.” Because the registrant is seeking to obtain significant financial resources through the issuance of new securities in public markets, each of these procedures is vitally important.

After selecting the appropriate form, the company accumulates information according to the requirements of *Regulation S-K* and *Regulation S-X*. If it anticipates problems or questions, the company may request a prefiling conference with the SEC staff to seek guidance prior to beginning the registration. For example, if uncertainty concerning the handling or disclosure of an unusual transaction exists, a prefiling conference can save all parties considerable time and effort.

The Commission has a long-established policy of holding its staff available for conferences with prospective registrants or their representatives in advance of filing a registration statement. These conferences may be held for the purpose of discussing generally the problems confronting a registrant in effecting registration or to resolve specific problems of an unusual nature which are sometimes presented by involved or complicated financial transactions.<sup>34</sup>

#### **LO 12-6**

Describe an issuer’s registration process, various forms used by the issuers, and the exemption(s) from registration.

<sup>32</sup> K. Fred Skousen, *An Introduction to the SEC* (Cincinnati: South-Western Publishing, 1991), p. 47.

<sup>33</sup> [www.sec.gov/info/edgar/forms/edgform.pdf](http://www.sec.gov/info/edgar/forms/edgform.pdf).

<sup>34</sup> Stanley Weinstein, Daniel Schechtman, and Michael A. Walker, *SEC Compliance*, vol. 4 (Englewood Cliffs, NJ: Prentice Hall, 1999), para. 30,641.

When the SEC receives it, the Division of Corporation Finance reviews the registration statement.<sup>35</sup> An analyst determines whether all nonfinancial information complies with the SEC's disclosure requirements in *Regulation S-K*. At the same time, an accountant verifies that the financial statement data included in the filing meet the standards of *Regulation S-X* and have been prepared according to generally accepted accounting principles. *Because the SEC does not conduct a formal audit, the report of the company's independent CPA is essential to this particular evaluation.* In addition, an SEC lawyer reviews the registration statement to verify its legal aspects.

The Division of Corporation Finance regularly requests clarifications, changes, or additional information, especially for those filings involving an initial registration. A *letter of comments* (also known as a *deficiency letter*) is issued to the company to communicate these findings. In most cases, the registrant attempts to provide the necessary data or changes to expedite the process. However, in controversial areas, the issuer may begin discussions directly with the SEC staff in hope of resolving the problem without making the requested adjustments or disclosure or, at least, with limited inconvenience.

When the Division of Corporation Finance is eventually satisfied that the company has fulfilled all SEC regulations, the registration statement is made effective and the securities can be sold. *Effectiveness does not, however, indicate an endorsement of the securities by the SEC.* With most offerings, the company actually sells the stock using one or more underwriters (stock brokerage firms) that market the shares to their clients to earn commissions.

For convenience and to save time and money, large companies are allowed to use a process known as *shelf registration*. They file once with the SEC and are then allowed to offer those securities at any time over the subsequent two years without having to go back to the SEC. For example, "Enterprise Products Partners L. P. announced today that it has filed an \$800 million universal shelf registration statement with the Securities and Exchange Commission for the proposed sale of debt and equity securities over the next two years."<sup>36</sup>

The registration statement is physically composed of two parts. Part I, referred to as a *prospectus*, contains extensive information that includes these items:

1. Financial statements for the issuing company audited by an independent CPA along with appropriate supplementary data.
2. An explanation of the intended use of the proceeds to be generated by the sale of the new securities.
3. A description of the risks associated with the securities.
4. A description of the business and the properties owned by the issuer.

*The registrant must furnish every potential buyer of the securities with a copy of this prospectus, thus ensuring the adequate availability of information for their investment analysis.*

Part II of the registration statement is primarily for the informational needs of the SEC staff. Additional data should be disclosed about the company and the securities being issued such as marketing arrangements, expenses of issuance, sales to special parties, and the like. The registrant is not required to provide this information to prospective buyers, although the entire registration statement is available to the public through the SEC.

***Securities Exempt from Registration*** According to the 1933 Act, not all securities issued by companies and their underwriters require registration prior to their sale. For example, securities sold to the residents of the state in which the issuing company is chartered and principally doing business are exempted. However, these offerings may still be regulated by the securities laws of the individual states (commonly known as *blue sky laws*), which vary significantly.<sup>37</sup>

<sup>35</sup> All registration statements filed by issuers offering securities to the public for the first time are reviewed. Subsequent registration statements and periodic filings are reviewed only on a selective basis.

<sup>36</sup> "Enterprise Files \$800 Million Universal Shelf Registration with SEC," *Business Wire*, December 27, 1999.

<sup>37</sup> "These early laws became known as 'blue sky' laws after a judicial decision characterized some transactions as 'speculative schemes which have no more basis than so many feet of blue sky.'" (Skousen, *An Introduction to the SEC*, p. 3.)

Other exempt offerings include but are not limited to the following:

- Securities issued by governments, banks, and savings and loan associations.
- Securities issued that are restricted to a company's own existing stockholders for which no commission is paid to solicit the exchange.
- Securities, such as bonds, issued by nonprofit organizations such as religious, educational, or charitable groups.
- Revised Regulation A: Regulation A is an exemption from the requirement to register public offerings. In March 2015, the SEC implemented Section 401 of the Jumpstart Our Business Startups (JOBS) Act by amending Regulation A to create two offering tiers. Tier 1 provides exemption for up to \$20 million of securities in a 12-month period. Tier 2 provides exemption for up to \$50 million of securities in a 12-month period. Both Tier 1 and Tier 2 securities may be offered publicly utilizing general solicitation and advertising and offered to unaccredited investors.
- Regulation D—Rule 504: Offerings of no more than \$1 million made to any number of investors within a 12-month period. No specific disclosure of information is required. General solicitations are allowed. The issuer must give notice of the offering to the SEC within 15 days of the first sale.
- Regulation D—Rule 505: Offerings of no more than \$5 million made to 35 or fewer non-accredited and an unlimited number of accredited purchasers in a 12-month period. No general solicitation is allowed for securities issued in this manner. Unaccredited investors must still be furnished an audited balance sheet and other specified information. Parties making purchases have to hold the securities for at least two years or lose the filing exemption.
- Regulation D—Rule 506: The private placement of any dollar amount of issuance to unlimited non-accredited investors and no more than 35 sophisticated investors (having knowledge and experience in financial matters) who already have sufficient information available to them about the issuing company. General solicitation is not permitted, although solicitation is permitted if the entire issuance is to accredited investors. These private placement rules have become quite important in recent years. Private placements in the United States rose from \$16 billion in 1980 to more than \$200 billion in 1996. By 2004, private equity placements nearly approached this figure, approximating \$177 billion. For example, "SYS Technologies, a leading provider of real time information technology solutions to industrial and U.S. government customers, announced today that it has completed a private placement with institutional investors raising gross proceeds of \$3.35 million on June 3, 2005."<sup>38</sup>

### ***Periodic Filings with the SEC***

Once a company has issued securities that are publicly traded on a securities exchange or an over-the-counter market, it must continually file information with the SEC so that adequate disclosure is available. As with registration statements, several different forms are utilized for this purpose. However, for most companies with actively traded securities, three of these are common: Form 10-K (an annual report), Form 10-Q (a quarterly report), and Form 8-K (disclosure of significant events). Smaller businesses use Form 10-KSB for annual reports and Form 10-QSB for quarterly reports.

In addition, as mentioned previously, proxy statements must be filed with the SEC. Management or another interested party issues these statements to a company's owners in hope of securing voting rights to be used at stockholders' meetings.

**Form 10-K** A 10-K form is an annual report filed with the SEC to provide information and disclosures required by *Regulation S-K* and *Regulation S-X*. Fortunately, because of the integrated disclosure system, the annual report distributed by companies to their stockholders now includes most of the basic financial disclosures required by the SEC in Form

<sup>38</sup> "SYS Technologies Completes Private Placement Transaction," [www.freshnews.com/news/fresh-money/article\\_24429.html](http://www.freshnews.com/news/fresh-money/article_24429.html).

10–K. Thus, many companies simply attach the stockholders’ annual report to the Form 10–K each year and use the incorporation by reference procedure to meet most of the SEC’s filing requirements. This process is sometimes known as a *wraparound filing*.

Form 10–K, as with the various other SEC filings, is constantly undergoing assessment to determine whether it is meeting investor needs.<sup>39</sup> Thus, the SEC’s reporting requirements are evolutionary and change over time.

The Securities and Exchange Commission issued guidelines aimed at making public companies provide a more detailed look at the trends and business changes that management expects in the future. . . . In the main part of yesterday’s interpretation, the commissioners said that in the 10–K reports, companies must discuss “trends, demands, commitments or events” that it knows are “reasonably likely” to occur and have a material effect on financial condition or results.<sup>40</sup>

As this quote indicates, the SEC is especially interested in the quality of the information provided by the MD&A section of a registrant’s filings. Basically, management should describe the company’s past, present, and future. This information can furnish investors with a feel for the prospects of the company; it is a candid narrative to provide statement readers with a sense of management’s priorities, accomplishments, and concerns. The SEC staff carefully reviews the MD&A feature. “If the management of a company knows something that could have a material impact on earnings in the future, officials have an obligation to share that information with shareholders.”<sup>41</sup>

**Form 10–Q** A 10–Q form contains condensed interim financial statements for the registrant and must be filed with the SEC shortly after the end of each quarter. However, no Form 10–Q is required following the fourth quarter of the year since a Form 10–K is forthcoming shortly thereafter. A Form 10–Q does not have to be audited by an independent CPA.

Information to be contained in each Form 10–Q includes the following:

- Income statements must be included for the most recent quarter and for the year to date as well as for the comparative periods in the previous year.
- A statement of cash flows is also necessary, but only for the year to date as well as for the corresponding period in the preceding year.
- Two balance sheets are reported: one as of the end of the most recent quarter and the second showing the company’s financial position at the end of the previous fiscal year.
- Each Form 10–Q should also include any needed disclosures pertaining to the current period including the MD&A of the financial condition of the company and results of operations.

**Form 8–K** An 8–K form is used to disclose a unique or significant happening.<sup>42</sup> Consequently, the 8–K is not filed at regular time intervals but within 15 calendar days of the event (or within five business days in certain specified instances). The SEC receives thousands of 8–K reports each year. According to the SEC’s guidelines, Form 8–K may be filed to report any action that company officials believe is important to security holders. However, the following events are designated for required disclosure in this manner:

- Resignation of a director.
- Changes in control of the registrant.
- Acquisition or disposition of assets.
- Changes in the registrant’s certified public accountants (independent auditors).
- Bankruptcy or receivership.

<sup>39</sup> The current Form 10–K instructions can be viewed at [www.sec.gov/about/forms/form10-K.pdf](http://www.sec.gov/about/forms/form10-K.pdf). This version of the Form 10–K has been approved for use through March 31, 2018.

<sup>40</sup> Paul Duke Jr., “SEC Issues Guidelines for 10–K Filings Seeking More Details on Trends, Changes,” *The Wall Street Journal*, May 19, 1989, p. A2.

<sup>41</sup> Kevin G. Salwen, “SEC Charges Caterpillar Failed to Warn Holders of Earnings Risk Posed by Unit,” *The Wall Street Journal*, April 2, 1992, p. A3.

<sup>42</sup> The current Form 8–K instructions can be viewed at [www.sec.gov/about/forms/form8-K.pdf](http://www.sec.gov/about/forms/form8-K.pdf). The SEC estimates that an issuer can complete an 8–K filing in approximately five hours.

**Proxy Statements** As previously mentioned, most of the significant actions undertaken by a company first must be approved at stockholders' meetings. For example, the members of the board of directors are elected in this meeting to oversee the company's operations. Although such votes are essential to the operations of a business, few major companies could possibly assemble enough shareholders at any one time and place for a voting quorum. The geographic distances are simply too great. Hence, before each of the periodic meetings, the management (or any other interested party) usually requests signed proxies from shareholders granting the legal authority to cast votes for the owners in connection with the various actions to be taken at such stockholders' meetings.<sup>43</sup>

Because of the power conveyed by a proxy, any such solicitation sent to shareholders (by any party) must include specific information as the SEC required in its *Regulation 14A*. This proxy statement has to be filed with the SEC at least 10 days before being distributed. In addition to the disclosed items previously described, other data must be reported to the owners:

- The proxy statement needs to indicate on whose behalf the solicitation is being made.
- The proxy statement must disclose fully all matters that are to be voted on at the meeting.
- In most cases, the proxy statement has to be accompanied (or preceded) by an annual report to the shareholders.

As with all areas of disclosure, the SEC's regulation of proxy statements has greatly enhanced the information available to investors. Historically, shareholders have not always been able to get adequate information.

Thus was the president of one company able to respond cavalierly to a shareholder's request for information, "I can assure you that the company is in a good financial position. I trust that you will sign and mail your proxy at an early date." Quaint. But that was nothing. One unlisted company printed its proxy on the back of the dividend check—so when you endorsed the check you voted for management.<sup>44</sup>

From a 1902 annual report to shareholders: "The settled plan has been to withhold all information from stockholders and others that is not called for by the stockholders in a body. So far no request for information has been made in the manner prescribed by the directors."<sup>45</sup>

## Electronic Data Gathering, Analysis, and Retrieval System (EDGAR)

During recent years, the SEC has been almost overwhelmed by the sheer mountains of documents that it receives, reviews, and makes available to the public. Filings with the SEC contain millions of pieces of paper each year. Not surprisingly, some problems in the capital markets during the last few years have been blamed, in part, on this overload. "[The SEC's] corporation finance division cannot keep up with the deluge of company filings."<sup>46</sup>

In 1984, the SEC began to develop an electronic data gathering, analysis, and retrieval system nicknamed EDGAR. As originally envisioned, all filings would arrive at the SEC on disks or through some other electronic transmission. Each filing could be reviewed, analyzed, and stored by SEC personnel on a computer so they would no longer constantly have to sift through stacks of paper. Perhaps more important, investors would have the ability to access these data through the Internet. Thus, investors throughout the world could have information available for their decisions literally minutes after the documents are made effective by the SEC.

Because of the ambitious nature of the EDGAR project, approximately a decade was required to get the system effectively operational. For years, EDGAR was the object of much scorn; "one member of the House Energy and Commerce Committee suggested renaming the project Mr. Ed, 'since the SEC has a much better chance of finding a talking horse than it does

<sup>43</sup> Any person who owns at least 5 percent of the company's stock or has been an owner for six months or longer has the right to look at a list of shareholders to make a proxy solicitation.

<sup>44</sup> Laura Jereski, "You've Come a Long Way, Shareholder," *Forbes*, July 13, 1987, p. 282.

<sup>45</sup> Skousen, *An Introduction to the SEC*, p. 75.

<sup>46</sup> Stephen Labaton, "Can a Bloodied S.E.C. Dust Itself Off and Get Moving?" *The New York Times*, December 16, 2002.



## Discussion Question

### IS THE DISCLOSURE WORTH THE COST?

Filing with the SEC requires a very significant amount of time and effort on the registrant's part. Companies frequently resist attempts by the SEC to increase the levels of disclosure. Usually, they argue that additional information will not necessarily be useful to a great majority of investors. Regardless of the issue being debated, critics claim that the cost of the extra data far outweighs any benefits that might be derived from this disclosure.

Such contentions are not necessarily made just to avoid disclosing information. This cost analysis has continued for most of the past four decades. One survey from the late 1970s estimated the cost of SEC disclosures to be more than \$400 million in 1975 alone.

The table reports an estimated \$213,500,000 for the fully variable costs of 10-K, 10-Q, and 8-K disclosures in 1975. To this should be added the separate estimate (not shown) of \$191,900,000 for disclosure related to new issues in 1975, for a total estimate of about \$400,000,000 for SEC disclosure costs in 1975. These estimates are biased downward because they do not include various fixed costs.\*

Such costs are either passed along to the consumer in the form of higher prices or serve to retard the growth of the reporting company.

Additional SEC requirements continue to concern issuers, many of which conclude that "the costs of mandatory SEC disclosures outweigh the benefits" and accept delisting from the various exchanges, rather than incurring the costs of such disclosure.<sup>†</sup> SEC revenues, which constitute real out-of-pocket costs to issuers, exceeded \$3 billion in 2012. This represents a 15-fold increase in the past 40 years.

The author of one survey (that has been widely discussed and debated over the years) held that federal securities laws are not actually helpful to investors.

I found that there was little evidence of fraud related to financial statements in the period prior to the enactment of the Securities Acts. Nor was there a widespread lack of disclosure. . . . Hence, I conclude that there was little justification for the accounting disclosure required by the Acts. . . . These findings indicate that the data required by the SEC do not seem to be useful to investors.<sup>‡</sup>

The SEC was created, in part, to ensure that the public has fair and full disclosure about companies whose securities are publicly traded. However, the commission must be mindful of the cost of such disclosures. How can the SEC determine whether the cost of a proposed disclosure is more or less than the benefits to be derived by the public? After all, despite SEC investigations, Bernard Madoff avoided detection for decades.

\*J. Richard Zecher, "An Economic Perspective of SEC Corporate Disclosure," *The SEC and Accounting: The First 50 Years*, ed. Robert H. Mundheim and Noyes E. Leech (Amsterdam: North-Holland, 1985), pp. 75–76.

<sup>†</sup> Brian J. Bushee and Christian Leuz, "Economic Consequences of SEC Disclosure Regulation," The Wharton School, University of Pennsylvania, February 2004, p. 3.

<sup>‡</sup>George J. Benston, "The Value of the SEC's Accounting Disclosure Requirements," *The Accounting Review*, July 1969, p. 351.

of achieving an efficient computer filing system."<sup>47</sup> However, the beginning of the explosive use of the Internet in the mid-1990s corresponded with the widespread availability of information on EDGAR. Not surprisingly, EDGAR's popularity has expanded.

<sup>47</sup> Sandra Block, "SEC Gets Closer to Electronic Filing," *The Wall Street Journal*, August 30, 1991, p. C1.

If you're suspicious about a certain stock, then go to the Securities and Exchange Commission's EDGAR database—chockablock with annual reports, prospectuses and all the other paperwork demanded of public companies.<sup>48</sup>

Since Congress went to all the trouble in the 1930s of creating the SEC and requiring these corporate disclosures, it seems like somebody should give them an occasional good read. The EDGAR database at the SEC's Web site gives any individual free access to the filings of thousands of public companies. . . . It's sometimes amazing what kind of information typing someone's name, address or phone number into an EDGAR search engine can generate.<sup>49</sup>

Today virtually all publicly held companies are required to file their SEC reports electronically. Paper filings, when permitted, are also converted to electronic files and available to the general public.<sup>50</sup> The resultant EDGAR filings are typically available via the SEC's website within 24 hours of filing. These public filings, combined with the ease of access via the Internet, have resulted in the virtually immediate dissemination of vital investment-related data to accounting professionals, financial advisers, government regulators, and the investing public. EDGAR users can locate filings based on entity names, standard industrial classification (SIC) codes, central index keys (CIK), addresses, date–time frames, and a variety of other variables. This extensive database has helped move financial reporting to a significantly higher level of transparency.

## Summary

1. In the United States, the Securities and Exchange Commission (SEC) has been entrusted with the responsibility for ensuring that complete and reliable information is available to investors who buy and sell securities in public capital markets. Since being created in 1934, this agency has administered numerous reporting rules and regulations created by congressional actions starting with the Securities Act of 1933 and the Securities Exchange Act of 1934.
2. The corporate accounting scandals that rocked the U.S. financial community during 2001 and 2002 led Congress to pass the Sarbanes–Oxley Act. This legislation addressed a number of problems. One main provision was the creation of the Public Company Accounting Oversight Board to monitor and regulate the auditors of public companies. Audit firms of public companies must register with this board and are subject to periodic inspections as well as various types of possible disciplinary actions. This act also contains rules to help ensure the independence of the external auditor.
3. Before a company's securities (either equity or debt) can be publicly traded, appropriate filings must be made with the SEC to ensure that sufficient data are made available to potential investors. Disclosure requirements for this process are outlined in two documents: *Regulation S–K* (for non-financial information) and *Regulation S–X* (describing the form and content of all included financial statements).
4. The ability to require the reporting of special information gives the SEC enormous legal power over accounting standards in the United States. Traditionally, this authority has been wielded only on rare occasions and only to increase disclosure requirements and to provide guidance where none was otherwise available. However, in a significant demonstration of its authority, the SEC overruled the FASB's decision in 1977 as to the appropriate method to account for unsuccessful exploration and drilling costs incurred by oil- and gas-producing companies.
5. Filings with the SEC are divided generally into two broad categories: registration statements and periodic filings. Registration statements are designed to provide information about a company prior to its issuance of a security to the public. Depending on the circumstances, several different registration forms are available for this purpose. After the registrant produces the statement and the SEC initially reviews it, a letter of comments describing desired explanations or changes is furnished. These concerns must be resolved before the security can be sold.
6. Not all securities issued in the United States require registration with the SEC. As an example, formal registration is not necessary for securities sold by either government units or banks. Certain

<sup>48</sup> The address for EDGAR is located at the SEC website [www.sec.gov](http://www.sec.gov). A quick EDGAR tutorial is available at [www.sec.gov/edgar/quickedgar.htm](http://www.sec.gov/edgar/quickedgar.htm) to familiarize users with the retrieval system. Joseph R. Garber, "Click Before You Leap," *Forbes*, February 24, 1997, p. 162.

<sup>49</sup> John Emshwiller, "Financial Filings Hold Key to Investigative Pieces, Big and Small," *The Wall Street Journal*, May 31, 2005.

<sup>50</sup> [www.sec.gov/edgar/quickedgar.htm](http://www.sec.gov/edgar/quickedgar.htm).

issues for relatively small amounts are also exempt although some amount of disclosure is normally required. Securities sold solely within the state in which the business operates are not subject to federal securities laws but must comply with state laws frequently referred to as *blue sky laws*.

7. Companies whose stocks or bonds are publicly traded on a securities exchange must also submit periodic filings to the SEC to ensure that adequate disclosure is constantly maintained. Among the most common of these filings are Form 10-K (an annual report) and Form 10-Q (condensed interim financial information). Form 8-K also is required to report any significant events that occur. In addition, proxy statements (documents that are used to solicit votes at stockholders' meetings) also come under the filing requirements monitored by the SEC.
8. The SEC created the EDGAR database to allow companies to make electronic filings with the commission. More importantly, EDGAR allows any person with access to the Internet to review these documents in a timely fashion. Thus, access to financial and other information about filing entities has become much more widely available.

## Questions

(Students should visit the SEC website, [www.sec.gov](http://www.sec.gov), for supplemental resources.)

1. Why were federal securities laws originally enacted by Congress?
2. What are some of the possible reasons for the numerous corporate accounting scandals discovered during 2001 and 2002?
3. List several provisions of the Sarbanes–Oxley Act that are designed to restore public confidence in the U.S. capital market system.
4. What is the SEC's relationship to the Public Company Accounting Oversight Board?
5. Who must register with the Public Company Accounting Oversight Board?
6. What is the impact of being registered with the PCAOB?
7. How has the Sarbanes–Oxley Act attempted to ensure that external auditors will be completely independent in the future?
8. What is the purpose of the inspection process created by the Sarbanes–Oxley Act?
9. What is covered by *Regulation S–K*?
10. What is covered by *Regulation S–X*?
11. What are some of the major divisions and offices within the SEC?
12. What does the Securities Act of 1933 cover?
13. What does the Securities Exchange Act of 1934 cover?
14. What are the goals of the SEC?
15. What information is required in a proxy statement?
16. Why is the content of a proxy statement considered to be so important?
17. How does the SEC affect the development of generally accepted accounting principles in the United States?
18. What is the purpose of *Financial Reporting Releases* and *Staff Accounting Bulletins*?
19. What was the SEC's response to the FASB's handling of accounting for oil- and gas-producing companies, and why was this action considered so significant?
20. What is the purpose of a registration statement?
21. Under what law is a registration statement filed?
22. What are the two parts of a registration statement? What does each part contain?
23. How does the SEC generate revenues?
24. Two forms commonly used in the registration process are Form S–1 and Form S–3. Which registrants should use each form?
25. What is incorporation by reference?
26. What is a prefiling conference, and why might it be helpful to a registrant?
27. What is a letter of comments? By what other name is it often called?
28. What is a prospectus? What does a prospectus contain?
29. Under what circumstances is a company exempt from filing a registration statement with the SEC prior to the issuance of securities?
30. What is a private placement of securities?



31. What are blue sky laws?
32. What is a wraparound filing?
33. When is a Form 8-K issued by a company? What specific information does a Form 8-K convey?
34. What is the purpose of the Management's Discussion and Analysis?
35. What is the difference between a Form 10-K and a Form 10-Q?
36. What was the purpose of creating the EDGAR system?

## Problems

### LO 12-1

1. Which of the following statements is true?
  - a. The Securities Exchange Act of 1934 regulates intrastate stock offerings made by a company.
  - b. The Securities Act of 1933 regulates the subsequent public trading of securities through brokers and markets.
  - c. The Securities Exchange Act of 1934 is commonly referred to as blue sky legislation.
  - d. The Securities Act of 1933 regulates the initial offering of securities by a company.

### LO 12-2

2. What is the purpose of *Regulation S-K*?
  - a. Defines generally accepted accounting principles in the United States.
  - b. Establishes required disclosure of nonfinancial information with the SEC.
  - c. Establishes required financial disclosures with the SEC.
  - d. Indicates which companies must file with the SEC on an annual basis.

### LO 12-2

3. What is the difference between *Regulation S-K* and *Regulation S-X*?
  - a. *Regulation S-K* establishes reporting requirements for companies in their initial issuance of securities whereas *Regulation S-X* is directed toward the subsequent issuance of securities.
  - b. *Regulation S-K* establishes reporting requirements for companies smaller than a certain size whereas *Regulation S-X* is directed toward companies larger than that size.
  - c. *Regulation S-K* establishes regulations for nonfinancial information filed with the SEC whereas *Regulation S-X* prescribes the form and content of financial statements included in SEC filings.
  - d. *Regulation S-K* establishes reporting requirements for publicly held companies whereas *Regulation S-X* is directed toward private companies.

### LO 12-2

4. The Securities Exchange Act of 1934
  - a. Regulates the public trading of previously issued securities through brokers and exchanges.
  - b. Prohibits blue sky laws.
  - c. Regulates the initial offering of securities by a company.
  - d. Requires the registration of investment advisers.

### LO 12-3

5. Which of the following is a requirement of the Sarbanes-Oxley Act of 2002?
  - a. Registration of all auditing firms with the Public Company Accounting Oversight Board.
  - b. Annual inspection of all auditing firms registered with the Public Company Accounting Oversight Board.
  - c. A monetary fee assessed on organizations issuing securities.
  - d. Overall assessment of the work of the SEC each year.

### LO 12-3

6. Which of the following is *not* correct with regard to the Public Company Accounting Oversight Board?
  - a. The board can expel a registered auditing firm without SEC approval.
  - b. All registered auditing firms must be inspected at least every three years.
  - c. The board members must be appointed by Congress.
  - d. The board has the authority to set auditing standards rather than utilize the work of the Auditing Standards Board.

### LO 12-3

7. Which of the following is *not* a way by which the Sarbanes-Oxley Act attempts to ensure auditor independence from an audit client?
  - a. The auditing firm must be appointed by the client's audit committee.
  - b. Audit fees must be approved by the Public Company Accounting Oversight Board.
  - c. The audit committee must be composed of members of the client's board of directors who are independent of the management.
  - d. The external auditor cannot also perform financial information system design and implementation work.

LO 12-5

8. What is a registration statement?
- A statement that must be filed with the SEC before a company can begin an initial offering of securities to the public.
  - A required filing with the SEC before a large amount of stock can be obtained by an inside party.
  - An annual filing made with the SEC.
  - A filing made by a company with the SEC to indicate that a significant change has occurred.

LO 12-5

9. Which of the following is a registration statement used by large companies that already have a significant following in the stock market?
- Form 8-K
  - Form 10-K
  - Form S-1
  - Form S-3

LO 12-4

10. What was the significance of the controversy in 1977 over the appropriate accounting principles to be used by oil- and gas-producing companies?
- Several major lawsuits resulted.
  - Companies refused to follow the SEC's dictates.
  - Partners of a major accounting firm were indicted on criminal charges.
  - The SEC overruled the FASB on its handling of this matter.

LO 12-6

11. Which of the following must be provided to every potential buyer of a new security?
- A letter of comments.
  - A deficiency letter.
  - A prospectus.
  - A Form S-16.

LO 12-5

12. What does the term *incorporation by reference* mean?
- The legal incorporation of a company in more than one state.
  - Filing information with the SEC by indicating that the information is already available in another document.
  - A reference guide indicating informational requirements specified in *Regulation S-X*.
  - Incorporating a company in a state outside of its base of operations.

LO 12-6

13. What is a letter of comments?
- A letter the SEC sends to a company indicating needed changes or clarifications in a registration statement.
  - A questionnaire supplied to the SEC by a company suggesting changes in *Regulation S-X*.
  - A letter included in a Form 10-K to indicate the management's assessment of the company's financial position.
  - A letter composed by a company asking for information or clarification prior to the filing of a registration statement.

LO 12-6

14. What is a prospectus?
- A document attached to a Form 8-K.
  - A potential stockholder as defined by *Regulation S-K*.
  - A document a company files with the SEC prior to filing a registration statement.
  - The first part of a registration statement that a company must furnish to all potential buyers of a new security.

LO 12-6

15. Which of the following is *not* exempt from registration with the SEC under the Securities Act of 1933?
- Securities issued by a nonprofit religious organization.
  - Securities issued by a government unit.
  - A public offering of \$40 million to unaccredited investors under Regulation A.
  - An offering to 40 sophisticated investors.

LO 12-6

16. Which of the following is usually *not* filed with the SEC on a regular periodic basis?
- A Form 10-Q
  - A prospectus
  - A proxy statement
  - A Form 10-K

## LO 12-6

17. What is a shelf registration?
- A registration statement that the SEC formally rejects.
  - A registration statement that the SEC rejects due to the lapse of a specified period of time.
  - A registration process for large companies that allows them to offer securities over a period of time without seeking additional approval by the SEC.
  - A registration form that is withdrawn by the registrant without any action having been taken.

## LO 12-6

18. What is EDGAR?
- A system the SEC uses to reject registration statements that do not contain adequate information.
  - The enforcement arm of the SEC.
  - A system designed by the SEC to allow electronic filings.
  - A branch of the government that oversees the work of the SEC.

## LO 12-1, 12-3, 12-5, 12-6

19. Identify each of the following as they pertain to the SEC.
- Blue sky laws.
  - S-8 Statement.
  - Letter of comments.
  - Public Company Accounting Oversight Board.
  - Prospectus.

## LO 12-2

20. Discuss the objectives of the Securities Act of 1933 and the Securities Exchange Act of 1934. How are these objectives accomplished?

## LO 12-6

21. What are the general steps involved in filing a registration statement with the SEC?

## LO 12-4

22. Discuss the methods by which the SEC can influence the development of generally accepted accounting principles in the United States.

## LO 12-6

23. Which forms do most companies file with the SEC on a periodic basis? Explain the purpose of each form and its primary contents.

## LO 12-5

24. Which forms do most companies file with the SEC in connection with the offering of securities to the public?

## LO 12-6

25. What is the importance of a Form 8-K? What is the importance of a proxy statement?

## LO 12-3

26. Describe the provisions of the Sarbanes-Oxley Act as they relate to the creation and responsibilities of the Public Company Accounting Oversight Board.

## LO 12-1, 12-2, 12-4, 12-5, 12-6

27. Explain each of the following items:
- Staff Accounting Bulletins.
  - Wraparound filing.
  - Incorporation by reference.
  - Division of Corporation Finance.
  - Integrated disclosure system.
  - Management's discussion and analysis.
  - Chief accountant of the SEC.

## LO 12-6

28. Which organizations are normally exempted from the SEC's registration requirements?

## Develop Your Skills

### RESEARCH CASE 1



Domer Corporation is preparing to issue a relatively small amount of securities and does not want to go to the trouble and expense of filing a registration statement with the SEC. Company officials hope to be exempt under provisions of Regulation A. These officials want to be certain that they meet these provisions precisely so that no later legal problems arise.

#### Required

Go to the website [www.sec.gov](http://www.sec.gov) and select "Corporate Finance under Divisions." Then select the link for "Statutes, Rules, and Forms," followed by the "Rules, Regulations, and Schedules" link. Based on

the information provided for Regulation A (click on “General Rules and Regulations, Securities Act of 1933”), prepare a report for Domer Corporation officials as to the requirements for exemption and advise as to the maximum amount of capital that may be raised through such issuance. Assuming that Domer Corporation is a development stage company, revise the report. Note specifically Regulation §230.251.

## RESEARCH CASE 2



Tasch Corporation, a multilevel marketing and sales organization, plans to sell approximately \$10,000,000 worth of “service agreements” to many of its customers. These service agreements guarantee a set return to the customer in exchange for an up-front purchase price, with Tasch Corporation managing the various business interests of its customers. Jerry Tasch, the corporation’s president, needs advice concerning the necessity of SEC filings prior to the sale of these service agreements.

### Required

Assume that the only (initial) question to be addressed is whether the service agreements constitute securities under the Securities Act of 1933. Perform research utilizing an Internet search engine to determine whether the service agreements are in fact securities. Note that courts interpret statutes and regulations, so it is often useful to look at judicial determinations to reach a conclusion. To that end, consider locating and reviewing the following case: *SEC v. Calvo*, 378 F.3d 1211 (11th Cir. 2004). Students can locate this case using many web links including FINDLAW and LexisNexis. This web link will direct the student directly to the specific opinion (<https://law.resource.org/pub/us/case/reporter/F3/378/378.F3d.1211.02-13445.html>).

## ANALYSIS CASE 1



Go to the website [www.sec.gov](http://www.sec.gov) and, under the Filings heading, click on “Filings” and then click on “Company Filing Search.” Enter the name of a well-known company such as Facebook. A list of available documents should be shown for that company.

### Required

Using these available documents, answer the following questions:

1. Has the company filed an 8-K during the most recent time period? If so, open that document and determine the reason that the form was filed with the SEC.
2. Has the company filed a 10-K during the recent time period? If so, open that document and determine the total reported net income for the latest period of time.
3. Has the company filed a 10-Q during the most recent time period? If so, open that document and determine what issues were addressed and disclosed.

## COMMUNICATION CASE 1

The senior partner of Wojtysiak & Co., CPAs, has been approached by a small, publicly traded corporation wishing to change auditors. The Wojtysiak firm does not audit any other public companies. Because of the Sarbanes-Oxley Act of 2002, Mike Wojtysiak, the senior partner, needs to know the regulatory issues facing his firm if it accepts the new engagement.

### Required

Draft a report that outlines the Sarbanes–Oxley considerations for a firm such as the Wojtysiak firm. Locate the actual act (Public Law 107-204) or perform a thorough summary and review it prior to preparing the report. The full act may be found at: [www.gpo.gov/fdsys/pkg/PLAW-107publ204/pdf/PLAW-107publ204.pdf](http://www.gpo.gov/fdsys/pkg/PLAW-107publ204/pdf/PLAW-107publ204.pdf).



# Accounting for Legal Reorganizations and Liquidations

One common thread running through a significant portion of this textbook is the financial reporting of an organization when viewed as a whole.<sup>1</sup> Several chapters, for example, examine the consolidation of financial information generated by two or more companies that have been united in a business combination. Although that coverage includes the reporting of many specific accounts, the primary emphasis is on creating financial statements for these organizations as a single economic entity.

Likewise, the analysis of foreign currency translation demonstrates the procedures used in consolidating the assets, liabilities, and operating results of a subsidiary conducting business in a different functional currency than that of its parent.

Various reporting requirements for disaggregated information have also been described in this textbook to show the many distinct ways an organization can be presented. Again, the accounting goal is to convey data that enables decision makers to evaluate the entire operation.

Continuing with this theme, subsequent chapters present the specialized accounting used by partnerships, state and local government units, not-for-profit organizations, estates, and trusts.

Thus, the presentation of financial data to describe a particular type of organization does not rely on a rigid structure. Accounting is adaptable. Numerous factors influence the reporting required by specific circumstances: the purpose of the information, the nature and environment of the organization, and so on. In reporting the operations, cash flows, and financial position of a business combination, a foreign subsidiary, an operating segment, a partnership, a state or local government unit, an estate, or a not-for-profit organization, accountants develop unique reporting techniques to address particular needs and problems.

The current chapter extends this coverage by examining the accounting procedures required for financially troubled companies. In such circumstances, both owners and creditors face the prospect of incurring significant losses. Once again, the accountant must adapt financial reporting to meet varied informational needs. The failure of a significant number of prominent companies during the past decade has made this accounting process especially relevant.

<sup>1</sup>Intermediate accounting textbooks, in contrast, tend to examine the reporting of specific assets and liabilities such as leases, pensions, deferred income taxes, and bonds.

## Learning Objectives

After studying this chapter, you should be able to:

- LO 13-1** Describe the history and current status of bankruptcy and bankruptcy laws.
- LO 13-2** Describe the reporting actions that accountants should consider before a troubled company declares bankruptcy.
- LO 13-3** Explain the difference between a voluntary bankruptcy and an involuntary bankruptcy.
- LO 13-4** Identify the various types of creditors based on their status during a bankruptcy.
- LO 13-5** Describe the difference between a Chapter 7 bankruptcy and a Chapter 11 bankruptcy.
- LO 13-6** Account for a company as it enters bankruptcy.
- LO 13-7** Account for the liquidation of a company in bankruptcy especially when using the liquidation basis of accounting.
- LO 13-8** Discuss the provisions often found in a bankruptcy reorganization plan.
- LO 13-9** Account for a company as it moves through reorganization.
- LO 13-10** Describe the financial reporting for a company that successfully exits bankruptcy as a reorganized entity.

## LO 13-1

Describe the history and current status of bankruptcy and bankruptcy laws.

## An Overview of U. S. Bankruptcy Laws

The term bankruptcy goes back to the Roman Empire. In those days, a vendor who did not pay his debts had his table, or bench, broken and was put out of business. The Latin term for bench is “bankus,” while Latin for broken is “ruptus.” This is the origin of the term bankruptcy.<sup>2</sup>

A basic assumption of accounting is that a business is considered a *going concern* unless evidence to the contrary is discovered. As a result, assets such as inventory, land, buildings, and equipment are traditionally reported based on historical cost rather than the net realizable value they could command at the current time. Unfortunately, not all organizations prove to be going concerns.<sup>3</sup> The number of companies experiencing financial difficulties varies from year to year as the economy and other conditions change. During the 12 months ending September 30, 2015, 16,474 U.S. companies filed for Chapter 7 bankruptcy and another 5,945 filed for Chapter 11 bankruptcy. As a possible sign of an improving economy, those figures were down from 19,017 and 6,504 for the same period ending September 30, 2014.<sup>4</sup>

“The new normal of persistent low interest rates and high filing costs continue to steer distressed households and businesses away from the financial relief of bankruptcy,” said ABI Executive Director Samuel J. Gerdano. “Filings remain on track for the second-lowest total since changes to the bankruptcy law were implemented 10 years ago.”<sup>5</sup>

The sheer size of the more renowned bankruptcies is often astronomical. Many of the 10 largest U.S. bankruptcies occurred in the last few years:

- Lehman Brothers Holdings Inc., September 15, 2008, \$691 billion in assets.
- Washington Mutual Inc., September 26, 2008, \$328 billion.
- WorldCom Inc., July 21, 2002, \$104 billion.
- General Motors Corp., June 1, 2009, \$91 billion.
- CIT Group, Inc., November 1, 2009, \$81 billion.
- Enron Corp., December 2, 2001, \$66 billion.
- Consec Inc., December 17, 2002, \$61 billion.
- Energy Future Holdings Corp., April 29, 2014, \$41 billion.
- MF Global Holdings, LTD, October 31, 2011, \$41 billion.
- Chrysler LLC, April 30, 2009, \$39 billion.<sup>6</sup>

*What happens to these businesses after they fail? Is bankruptcy the equivalent of a death sentence? Who gets the assets that remain? Are creditors protected? During this period, how does the accountant reflect the economic plight of the company?*

Virtually all businesses undergo occasional financial difficulties. Economic downturns, poor product performance, intense competition, rapid technological changes, unwise acquisitions, and litigation losses can create cash flow difficulties for even the best-managed organizations. Management teams will attempt remedial actions in hopes of returning operations to normal profitability. However, not every company is able to solve its difficulties. If problems persist, a company can eventually become *insolvent*, unable to pay debts as the obligations come due. When creditors are not paid, they take whatever actions they can to

<sup>2</sup> [https://www.pwc.com/us/en/cfodirect/assets/pdf/accounting-guides/pwc\\_guide\\_bankruptcies\\_and\\_liquidations\\_2014\\_.pdf](https://www.pwc.com/us/en/cfodirect/assets/pdf/accounting-guides/pwc_guide_bankruptcies_and_liquidations_2014_.pdf)

<sup>3</sup> A short history of bankruptcies and bankruptcy law as it has evolved over the past 2,000 years can be found at <http://www.bankruptcydata.com/Ch11History.htm>.

<sup>4</sup> <http://www.uscourts.gov/statistics-reports/caseload-statistics-data-tables>

<sup>5</sup> “Bankruptcy Filings Through First Three Quarters of 2015 Fall 11 Percent from 2014; Commercial Filings Fall 17 Percent,” posted October 5, 2015, <http://www.abi.org/newsroom/press-releases/bankruptcy-filings-through-first-three-quarters-of-2015-fall-11-percent-from>

<sup>6</sup> <http://bankruptcydata.com/researchcenter2.htm>.

protect their financial interests in hopes of reducing possible losses. They might seek recovery from the distressed company in several ways including repossessing assets, filing lawsuits, foreclosing on loans, and so on. An insolvent company can quickly become besieged by its creditors.

If left unchecked, pandemonium would likely be the outcome of a company's insolvency. As a result, some creditors and stockholders as well as the company itself could be treated unfairly. One party might collect debts in full while another is left with a total loss. Not surprisingly, bankruptcy laws have been established in the United States to structure this process, provide protection for all parties, and ensure fair and equitable treatment.

Although a complete coverage of bankruptcy statutes is more appropriate for a business law textbook, significant aspects of this process directly involve accountants.

In many small business situations, the company accountant is the sole outside financial adviser and the first to recognize that the deteriorating financial picture mandates consideration of bankruptcy in one form or another. In many such situations, the accountant's role in convincing management that a timely reorganization under the bankruptcy law is the sole means of salvaging any part of the business may be critical.<sup>7</sup>

### LO 13-2

Describe the reporting actions that accountants should consider before a troubled company declares bankruptcy.

### *Preliminary Reporting Considerations for a Troubled Company*

Companies rarely fall into bankruptcy because of a single and sudden action. Typically, management will struggle for months if not years to keep operations viable. During that period, a number of reporting actions can become necessary. For example, the possible demise of the company might force an accounting reassessment of several assets.

Goodwill is one obvious asset that accountants must monitor. As discussed in an earlier chapter, entities are required to test goodwill annually for impairment. More frequent testing is necessary if circumstances or events indicate that the fair value of an individual reporting unit is more likely than not to have fallen below its carrying amount. If possible bankruptcy looms, accountants should not wait too long to begin testing for goodwill impairment. "It is common for goodwill to be impaired prior to the bankruptcy filing."<sup>8</sup>

Another asset balance that requires reporting attention in troubled times is a deferred income tax asset. As covered in intermediate accounting textbooks, a valuation allowance must be recognized to offset the impact of this future tax benefit but only if it is more likely than not that the asset will not be realized. The possibility that an entity will not be able to make use of a temporary tax difference (a warranty expense, for example) to reduce future amounts of taxable income increases as the financial outlook becomes more uncertain. Accountants weigh all available factors to assess the need for having a valuation allowance to offset the financial effect of this tax asset. In the period before a possible bankruptcy, the likelihood of that recognition increases.

FASB has also stepped in to provide additional structure for the reporting of troubled companies. In 2014, the board decided that a formal warning is necessary when bankruptcy becomes a possibility. In this way, outside decision-makers would not be caught unaware by a bankruptcy filing. Accounting Standards Update 2014-15 ("Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern") describes situations of uncertainty that warrant investigation and the related disclosures needed to inform financial statement readers of any going concern issues.

According to this update to U.S. GAAP, conditions or events can arise that, in the aggregate, cast substantial doubt on an entity's ability to continue as a going concern for a reasonable period of time. Substantial doubt is said to exist when an entity will probably (likely) be unable to meet its financial obligations as they come due during a period that extends one year from the date of the financial statements.

<sup>7</sup> John K. Pearson, "The Role of the Accountant in Business Bankruptcies," *The National Public Accountant*, November 1982, p. 22.

<sup>8</sup> [https://www.pwc.com/us/en/cfodirect/assets/pdf/accounting-guides/pwc\\_guide\\_bankruptcies\\_and\\_liquidations\\_2014\\_.pdf](https://www.pwc.com/us/en/cfodirect/assets/pdf/accounting-guides/pwc_guide_bankruptcies_and_liquidations_2014_.pdf)



Several of the conditions or events that could signal an entity's inability to meet debts as they come due include

- Recurring operating losses.
- Working capital deficiencies.
- Negative cash flows from operating activities.
- Loan default.
- Work stoppages or other labor difficulties.
- Legal proceedings.
- Loss of a key asset such as a patent or franchise.<sup>9</sup>

If substantial doubt does exist about the ability to continue as a going concern, management must evaluate any plans that have been established to avoid the possibility of failing to meet obligations as they come due. For financial reporting purposes, two questions must be addressed:

1. First, is it probable that these plans will be effectively implemented by the entity within the one-year period? Plans provide no benefit if the described actions cannot or will not be taken.
2. Second, is it probable that the plans will mitigate the conditions or events that have raised substantial doubts? The plans must provide a genuine likelihood of success.

What are possible plans that management might create to mitigate the substantial doubt that the entity will fail to make its debt payments within one year from the issuance of the financial statements? Many possibilities exist. For example, management could develop plans to dispose of assets in order to raise cash and reduce costs. Management might also plan to borrow money, restructure the entity's debt, reduce expenditures, or increase outside ownership. All of these possibilities could raise the funds necessary so as to reduce the level of uncertainty.

However, plans alone are not sufficient. Management must have the evidence necessary to show that it can probably implement the plans, and if so, that they will probably mitigate the conditions or events that have created the high level of doubt.

Interestingly, whether implementation of the plans is probable and whether mitigation is probable, disclosure is still required. Once substantial doubt has been raised, certain information must be included in the financial reporting so that outside decision-makers are aware of the situation.

- If substantial doubt is raised but alleviated by management's plans, the conditions or events that caused the concern are disclosed along with management's evaluation of their significance as well as the plans that are expected to solve the concern.
- If substantial doubt is raised that is not alleviated by management's plans, the same information as above is disclosed. In addition, a clear statement is included in the footnotes to state that substantial doubt exists about the entity's ability to continue as a going concern for one year from the date on which the financial statements were issued.

In either case, outside decision-makers are made aware of the concern, and if that concern has not been mitigated, a warning of the substantial doubt is included in financial statement note disclosures.

## Bankruptcy Reform Act of 1978

Over the ages debtors who found themselves unable to meet obligations were dealt with harshly. Not only were all their assets taken from them, but they were given little or no relief through legal forgiveness of debts. Many of them ended up in debtors' prisons with all means of rehabilitation removed. A large number of the early settlers in this country left their homelands to escape such a fate.<sup>10</sup>

<sup>9</sup> From Accounting Standards Codification 205-40-55-2

<sup>10</sup> Homer A. Bonhiver, *The Expanded Role of the Accountant under the 1978 Bankruptcy Code* (New York: Deloitte Haskins & Sells, 1980), p. 7.

Based on an original provision of the U.S. Constitution, Congress is responsible for creating bankruptcy laws. However, virtually no federal bankruptcy laws were passed until the Bankruptcy Act of 1898 (revised in 1938 by the Chandler Act). Later, following a decade of study and debate, the Bankruptcy Reform Act of 1978 replaced these laws. Congress has amended this act several times since 1978.<sup>11</sup>

Consequently, the Bankruptcy Reform Act of 1978 as amended continues to provide the legal structure for most bankruptcy proceedings in the United States. *It strives to achieve two goals in connection with insolvency cases: (1) the fair distribution of assets to creditors and (2) the discharge of an honest debtor from debt.*

### LO 13-3

Explain the difference between a voluntary bankruptcy and an involuntary bankruptcy.

### Voluntary and Involuntary Petitions

When insolvency occurs, every interested party has the right to seek protection under the Bankruptcy Reform Act.<sup>12</sup> The company itself can file a petition with the court to begin bankruptcy proceedings. If the company is the initiator, the process is referred to as a *voluntary bankruptcy*. In such cases, the petition must be accompanied by exhibits listing all assets and debts.<sup>13</sup> Company officials also must respond to questions concerning various aspects of the business's affairs. Such questions include

- When did the business commence?
- In whose possession are the books of account and records?
- When was the last inventory of property taken?

Creditors also can seek to force a debtor into bankruptcy (known as an *involuntary bankruptcy*) in hopes of reducing their potential losses. To avoid nuisance actions, bankruptcy laws regulate the filing of involuntary petitions. If a company has 12 or more unsecured creditors, at least 3 must sign the petition. The creditors that sign must have unsecured debts of at least \$15,775.<sup>14</sup> If fewer than 12 unsecured creditors exist, only a single signer is required, but the \$15,775 minimum debt limit remains.

Attorney Kirk B. Burkley of Bernstein-Burkley, P.C., on behalf of three petitioning creditors, filed an involuntary bankruptcy petition in the Western District of Pennsylvania against Wishgard, LLC, a regional oil and gas company. "Wishgard failed to pay its creditors in a timely manner and it is time to take the next step to try and recover their money," says Kirk Burkley, attorney for the petition creditors, Southeast Land Services, Inc., Brighton Resources, LLC and Ray Bauman.<sup>15</sup>

Neither a voluntary nor an involuntary petition automatically creates a bankruptcy case. Bankruptcy courts can reject voluntary petitions if the action is considered detrimental to the creditors. Involuntary petitions also can be rejected unless evidence exists to indicate that the

<sup>11</sup> An excellent overview of the bankruptcy process from a legal perspective can be found at <http://www.uscourts.gov/FederalCourts/Bankruptcy/BankruptcyBasics.aspx>. It is titled "Bankruptcy Basics" and produced by the Administrative Office of the United States Courts. Bankruptcy can be viewed in an entirely different light in the book *Comic Wars* written by Dan Raviv and published in 2002 by Broadway Books in New York. *Comic Wars* follows the battle between several financial icons as they seek to gain control over Marvel Entertainment as the company struggles to avoid liquidation.

<sup>12</sup> Insolvency (not being able to pay debts as they come due) is not necessary for filing a bankruptcy petition. During the 1980s, such companies as Manville Corporation, Texaco, and A. H. Robins filed for protection under the Bankruptcy Reform Act in hopes of settling massive litigation claims.

<sup>13</sup> The bankruptcy petition filed by Circuit City on November 10, 2008, can be found at <http://www.creditslips.org/creditslips/CircuitCity.pdf>. This document shows that the company held total assets of \$3.4 billion and total debt of \$2.3 billion. The document indicates that off balance sheet debts (such as operating leases) have not been included in this total. On that day, the company owed Hewlett-Packard, its biggest unsecured creditor, \$118,797,964. The petition originally sought a reorganization but that quickly became a liquidation in January 2009 after an unsuccessful attempt to generate a significant amount of cash from Christmas sales.

<sup>14</sup> Throughout the bankruptcy laws, a number of monetary thresholds exist. These dollar amounts are adjusted for inflation every three years based on the Consumer Price Index for All Urban Consumers. The \$15,775 figure was established on April 1, 2016.

<sup>15</sup> PR Newswire, "Creditors File Involuntary Bankruptcy Against Wishgard, LLC," March 5, 2013.

debtor is not actually able to meet obligations as they come due. Merely being slow to make payments is not sufficient. The debtor may well fight an involuntary petition fearing that its reputation will be tainted.

If the court accepts the petition, an *order for relief* is granted which creates an automatic stay that halts all actions against the debtor. This provides time for the various parties to consider what steps should be taken to limit losses. The company comes under the authority of the bankruptcy court so that any asset distributions must be made in a fair manner.

To prevent creditors from seizing whatever is handy once the bankruptcy is filed, the Bankruptcy Code provides for an automatic stay or injunction that prohibits actions by creditors to collect debts from the debtor or the debtor's property without the court's permission. The automatic stay bars any creditor (including governmental creditors such as the Internal Revenue Service) from taking any action against the debtor or the debtor's property.<sup>16</sup>

#### LO 13-4

Identify the various types of creditors based on their status during a bankruptcy.

### *Classification of Creditors*

Following the issuance of an order for relief, the possibility of loss influences each party's view of a bankruptcy case. However, some creditors might have already obtained a measure of security for themselves. When a debt is created, the parties can agree to attach a mortgage lien or security interest to specified assets (known as *collateral*) owned by the debtor. This action is most likely to occur when the amounts involved are great or the debtor is experiencing financial difficulty. If the liability is not paid when due, the creditor can force the sale (or, in some cases, the return) of the pledged property with the proceeds used to satisfy all or part of the obligation. In bankruptcy proceedings, a secured creditor holds a much less vulnerable position than an unsecured creditor.

Because of the possible presence of liens, all loans and other liabilities are reported to the bankruptcy court according to their degree of protection against loss. Some are identified as *fully secured* to indicate that the net realizable value of the collateral exceeds the amount of the obligation. Despite the debtor's insolvency, these creditors will suffer no loss. They are protected by the pledged property. Any money received from the collateral in excess of the debt balance is used to pay unsecured creditors.

A liability is viewed as *partially secured* if the value of the collateral covers only a portion of the obligation. The remainder is considered *unsecured*. The creditor risks losing some or all of the additional amount. For example, assume a bank holds a \$90,000 loan due from an insolvent party. The creditor is protected by a lien attached to land valued at \$64,000. The debt is only partially secured. Proceeds from the sale of the land cannot satisfy the other \$26,000 of the balance. This residual portion is reported to the court as unsecured.

All other liabilities are unsecured. These creditors have no legal right to any of the debtor's specific assets. They are only entitled to share in any funds that might remain after all secured claims have been settled. Unsecured creditors are in a precarious position. Unless a debtor's assets greatly exceed secured liabilities (which is unlikely in most insolvency cases), unsecured creditors can expect significant losses if liquidation becomes necessary. For example, in the liquidation plan approved for Circuit City, "unsecured creditors, such as suppliers, should get between 10 percent and 32 percent of the amount they are owed."<sup>17</sup>

Hence, an important aspect of the bankruptcy laws is the ranking of unsecured claims. The Bankruptcy Reform Act identifies several types of unsecured liabilities that have priority and must be paid before other unsecured debts are settled. *These obligations are ranked with each level to be satisfied in full before any payment is made to the next.* Only in this manner is a systematic distribution of any remaining assets possible.

<sup>16</sup> Pearson, "The Role of the Accountant," p. 24.

<sup>17</sup> Louis Llovio, "Circuit City Liquidation Plan Approved in Bankruptcy Court," *Richmond Times-Dispatch* (online), September 9, 2010.

### ***Unsecured Liabilities Having Priority***

The following liabilities have priority in a bankruptcy:<sup>18</sup>

1. Claims for administrative expenses such as the costs of preserving and liquidating available property. All trustee expenses and the costs of outside attorneys, accountants, or other consultants fall within this category. Without a high-priority ranking, insolvent companies would have difficulty convincing qualified individuals to serve in these essential positions.

Ms. Goldstein's firm received \$389 million in fees and expenses in its 3 1/2 years as lead counsel in the Lehman Brothers bankruptcy, just a piece of the more than \$1.4 billion in total fees paid out to all of the professional firms on Lehman's tab.<sup>19</sup>

2. Obligations arising between the date that a petition is filed with the bankruptcy court and the appointment of a trustee or the issuance of an order for relief. In voluntary cases, such claims are rare because an order for relief is usually entered when the petition is filed. This provision is important in helping the debtor continue operations if an involuntary petition is presented but legal action is not immediately taken. With this high ranking, the debtor can hope to continue to buy goods on credit in order to stay in business while resisting the involuntary petition.
3. Employee claims for wages earned during the 180 days preceding the filing of a petition. The amount of this priority is limited, though, to \$12,850 per individual. (The limit was \$11,725 until raised in 2013 to \$12,475. That limit remained until set at \$12,850 in 2016.) This priority ranking does not include officers' salaries. Employees are not company creditors in the traditional sense of that term. They did not enter employment to serve as lenders to the business. This designation prevents employees from being penalized too heavily because of the company's problems. It also encourages them to continue working until the bankruptcy issue is settled.
4. Employee claims for contributions to benefit plans earned during the 180 days preceding the filing of a petition. Again, a \$12,850 limit per individual (reduced by certain specified payments) is enforced.
5. Claims for the return of deposits made by customers to acquire property or services that the debtor never delivered or provided. The priority figure here is limited to \$2,850. These claimants did not intend to be creditors. They were merely trying to make a purchase.
6. Government claims for unpaid taxes.

All of the remaining obligations of an insolvent company are classified as general unsecured claims that will be repaid only after all creditors with priority have been satisfied. *If the funds that remain are not sufficient to settle all of these general unsecured claims, the available money must be divided proportionally.*

RadioShack's bankruptcy filing back in February probably surprised no one, and it's also not surprising that it has taken almost eight months to sort out the affairs of a company that was 95 years old and had 4,000 stores. While many of the chain's stores were saved and continue under a new owner, and some creditors will be paid in full, the bankruptcy won't end well for the Shack's unsecured creditors. The electronics retailer had \$1 billion in debt, and there simply aren't enough assets to pay everyone back. The bankruptcy can finally conclude because those unsecured or "junior" creditors agreed to end lawsuits against the senior creditors in exchange for having the senior creditors set aside about \$9 million in a trust for them when the company finally liquidates.<sup>20</sup>

<sup>18</sup> Only the most significant unsecured liabilities given legal priority are included here. For a complete list, check a current business law textbook.

<sup>19</sup> Jacqueline Palank, "\$1,000/Hour Bankruptcies: Attorneys Justify Their Fees," *The Wall Street Journal*, June 4, 2012, page B-6.

<sup>20</sup> <https://consumerist.com/2015/10/01/judge-approves-final-plan-for-radioshack-bankruptcy/>



## Discussion Question

### WHAT DO WE DO NOW?

The Toledo Shirt Company manufactures men's shirts sold to department stores and other outlets throughout Ohio, Illinois, and Indiana. For the past 14 years, one of Toledo's major customers has been Abraham and Sons, a chain of nine stores selling men's clothing. Mr. Abraham retired 18 months ago and his two sons took complete control of the organization. Since that time, they have invested significant sums of money in an attempt to expand each store by also selling women's clothing. Success in this new market has proven to be difficult. Abraham and Sons is not known for selling women's clothing, and no one in the company has much expertise in the area.

Approximately seven months ago, James Thurber, Toledo's chief financial officer, began to notice that Abraham and Sons was taking longer than usual to make payments. Instead of the normal 30 days, the retailer was taking 45 days—and frequently longer—to pay each invoice. Because of the amount of money involved, Thurber began to monitor the balance daily. When the age of the receivable (\$393,000) hit 60 days, he called Abraham and Sons. The treasurer assured him that the company was merely having seasonal cash flow issues but that payments would soon be back on a normal schedule.

Thurber was still concerned and shortly thereafter placed Abraham and Sons on a “cash and carry” basis. No new sales were to be made unless cash was collected in advance. The company's treasurer immediately called Thurber to complain bitterly. “We have been one of your best customers for well over a decade, but now that we have gotten into a bit of trouble you stab us in the back. When we finish straightening things out here, we will remember this. We can get our shirts from someone else. Our expansions are now complete. We have hired an expert to help us better market women's clothing. We can see the light at the end of the tunnel. Abraham and Sons will soon be more profitable than ever.” In hopes of appeasing the customer while still protecting his own financial position, Thurber agreed to sell merchandise to Abraham and Sons on a very limited credit basis.

A few days later, Thurber received a disturbing phone call from a vice president with another clothing manufacturer. “We've got to force Abraham and Sons into involuntary bankruptcy immediately to protect ourselves. Those guys are running their father's company into the ground. They owe me \$270,000, and I can only hope to collect a small portion of the money now. I need two other creditors to sign the petition and I want Toledo Shirt to be one of them. Abraham and Sons has already mortgaged all of its buildings and equipment so we cannot get anything from those assets. Inventory stocks are dwindling and sales have disappeared since they've tried to change the image of their stores. We can still get some of our money but if we wait much longer nothing will be left but the bones.”

Should Toledo Shirt Company be loyal to a customer that has been excellent in the past or start the bankruptcy process to protect itself? What actions should Thurber take?

#### LO 13-5

Describe the difference between a Chapter 7 bankruptcy and a Chapter 11 bankruptcy.

### *Liquidation versus Reorganization*

An essential decision in any bankruptcy filing (either voluntary or involuntary) is the method by which the debtor will be discharged from its obligations. One obvious option is to liquidate the company's assets with the proceeds distributed to creditors based on their secured positions and the priority ranking system just outlined. However, an important alternative to liquidation does exist. A debtor organization might be able to survive insolvency and continue operating if the parties accept a proposal for *reorganization*.

Legal guidelines for the liquidation of a debtor are contained in Chapter 7 of Title I of the Bankruptcy Reform Act. Chapter 11 describes the reorganization process. Consequently, the proceedings have come to be referred to as a Chapter 7 bankruptcy (liquidation) or as a Chapter 11 bankruptcy (reorganization).

Not everyone agrees with the wisdom of allowing troubled businesses to reorganize and continue operating. This argument holds that keeping inefficient organizations alive and competing does not serve the industry or the economy well.

There are many reasons why a business gets sick, but they don't necessarily mean it should be destroyed. Hundreds of thousands of businesses that at one time or another had financial difficulties survive today as the result of Chapter 11 proceedings. They continue to contribute to employment, to tax revenues, to overall growth. It's counterproductive to destroy the business value of an asset by liquidating it and paying it out in a Chapter 7 if that company shows signs of being able to recover in a reorganization.<sup>21</sup>

Contrast that statement with the following:

The efficiency of Chapter 11 is undergoing scrutiny. A particular concern, in industries such as telecoms and now airlines, is that bankrupt firms will return with manageable debts and thus be better able to compete, with the result that they force hitherto healthier rivals into bankruptcy in their turn. Does Chapter 11 create zombie companies that live on, only to drag other firms into their graves?<sup>22</sup>

Under most reorganization plans, creditors agree to absorb a partial loss rather than force the insolvent company to liquidate. Before accepting such an arrangement, creditors (as well as the bankruptcy court) must be convinced that helping to rehabilitate the debtor will lead to a higher return (or a smaller loss). One potential benefit associated with reorganizations is that the creditor might be able to retain the insolvent company as a customer. In many cases, continuation of the relationship is an important concern if the debtor has been a good client in the past. Furthermore, the priority ranking system for debts often leaves general unsecured creditors with very little to gain by trying to force a liquidation.

Accountants face two entirely different reporting situations depending on whether a Chapter 7 or a Chapter 11 bankruptcy is encountered. However, in both cases, accountants must keep all parties informed about relevant events as they occur.

#### LO 13-6

Account for a company as it enters bankruptcy.

### *Statement of Financial Affairs*

A federal bankruptcy judge on Friday granted a 30-day extension, to February 27, for AMR Corp.'s filing of schedules of assets and liabilities and a statement of financial affairs in its Chapter 11 bankruptcy restructuring.<sup>23</sup>

At the start of bankruptcy proceedings, the debtor normally prepares a statement of financial affairs. This schedule provides vital information about the company's financial position and helps guide all parties as they consider what actions to take. This statement is especially important in assisting unsecured creditors as they decide whether to push for reorganization or liquidation. To assist in these assessments, the debtor's assets and liabilities are reported according to the classifications that are relevant to a liquidation.

Consequently, on a statement of financial affairs, assets are labeled as follows:

1. Pledged with fully secured creditors.
2. Pledged with partially secured creditors.
3. Free assets available to pay priority liabilities with any remaining amount then used to pay some or all of the other unsecured creditors. This category consists of both assets that have not been pledged on debts and the excess value of any pledged assets. Excess value exists when an asset can be liquidated for more money than the debt it secures.

<sup>21</sup> James A. Goodman as interviewed by Robert A. Mamis, "Why Bankruptcy Works," *Inc.*, October 1996, p. 39.

<sup>22</sup> "The Night of the Killer Zombies," *The Economist*, December 14, 2002.

<sup>23</sup> D. R. Stewart, "AMR Gets Extension for Filing Key Papers," *McClatchy-Tribune Regional News*, January 28, 2012.



## Discussion Question

### HOW MUCH IS THAT BUILDING REALLY WORTH?

Viron, Inc., was created in 2009 to recycle plastic products and manufacture a variety of new items. The actual production process was quite complex because the old plastic had to be divided into categories and then reclaimed based on the composition. Viron made new products based on the type of plastic available and the market demand.

In December 2013, the company spent \$7.5 million to construct a building for manufacturing purposes. It was designed specifically to meet Viron's needs. The building was constructed near Gaffney, South Carolina, to take advantage of a large labor force available because of high unemployment in the area.

Unfortunately, because of a lingering recession in that area, Viron was unable to generate sufficient revenues quickly enough to reach break-even point and was forced to file for bankruptcy. An accountant was hired to aid the parties in deciding whether to liquidate or attempt a reorganization.

In producing an initial report for the court and the parties involved, the accountant needed to establish a liquidation value for the building in Gaffney, the company's largest asset. A real estate appraiser was brought in and she made the following comments about the structure:

The building is well constructed and practically new. It is clearly worth in excess of \$7 million. However, I doubt that anyone is going to pay that much for it. We don't get a lot of new industry in this area. Not many companies need to buy large buildings. Even if a buyer is found, a significant amount of money will be required to convert the property into a different usage. Unless a company wants to recycle plastics, the building will have to be completely adapted to any other purpose. To be honest, I am not sure it can be sold at any price. There are a lot of abandoned buildings in this area of South Carolina. Of course, if someone wants to recycle plastics, it just might bring in \$7 million.

In producing financial information for this company, how should the accountant report this building?

The company's debts are listed in a similar fashion:

1. Liabilities with priority.
2. Fully secured creditors.
3. Partially secured creditors.
4. Unsecured creditors. For convenience, stockholders are included in this final group.

The statement of financial affairs is produced under the assumption that liquidation will occur. Historical cost figures are not relevant. The parties to the bankruptcy desire information that reflects (1) the net realizable value of the debtor's assets and (2) the potential application of these proceeds to the various liabilities. With this knowledge, creditors and stockholders can estimate the monetary resources that will be available after all secured claims and priority liabilities have been settled. By comparing this total with the amount of unsecured liabilities, interested parties can approximate the eventual loss they face.

The information found in a statement of financial affairs can affect the outcome of a bankruptcy. If, for example, the statement indicates that unsecured creditors are destined to suffer a substantial loss from a liquidation, this group might well favor reorganizing the company in hopes of averting that consequence. Conversely, if the statement shows that

all creditors will be paid in full and that a distribution to the stockholders is also possible, liquidation becomes a much more viable option. Thus, all parties involved with an insolvent company should study the statement of financial affairs before deciding the fate of the operation.

### Statement of Financial Affairs Illustrated

For illustration purposes, assume that Chaplin Company recently experienced severe financial difficulties and is currently insolvent. It will soon file a voluntary bankruptcy petition. Company officials are trying to decide whether to seek liquidation or reorganization. They have asked their accounting firm to produce a statement of financial affairs to assist them in formulating an appropriate strategy. A current balance sheet for Chaplin, prepared as if the company were a going concern, is presented in Exhibit 13.1.

Assume that the following information about Chaplin Company has been accumulated as a preliminary step in creating the statement of financial affairs:

- The equity method investment reported on the balance sheet has appreciated in value since being acquired and is now worth \$20,000. Dividends of \$500 are currently due from this investment, although Chaplin has not yet recognized the revenue.
- Officials estimate that \$12,000 of the company's accounts receivable can still be collected despite the bankruptcy proceedings.
- By spending \$5,000 for repairs and marketing, Chaplin can sell its inventory for \$50,000.
- The company will receive a \$2,000 refund from the various prepaid expenses, but its intangible assets have no resale or other monetary value.
- The land and building are in an excellent location and can be sold for a figure 10 percent above net book value. However, the equipment was specially designed for Chaplin.

#### EXHIBIT 13.1 Financial Position Prior to Bankruptcy Petition

<b>CHAPLIN COMPANY</b>			
<b>Balance Sheet</b>			
<b>June 30, 2017</b>			
<b>Assets</b>			
Current assets:			
Cash . . . . .		\$ 2,000	
Investment (equity method) . . . . .		15,000	
Accounts receivable (net) . . . . .		23,000	
Inventory . . . . .		41,000	
Prepaid expenses . . . . .		5,000	\$ 86,000
Land, building, equipment, and other assets:			
Land . . . . .		100,000	
Building (net) . . . . .		110,000	
Equipment (net) . . . . .		80,000	
Intangible assets . . . . .		15,000	305,000
Total assets . . . . .			<u>\$391,000</u>
<b>Liabilities and Stockholders' Equity</b>			
Current liabilities:			
Notes payable (secured by inventory) . . . . .		\$ 75,000	
Accounts payable . . . . .		59,000	
Accrued expenses . . . . .		21,000	\$155,000
Long-term liabilities:			
Notes payable (secured by lien on land and buildings) . . . . .			200,000
Stockholders' equity:			
Common stock . . . . .		100,000	
Retained earnings (deficit) . . . . .		(64,000)	36,000
Total liabilities and stockholders' equity . . . . .			<u>\$391,000</u>



The company's management anticipates having trouble finding a buyer for this equipment unless the price is reduced considerably. Only 40 percent of the current net book value is expected from these assets.

- Administrative costs of \$20,500 are projected if the company is liquidated.
- Accrued expenses are listed on the balance sheet as \$21,000. That amount includes employee salaries of \$16,000. This figure includes one person who is owed \$13,850 but is the only employee due an amount above \$12,850. Other accrued expenses total \$5,000. In addition, payroll taxes of \$2,000 have been withheld from these wages but not yet paid to the government or recorded as a liability.
- Interest of \$5,000 on the company's long-term liabilities has not yet been accrued for the first six months of 2017.

Using this information, the statement of financial affairs presented in Exhibit 13.2 can be prepared for the Chaplin Company. Several aspects of this statement should be specifically noted:

1. The current and noncurrent distinctions usually applied to reported assets and liabilities are omitted from this statement. Because the company is on the verge of going out of business, such classifications are meaningless. Instead, the statement is designed to separate secured from unsecured balances.
2. Book values are included on the side of the schedule but only for informational purposes. These figures are not relevant in a bankruptcy. *Assets are reported at estimated net realizable value. Liabilities are shown at the amount required for settlement.*
3. Both the dividend receivable and the interest payable are included in Exhibit 13.2, although neither was recorded by the company on its balance sheet. The payroll tax liability is reported at the amount the company presently owes. The statement of financial affairs is designed to disclose currently updated figures.
4. Liabilities having priority are individually identified within the liability section (Point A). Because these claims will be paid before other unsecured creditors, the \$37,500 total is subtracted directly from the free assets (Point B). Although not yet incurred, estimated administrative costs are included in this category because such expenses will be necessary for liquidation. Salaries are appropriately considered as priority liabilities. However, the \$1,000 owed to one employee in excess of the individual \$12,850 limit is separated and shown as an unsecured claim (Point C).
5. According to this statement, if the liquidation process occurs as expected, Chaplin will have \$57,000 in free assets remaining after settling all liabilities with priority (Point D). Because the liability section shows unsecured claims of \$95,000, these creditors face a \$38,000 loss (\$95,000 – \$57,000) if the company is liquidated (Point E). This final distribution is often stated as a percentage:

$$\frac{\text{Free assets}}{\text{Unsecured claims}} = \frac{\$57,000}{\$95,000} = 60\%$$

Unsecured creditors can anticipate receiving 60 percent of their claims. A creditor, for example, to whom this company owes an unsecured balance of \$400 should anticipate collecting \$240 (\$400 × 60%) following liquidation. However, this figure is merely an estimate.

6. If the statement of financial affairs had shown the company with more free assets (after subtracting liabilities with priority) than the total amount of unsecured claims, all of the creditors could expect to be paid in full with any excess money going to Chaplin's stockholders.

### LO 13-7

Account for the liquidation of a company in bankruptcy especially when using the liquidation basis of accounting.

## Liquidation—Chapter 7 Bankruptcy

When an insolvent company is to be liquidated, the provisions established by Chapter 7 of the Bankruptcy Reform Act regulate the process. These laws were created to provide an orderly and equitable structure for selling assets and settling debts. To achieve this end, several events occur after the court enters an order for relief in either a voluntary or involuntary liquidation.

## EXHIBIT 13.2

<b>CHAPLIN COMPANY</b>		
<b>Statement of Financial Affairs</b>		
<b>June 30, 2017</b>		
<b>Book Values</b>		<b>Available for Unsecured Creditors</b>
<b>Assets</b>		
	<b>Pledged with fully secured creditors:</b>	
\$210,000	Land and building . . . . .	\$ 231,000
	Less: Notes payable (long term) . . . . .	(200,000)
	Interest payable . . . . .	<u>(5,000)</u>
		\$ 26,000
	<b>Pledged with partially secured creditors:</b>	
41,000	Inventory . . . . .	\$ 45,000
	Less: Notes payable (current) . . . . .	<u>(75,000)</u>
		-0-
	<b>Free assets:</b>	
2,000	Cash . . . . .	2,000
15,000	Investment in marketable securities . . . . .	20,000
-0-	Dividends receivable . . . . .	500
23,000	Accounts receivable . . . . .	12,000
5,000	Prepaid expenses . . . . .	2,000
80,000	Equipment . . . . .	32,000
15,000	Intangible assets . . . . .	<u>-0-</u>
	Total available to pay liabilities with priority and unsecured creditors . . . . .	94,500
	Less: Liabilities with priority (see Ⓐ below in Liabilities) . . . . .	<u>(37,500)</u> Ⓑ
	Available for unsecured creditors . . . . .	57,000 Ⓓ
	Estimated deficiency . . . . .	<u>38,000</u> Ⓔ
<u>\$391,000</u>		<u>\$ 95,000</u>
<b>Book Values</b>		<b>Unsecured—Nonpriority Liabilities</b>
<b>Liabilities and Stockholders' Equity</b>		
	<b>Liabilities with priority:</b>	
\$ -0-	Administrative expenses (estimated) . . . . .	\$ 20,500
16,000	Salaries payable (accrued expenses) . . . . .	15,000
-0-	Payroll taxes payable (accrued expenses) . . . . .	<u>2,000</u>
	Total . . . . .	<u>\$ 37,500</u> Ⓐ
	<b>Fully secured creditors:</b>	
200,000	Notes payable . . . . .	\$ 200,000
-0-	Interest payable . . . . .	5,000
	Less: Land and building . . . . .	<u>(231,000)</u>
		-0-
	<b>Partially secured creditors:</b>	
75,000	Notes payable . . . . .	\$ 75,000
	Less: Inventory . . . . .	<u>(45,000)</u>
		30,000
	<b>Unsecured creditors:</b>	
59,000	Accounts payable . . . . .	59,000
	Accrued expenses (other than salaries and payroll taxes) . . . . .	5,000
5,000		5,000
36,000	Stockholders' equity . . . . .	<u>-0-</u>
<u>\$391,000</u>		<u>\$ 95,000</u>

To begin, the court appoints an interim trustee to oversee the company and its liquidation. This individual is charged with preserving the assets and preventing loss of the estate. Thus, creditors are protected from detrimental actions that management, the ownership, or any of the other creditors might undertake. The interim trustee (as well as the permanent trustee, if the creditors subsequently select one) normally performs a number of tasks including changing locks, securing all assets, and gaining possession of the financial records and other official documents.<sup>24</sup>

The court then calls for a meeting of all creditors who have appropriately filed a proof of claim against the debtor. To ensure fairness during the liquidation process, a committee of unsecured creditors is selected to help protect the financial interests of all unsecured creditors. The committee consults with the trustee and makes recommendations about the administration of the estate.<sup>25</sup>

### Role of the Trustee

In a liquidation, the trustee is a central figure. This individual must recover all property belonging to the insolvent company, preserve the estate from any deterioration, liquidate non-cash assets, and make proper distributions to the various claimants. The trustee might need to continue operating the company to complete business activities that were in progress when the order for relief was entered. To accomplish such a multitude of objectives, this individual holds wide-ranging authority.

The trustee can also void any transfer of property (known as a *preference*) made by the debtor within 90 days *prior* to the filing of the bankruptcy petition if the company was already insolvent at the time. The recipient must return these transfers so that the money or other property can be returned to the debtor's estate.<sup>26</sup>

The preference avoidance statute is designed to ensure that any distributions from a bankruptcy estate are made in accordance with the scheme established by Congress. The preference avoidance statute looks back for a period of 90 days to a full year before the bankruptcy filing to examine whether any creditors received more than their proportionate share of the debtor's assets during that time. If a creditor did receive more than its fair share of the debtor's assets, the bankruptcy trustee is empowered to void such transactions and to recover the value of the transfers from the recipient for the benefit of the debtor's bankruptcy estate as a whole.<sup>27</sup>

Return of the asset is not necessary if the transfer was for no more than would have been paid to this party in an organized liquidation.

Not surprisingly, the trustee must record all activities and report them periodically to the court and other interested parties. Historically, a wide variety of statements has been utilized to report ongoing liquidations. Trustees often prepare a *statement of realization and liquidation* as a quick method to report the impact of events as they occur during the liquidation process. This statement is used mostly to report smaller concerns that are not required to follow U.S. GAAP. To be in conformity with U.S. GAAP, the reporting must adhere to the liquidation basis of accounting. Many bankruptcy cases involve small concerns where a simple statement of realization and liquidation can be used.

The statement of realization and liquidation is designed to convey significant information such as

- Account balances reported by the company at the date on which the order for relief was filed.
- Cash receipts generated by the sale of the debtor's property.
- Cash disbursements made to wind up the affairs of the business and pay secured creditors.
- Any other transactions such as the write-off of assets and the recognition of unrecorded liabilities.

<sup>24</sup> Bonhiver, *The Expanded Role of the Accountant*, pp. 50–51.

<sup>25</sup> *Ibid.*, p. 26.

<sup>26</sup> The 90-day limit is extended to one year if the transfer is made to an inside party such as an officer or a director or an affiliated company. The one-year limit also applies to any transfer made by the debtor with the intent to defraud another party. Transfers of less than \$5,000 cannot be challenged as preferences.

<sup>27</sup> Bradley S. Schmarak and Tracy L. Treger, "Avoiding the Preference Pitfall in Workouts," *Commercial Lending Review*, October 11, 1997, p. 37.

Any cash that remains following this series of events is distributed to the unsecured creditors after all priority claims have been settled.

As will be discussed later, to be in conformity with U.S. GAAP, a statement of net assets in liquidation and a statement of changes in net assets in liquidation must, at a minimum, be presented based on application of the liquidation basis of accounting. However, many small operations will not need that degree of financial reporting as they go out of business and will opt to report only a statement of realization and liquidation.

### Statement of Realization and Liquidation Illustrated

To demonstrate the production of a statement of realization and liquidation, the information previously presented for Chaplin Company will be extended into a liquidation.

The dollar amounts resulting from this liquidation will not necessarily agree with the balances used in creating the statement of financial affairs in Exhibit 13.2. The previous statement was based on projected sales and other estimations. A statement of realization and liquidation reports the actual transactions and other events as they occur. Differences between actual figures and the expected amounts are normal. Assume the following transactions occur in liquidating this company:

#### Liquidation Transactions of Chaplin Company—2017

- |         |                                                                                                                                                                                                                                                                                                                                                |
|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| July 1  | The accounting records in Exhibit 13.1 are adjusted to the appropriate balances as of June 30, 2017, the date on which the order for relief was entered. Hence, the previously unrecorded dividends receivable, interest payable, and additional payroll tax liability are now recognized.                                                     |
| July 23 | The trustee expends \$7,000 to dispose of the company's inventory at a negotiated price of \$51,000. The net cash is applied to the notes payable for which the inventory served as partial security.                                                                                                                                          |
| July 29 | A cash dividend of \$500, accrued as of June 30, is collected. The related investments (reported at \$15,000) are then sold for \$19,600.                                                                                                                                                                                                      |
| Aug. 17 | Accounts receivable of \$16,000 are collected. The remaining balances are written off as uncollectible.                                                                                                                                                                                                                                        |
| Aug. 30 | The trustee determines that no refund is available from any of the company's prepaid expenses. In addition, the intangible assets are removed from the financial records because they have no cash value. The land and building are sold for \$208,000. The trustee immediately uses \$205,000 of this money to pay off the secured creditors. |
| Oct. 9  | After an extended search for a buyer, the equipment is sold for \$42,000 in cash.                                                                                                                                                                                                                                                              |
| Nov. 1  | A \$24,900 invoice is received for various administrative expenses incurred in liquidating the company. The trustee also reclassifies the remaining portion of the partially secured liabilities as unsecured.                                                                                                                                 |
| Nov. 9  | Noncash assets have now been converted into cash and all secured claims settled, so the trustee begins to distribute any remaining funds. The liabilities with priority are paid first. The excess is then applied to the claims of unsecured nonpriority creditors.                                                                           |

Because the process is not structured under U.S. GAAP, the physical layout used to prepare a statement of realization and liquidation can vary significantly. For example, the various account groups can be presented on a horizontal plane with the liquidating transactions shown vertically. The accountants can then record events as they occur to show their effects on each account classification. Exhibit 13.3 has been constructed in this style to display the liquidation of Chaplin Company.

**EXHIBIT 13.3 Final Statement of Realization and Liquidation**

<b>CHAPLIN COMPANY</b>							
<b>Statement of Realization and Liquidation</b>							
<b>June 30, 2017, to November 9, 2017</b>							
<b>Date</b>	<b>Cash</b>	<b>Noncash Assets</b>	<b>Liabilities with Priority</b>	<b>Fully Secured Creditors</b>	<b>Partially Secured Creditors</b>	<b>Unsecured—Nonpriority Liabilities</b>	<b>Stockholders' Equity (Deficit)</b>
6/30/17	Book balances	\$ 2,000	\$ 15,000*	\$ 200,000	\$ 75,000	\$ 65,000 <sup>†</sup>	\$ 36,000
7/1/17	Adjustments for unrecorded dividends, interest, and payroll taxes		500	5,000			(6,500)
7/1/17	Adjusted book balances	2,000	389,500	17,000	75,000	65,000	29,500
7/23/17	Inventory sold—recorded net of disposal costs	44,000	(41,000)				3,000
7/23/17	Proceeds from inventory paid to secured creditors	(44,000)			(44,000)		
7/29/17	Investments sold and dividends received	20,100	(15,500)				4,600
8/1/17	Receivables collected with remainder written off	16,000	(23,000)				(7,000)
8/30/17	Intangible assets and prepaid expenses written off		(20,000)				(20,000)
	Land and building sold	208,000	(210,000)				(2,000)
	Proceeds from land and building paid to secured creditors	(205,000)		(205,000)			
10/9/17	Equipment sold	42,000	(80,000)				(38,000)
11/1/17	Administrative expenses accrued		24,900				(24,900)
11/1/17	Excess of partially secured liabilities reclassified as an unsecured claim				(31,000)	31,000	
11/9/17	Final balances remaining for unsecured creditors	\$ 83,100	\$ -0-	\$ 41,900	\$ -0-	\$ 96,000	\$ (54,800)

\*Includes salaries payable of \$15,000 (amount due employees but limited to \$12,850 per individual). In addition, payroll taxes have not yet been recorded.

<sup>†</sup>Accounts payable of \$59,000 plus \$1,000 salary payable above limit level and other accrued expenses of \$5,000.

Probably the most significant information presented in this statement is the measurement and classification of the company's liabilities. Once again, fully and partially secured claims are reported separately from liabilities with priority and unsecured nonpriority claims.

For Chaplin Company, Exhibit 13.3 discloses \$137,900 in debts as of November 9 (\$41,900 in priority claims and \$96,000 in unsecured nonpriority liabilities). After satisfying all secured liabilities, the company holds only \$83,100 in cash. The trustee must first use this remaining money to pay the three liabilities with priority according to the following ranking:

Administrative expenses (adjusted from original estimation) . . . . .	\$24,900
Salaries payable (within the \$12,850 per person limitation) . . . . .	15,000
Payroll taxes payable . . . . .	<u>2,000</u>
Total . . . . .	<u>\$41,900</u>

These disbursements leave the company with \$41,200 in cash (\$83,100 – \$41,900) but \$96,000 in unsecured liabilities. Consequently, the unsecured creditors will receive only 45 percent of their claims against Chaplin Company:

$$\frac{\$41,200}{\$96,000} = 42.9\% \text{ (rounded)}$$

Because all liabilities are not paid in full, stockholders receive nothing, a common outcome for a bankruptcy liquidation.

At a 42.9 percent collection rate, the unsecured nonpriority creditors receive a smaller percentage of their claims than the 60 percent figure projected in the statement of financial affairs (Exhibit 13.2). Although this earlier statement plays an important role in bankruptcy planning and proceedings, the ability to anticipate future events limits the statement's accuracy.

## The Liquidation Basis of Accounting

In 2013, FASB issued *Accounting Standards Update No. 2013-07*, "Liquidation Basis of Accounting." Official reporting standards prior to this pronouncement had been virtually nonexistent for companies in the process of being liquidated. A number of high profile liquidations at the time (such as Circuit City and Hostess Brands) pointed up a need for authoritative guidance to help the parties involved. In this Update, FASB addresses four essential questions about the reporting of a company being liquidated:

1. When is a company viewed as actually being in liquidation so that the liquidation basis of accounting becomes necessary?
2. At a minimum, what statements should be reported during liquidation to be in conformity with U.S. GAAP?
3. How should the liquidating company's assets be reported during this period?
4. How should the liquidating company's liabilities be reported during this period?

According to FASB, the liquidation basis is only applied when liquidation becomes imminent. This condition is said to exist when a plan of liquidation is approved by the court or by the people who have such authority, and there is only a remote chance that (a) the plan will be blocked or (b) the entity will return from liquidation. Thus, the proper approval of a plan is usually the point at which the liquidation basis becomes required by U.S. GAAP. Until that point, accounting rules for a going concern continue to be applied.

From that time forward, the company's financial reporting must include a statement of changes in net assets in liquidation and a statement of net assets in liquidation.

- The first of these statements reports all changes during the period in the net assets available for distribution to investors and other claimants. It shows the expected amount of net assets and the changes that occur in that anticipated balance. Because the company is going out of business, neither an income statement nor a statement of cash flows serves any purpose.
- The second of these statements provides information about the net assets held by the company that are available for distribution.

On the statement of net assets in liquidation, assets are reported at the estimated amount of cash (or other consideration) that is expected as a result of the liquidation process. FASB notes that this figure is not necessarily the same as fair value. Liquidations often take place quickly so that the amount collected might be far less than fair value. The statement reports all of the assets that can be used to generate cash during the liquidation process. Adjustments in these expected amounts affect the balance of the net assets in liquidation.

In reporting liabilities, no attempt is made to anticipate the legal release that might come from the bankruptcy process. Therefore, liabilities continue to be reported in a normal fashion unless actual changes in the situation take place. To help decision-makers understand the impact of actions that will occur during liquidation, the company accrues all estimated costs to dispose of its assets as well as any other costs that are expected.

Exhibits 13.4 and 13.5 present a set of these statements using the liquidation basis so that they are in conformity with U.S. GAAP. The assumption here is that liquidation has become imminent for the Winslow Corporation.

In examining these two financial statements, several distinct characteristics should be noted:

1. Even though liquidation is termed as *imminent*, the actual time for the process to be completed may take well over 12 months. New statements will need to be created periodically during that period of time.
2. Any financial statements prepared before the liquidation basis became necessary are not retroactively adjusted. They are still viewed as being presented fairly based on the facts at that time.
3. The net assets in liquidation figure represents the amount that is reasonably expected to remain after all assets have been liquidated and all liabilities settled.
4. Reported assets can include items that have not been previously reported as assets. Internally developed intangibles, for example, can have a cash value for the company even though previously recorded as an expense for financial reporting purposes.
5. All of the asset figures shown are reporting the amount that the company expects to collect. Therefore, the recording of depreciation or impairment is no longer necessary. Because these amounts are equal to the expected cash figure, no further gains and losses are expected. Adjustments of these balances because of new information will impact the amount reported for net assets in liquidation.

**EXHIBIT 13.4**  
Statement of Changes in  
Net Assets in Liquidation

<b>WINSLOW CORPORATION</b>	
<b>Statement of Changes in Net Assets in Liquidation</b>	
<b>for the Three Months Ending December 31, 2017</b>	
Net assets in liquidation as of October 1, 2017.....	\$3,422,960
Adjustment for additional accrued liquidation costs .....	(211,000)
Adjustment in expected net realizable value of assets .....	35,000
Adjustment in amount of valid liability claims .....	(20,000)
Net assets in liquidation as of December 31, 2017 .....	<u>\$3,226,960</u>

**EXHIBIT 13.5**  
Statement of Net Assets in  
Liquidation

<b>WINSLOW CORPORATION</b>	
<b>December 31, 2017</b>	
Cash .....	\$ 74,000
Accounts receivable .....	218,000
Inventory .....	610,540
Land, buildings, and equipment .....	2,873,220
Intangible assets .....	120,000
Accounts payable .....	(148,390)
Taxes payable .....	(124,130)
Accrued liquidation costs .....	(396,280)
Net assets in liquidation as of December 31, 2017 .....	<u>\$3,226,960</u>

6. Liabilities remain reported at the amounts due until they are settled. However, estimated amounts (such as warranties) may require adjustment because of the change in the remaining time of existence.
7. All disposal costs should be anticipated in advance and recognized as a liability so that the amount of cash expected to remain can be determined. The same is true for operating costs. For example, if employees will remain at work during this period and be paid \$10,000, that amount is recognized as soon as it can be estimated.
8. Equity accounts are usually not reported because that information is not relevant to the liquidation.

**LO 13-8**

Discuss the provisions that are often found in a bankruptcy reorganization plan.

## Reorganization—Chapter 11 Bankruptcy

Reorganization under the federal Bankruptcy Code is a way to salvage a company rather than liquidate it. Although the original owners of a company rescued in this way are often left without anything, others whose livelihoods depend on the company's fortunes may come out with their interests intact. The company's creditors, for example, may take over as the new owners. Its suppliers might be able to maintain the company as a customer. Its customers still may count on the company as a supplier. And perhaps most important, many of its employees may be able to keep the jobs that otherwise would have been sacrificed in a liquidation.<sup>28</sup>

As indicated at the beginning of this chapter, for the 12 months ended September 30, 2015, 5,945 Chapter 11 business reorganizations were begun in the United States.<sup>29</sup> Reorganizations allow the parties a chance to salvage the business so that operations can continue. Although this legal procedure offers the hope of survival, reorganization is no guarantee of future prosperity. Companies that attempt to reorganize are often eventually liquidated. For example, Circuit City filed for Chapter 11 reorganization on November 10, 2008, but ultimately began the liquidation process on January 19, 2009.

Obviously, the activities and events surrounding a reorganization differ significantly from a liquidation. One important distinction is that control over the company normally stays with the ownership (referred to as a *debtor in possession*). However, if fraud or gross mismanagement is proven, the court has the authority to appoint an independent trustee to assume control.

Unless replaced, the debtor in possession continues to operate the company and has the primary responsibility for developing an acceptable plan of reorganization. Not everyone, though, agrees with the wisdom of leaving operational control in the hands of management: "One philosophical objection raised increasingly often is the rule that puts the debtor in control of the bankruptcy process, an idea that often leaves foreigners 'stunned,' says one bankruptcy lawyer. This typically means that the managers who bankrupt a firm can have a go at restructuring it to keep it alive."<sup>30</sup>

While a reorganization is in process, owners and managers are legally required to preserve the company's estate as of the date that the order for relief is entered by the court. Liabilities must be separated into those occurring before the bankruptcy filing (often called "prepetition liabilities") and after the filing ("postpetition liabilities"). In this way, bankruptcy laws seek to reduce the losses that creditors and stockholders will have to absorb when either reorganization or liquidation eventually occurs.

### The Plan for Reorganization

The plan is the heart of every Chapter 11 reorganization. The provisions of the plan specify the treatment of all creditors and equity holders upon its approval by the Bankruptcy Court. Moreover, the plan shapes the financial structure of the entity that emerges.<sup>31</sup>

<sup>28</sup> John Robbins, Al Goll, and Paul Rosenfield, "Accounting for Companies in Chapter 11 Reorganization," *Journal of Accountancy*, January 1991, p. 75.

<sup>29</sup> <http://www.uscourts.gov/statistics-reports/caseload-statistics-data-tables>

<sup>30</sup> "The Night of the Killer Zombies," *The Economist*, December 14, 2002.

<sup>31</sup> FASB ASC (para. 852-10-05-4).



The most intriguing aspect of a Chapter 11 bankruptcy is the plan developed to rescue the company from insolvency. Initially, only the debtor in possession can file proposals with the court. If a plan for reorganization is not put forth within 120 days of the order for relief or accepted within 180 days (unless the court grants an extension, although the debtor's exclusivity to propose a plan cannot be extended beyond 18 months), any interested party has the right to prepare and file a proposal.

A recent trend has been to push for quicker reorganization by threatening to move the process to a liquidation. "Most companies that file for bankruptcy these days have debts that far exceed their assets. That means they probably won't be able to pay off their lenders in full, let alone more-junior creditors like suppliers, no matter how long they stay in bankruptcy proceedings. As a result, banks and other lenders, who often are owed millions of dollars and get first dibs on any sale proceeds, are using their clout for a speedy sale."<sup>32</sup>

A reorganization plan can contain an unlimited number of provisions: proposed changes in the company, additional financing arrangements, alterations in the debt structure, and the like. Regardless of the specific details, the intent of all such plans is to provide a feasible long-term solution to the company's monetary difficulties. In order to gain acceptance by the parties involved, a plan must present convincing evidence that the business will emerge from bankruptcy as a viable going concern.

Although no definitive list of inclusions in a reorganization proposal is possible, the following are some of the most common:

1. *Plans proposing changes in the company's operations.* In hopes of improving liquidity, officials often decide to introduce new product lines or sell off unprofitable assets or even entire businesses. Selling or closing failing operations is common because that reduces costs and might generate needed cash. A debtor in possession bears the burden of proving that the problems that led to insolvency can be eliminated by the proposed actions.

Kodak has agreed to sell some of its document imaging assets to Brother Industries Ltd. for about \$210 million, its latest deal as it seeks to exit bankruptcy protection. Japan-based Brother also would assume the business's deferred service revenue liability, which totaled about \$67 million as of Dec. 31, the companies said Monday. Kodak's document imaging business provides scanners, capture software and related services. Brother makes laser, label and multi-function printers, along with fax machines and sewing machines. Eastman Kodak Co. filed for Chapter 11 bankruptcy protection in January 2012.<sup>33</sup>

2. *Plans for generating additional monetary resources.* Companies facing insolvency must develop new sources of cash, often in a short period of time. Loans and the sale of both common and preferred stocks are frequently negotiated during reorganization to provide funding to continue the business. "The U.S. government will take about a 61 percent stake in the new GM after lending the automaker more than \$50 billion."<sup>34</sup>

3. *Plans for changes in company management.* In many cases, a financial crisis is blamed on poor leadership. For that reason, proposing to reorganize a company with the management team intact is probably not a practical suggestion. Many plans include hiring new individuals to implement the reorganization and run important aspects of the company. These changes may also affect the board of directors as shown in this remark about the Tribune Co. as it goes through reorganization:

The publisher of the *Chicago Tribune* and *Los Angeles Times* will soon turn to naming a new board and possibly a new chief executive as it wrestles with the fate of a sprawling empire of newspapers and television stations across the U.S.<sup>35</sup>

<sup>32</sup> Jacqueline Palank, "Companies in Chapter 11 Face Express Trip to Auction Block," *The Wall Street Journal*, January 14, 2013, p. B1.

<sup>33</sup> Associated Press, "Kodak Selling Document Imaging Assets for \$210M," April 15, 2013.

<sup>34</sup> Mike Spector, "GM Asset Sale Gets Judge's Nod," *The Wall Street Journal*, July 6, 2009, p. B-1.

<sup>35</sup> Keith Hagey and Mike Spector, "Tribune Nears Chapter 11 Exit," *The Wall Street Journal*, July 16, 2012, p. B5.

4. *Plans to settle the debts that existed when the order for relief was entered.* No element of a reorganization plan is more important than the proposal for satisfying the claims of the company's creditors. Their agreement is usually necessary before the court will confirm any plan of reorganization.

- Assets can be transferred to creditors who accept this payment in exchange for extinguishing a specified amount of debt. The liability being canceled is typically higher (often substantially higher) than the fair value of the assets surrendered. Most parties to a bankruptcy expect to incur significant losses.
- An equity interest (such as common stock, preferred stock, or stock rights) can be conveyed to creditors to settle outstanding debt.

Boston-based publisher Houghton Mifflin Harcourt emerged from bankruptcy protection Friday as a judge in New York approved a deal with the company's creditors to eliminate \$3.1 billion in debt. Under the terms of the Chapter 11 restructuring, Houghton's creditors have exchanged their debt holdings for ownership stakes in the company.<sup>36</sup>

- The terms of the outstanding liabilities can be modified: maturity dates extended, interest rates lowered, face values reduced, accrued interest forgiven, and so on.

One interesting development over the last few years is the use of prepackaged or prearranged bankruptcies where the company and creditors agree on the terms of a reorganization plan before the bankruptcy petition is signed. The parties enter bankruptcy with an agreement to present to the court. Using this strategy, extensive legal fees can be avoided. An increasing number of these bankruptcy reorganizations take only two to three months instead of years. Furthermore, the parties have more protection because the Bankruptcy Court is likely to accept the plan without requiring extensive changes or revisions.

Prearranged bankruptcies are on the rise and for good reason. A well-executed prearranged bankruptcy—where most of the biggest creditors agree to a reorganization plan before going to court—allows a company to secure attractive financing, maintain the trust of employees, customers and suppliers, and move through the bankruptcy process much more quickly and inexpensively than a standard filing.<sup>37</sup>

## Acceptance and Confirmation of Reorganization Plan

The creation of a plan for reorganization does not guarantee acceptance. The Bankruptcy Reform Act specifies that a plan must be voted on by both the company's creditors and stockholders before possible confirmation by the court. *To be accepted, each class of creditors must vote for the plan.* Acceptance requires the approval of two-thirds in dollar amount and more than one-half in the number of claims that cast votes. A separate vote is also required of each class of shareholders. For approval, at least two-thirds (measured by the number of shares held) of the owners who vote must agree to the proposed reorganization. Convincing parties to support a specific plan is not always an easy task. Agreement often means accepting a significant loss. Eventually, though, acceptance of some plan is necessary if progress is to be made and liquidation avoided.

Although a specific plan may gain creditor and stockholder approval, court confirmation is still required. The court reviews the proposal and can reject a reorganization plan if a claimant (who did not vote for acceptance) would receive more through liquidation.

The court also has the authority to confirm a reorganization plan that was not accepted by a particular class of creditors or stockholders. This provision is referred to as a *cram down* and occurs when the court determines that a rejected plan is fair and equitable. The court may also convert a Chapter 11 reorganization into a Chapter 7 liquidation at any time if the development of an acceptable plan does not appear possible. That threat should encourage the parties to join together to achieve a workable resolution.

<sup>36</sup> D. C. Denison, "Houghton Mifflin Harcourt Emerges from Bankruptcy," *boston.com*, June 22, 2012.

<sup>37</sup> Jim Hogan, "Keys to a Prearranged Bankruptcy: A Powerful Tool to Move a Company through Chapter 11 Proceedings Quickly, Inexpensively and with Minimal Disruption to the Business," *Investment Dealers Digest*, March 25, 2011.

## LO 13-9

Account for a company as it moves through reorganization.

## Financial Reporting during Reorganization

Developing and then gaining approval for a reorganization plan can take years. During that time, operations continue under the assumption that the company will eventually emerge from the bankruptcy proceedings. For that reason, most account balances are reported in the same manner as with any ongoing operation. However, during this period, companies do face several significant accounting questions:

- Should the income resulting from continuing operating activities be differentiated from transactions connected solely with the reorganization process? If so, how are those reorganization items identified?
- How should liabilities be reported? Some debts might not be paid for years and then require payment of an amount considerably less than face value. How is this information presented?
- Does reorganization necessitate a change in the reporting basis of the company's assets? Is the previous carrying value still relevant?

Answers to such questions can be found in FASB's *Accounting Standards Codification*<sup>®</sup>, Topic 852, "Reorganizations," which provides official guidance for the preparation of financial statements at two times:

1. During the period when an entity is going through reorganization.
2. At the point that the entity emerges from reorganization.

### ***Income Statement Reporting during Reorganization***

According to U.S. GAAP, any gains, losses, revenues, and expenses resulting from the reorganization are known as *reorganization items* and reported separately from normal operating activities (although they still appear on the income statement before any income tax expense or benefits).<sup>38</sup>

Reorganization items include gains and losses on the sale of assets but only if the sale is a direct result of the bankruptcy proceedings as approved by the bankruptcy court. In addition, as mentioned previously, professional fees can be incurred that are often of significant size. Such costs are recorded as expenses when incurred regardless of the monetary amount.

U.S. GAAP also establishes approved reporting for both interest expense and interest revenue. During reorganization, interest expense usually does not accrue on debts owed at the date on which the automatic stay is granted. The amount of these liabilities is frozen until reorganization or liquidation occurs. Recognition of interest expense is necessary only if payment will be made (for example, on debts incurred after the order for relief is granted). That expense is shown on the income statement but is not included within the reorganization items. Therefore, the interest expense reported on the income statement is often quite small. For informational purposes, the contractual interest that would have accrued except for the bankruptcy must also be disclosed.

In contrast, interest revenue can grow to a substantial amount during reorganization. Because the company is not forced to pay debts incurred prior to the date of the automatic stay, cash reserves often accumulate so that the resulting interest revenue becomes significant. For that reason, any interest revenue that would not have been earned except for the bankruptcy is reported separately as a reorganization item.

To illustrate the reporting of an income statement during reorganization, assume that Crawford Corporation files a voluntary petition of bankruptcy and is granted an order for relief on January 1, 2017. Thereafter, the ownership and management begin to work on a reorganization plan to rehabilitate the company. Accountants, lawyers, and other professionals are hired to assist in the reorganization. At the end of 2017, the bankruptcy is still in progress. The company should prepare an income statement that is structured so that the reader can distinguish the results of operating activities as separate from reorganization items (see Exhibit 13.6).

### ***Balance Sheet Reporting during Reorganization***

A new entity is not created when a company moves *into* reorganization. Therefore, most traditional generally accepted accounting principles continue to apply. Assets, for example, are still reported at their net book values.

<sup>38</sup> In a similar manner, the statement of cash flows is constructed so that reorganization items are shown separately within the operating, investing, and financing categories.

**EXHIBIT 13.6**  
**Income Statement during**  
**Reorganization**

<b>CRAWFORD CORPORATION</b> <b>(Debtor in Possession)</b> <b>Income Statement</b> <b>for Year Ended December 31, 2017</b> <b>(In thousands except for the loss per common share)</b>		
Revenues:		
Sales .....		\$ 650,000
Cost and expenses:		
Cost of goods sold .....	\$346,000	
General and administrative expenses .....	165,000	
Selling expenses .....	86,000	
Interest expense (\$15,000 contractual amount) .....	<u>4,000</u>	601,000
Earnings before reorganization items and tax effects .....		49,000
Reorganization items:		
Attorney and other legal fees .....	(81,000)	
Accounting and other professional fees .....	(70,000)	
Interest revenue .....	<u>16,000</u>	<u>(135,000)</u>
Loss before income tax benefit .....		(86,000)
Income tax benefit .....		<u>18,800</u>
Net loss .....		<u>\$ (67,200)</u>
Loss per common share .....		<u>\$ (0.56)</u>

However, a successful reorganization plan will likely reduce the payments to be made on many of the company's debts. According to U.S. GAAP, liabilities that are subject to compromise must be shown separately and at the expected amount of allowable claims rather than estimated settlement figures. Thus, the company does not anticipate the payments required by a final plan but simply discloses the amount of the claims. As of August 31, 2013, the Eastman Kodak Company reported liabilities subject to compromise of \$2,475 million, a figure that was separate from both current and noncurrent liabilities. The next day when the company emerged from bankruptcy these debts were settled with cash payments, warrants, equity, and other liabilities valued at only \$454 million.

The December 25, 2011, balance sheet for the Tribune Company reported current liabilities of \$612.8 million and noncurrent liabilities of \$808.0 million. The company separately reported liabilities on its balance sheet of over \$13.1 billion that were subject to compromise. Unsecured and partially secured obligations existing as of the granting of the order for relief fall into this category. Fully secured liabilities and all debts incurred subsequent to that date are not subject to compromise and should be reported in a normal manner as either current or noncurrent.

On August 31, 2013, when Eastman Kodak was ready to emerge from reorganization, its liabilities were reported on its balance sheet as follows:

(in millions)	
Current liabilities .....	\$ 317
Short-term borrowings and current portion of long-term debt .....	681
Other current liabilities .....	600
Liabilities held for sale .....	<u>45</u>
Total current liabilities .....	\$1,643
Long-term debt, net of current portion .....	370
Pension and other postretirement liabilities .....	411
Other long-term liabilities .....	318
Liabilities subject to compromise .....	<u>2,475</u>
Total liabilities .....	\$5,217

**LO 13-10**

Describe the financial reporting for a company that successfully exits bankruptcy as a reorganized entity.

## Financial Reporting for Companies Emerging from Reorganization

Is a company that successfully exits Chapter 11 status considered a new entity so that fair values should be assigned to its asset and liability accounts (referred to as *fresh start reporting*)? Or is the company simply a continuation of the organization that entered bankruptcy so that historical figures remain appropriate.

According to U.S. GAAP, such assets and liabilities should be adjusted to fair value if two criteria are met:

1. The total reorganization (or fair) value of the assets of the emerging company is less than the total of the allowed claims as of the date of the order for relief plus liabilities incurred subsequently.
2. The previous owners of the voting stock are left with less than 50 percent of the voting stock of the company when it emerges from bankruptcy.

Meeting the first criterion shows that the predecessor company could not have continued in business as a going concern because it would have had a negative net worth. The second criterion indicates that control of the successor company has changed.

Many, if not most, Chapter 11 bankruptcies meet these two criteria. Consequently, the entity is reported as if it were a brand new business. For example, a note to the financial statements of Six Flags Entertainment Corporation discloses: “Upon emergence from Chapter 11, we adopted fresh start reporting which resulted in our Company becoming a new entity for financial reporting purposes. Accordingly, consolidated financial data on or after May 1, 2010 is not comparable to the consolidated financial data prior to that date.”

In applying fresh start accounting, the reorganization value of the entity that emerges from bankruptcy must first be determined. This reorganization value is an estimate of the amount a willing buyer would pay for the company’s assets after restructuring. This total value is then assigned to the specific tangible and intangible assets of the company in the same way as in a business combination as described in earlier chapters of this book.

Unfortunately, determining the reorganization value for a large and complex business can be a difficult assignment. The 2010 financial statements for General Motors describe its approach to this computation:

Our reorganization value was determined using the sum of:

- Our discounted forecast of expected future cash flows from our business subsequent to the 363 Sale,<sup>39</sup> discounted at rates reflecting perceived business and financial risks;
- The fair value of operating liabilities;
- The fair value of our non-operating assets, primarily our investments in nonconsolidated affiliates and cost method investments; and
- The amount of cash we maintained at July 10, 2009, that we determined to be in excess of the amount necessary to conduct our normal business activities.

During the reorganization, the reorganization value is usually reported to the court as a range of possibilities. When the company emerges from bankruptcy, a best figure within that range must be selected. This single number is often based on the determination of the emerging company’s enterprise value. A company’s enterprise value represents the fair value of its interest-bearing debt and its shareholders’ equity. In most bankruptcy proceedings, a valuation specialist will determine the emerging entity’s enterprise value. The reorganization value can then be derived from the enterprise value by adding back liabilities other than interest-bearing debt.

In applying fresh start accounting, the assets held by a company on the day when it exits from reorganization should be reported based on individual current values, not historical book values. *The entity is viewed as a newly created organization.* For that reason, Kmart Holdings indicated when it emerged from reorganization that the “fair value adjustments included the recognition of approximately \$2.2 billion of intangible assets that were previously not recorded in the Predecessor Company’s financial statements, such as favorable leasehold

<sup>39</sup>A 363 Sale refers to the section of the bankruptcy code that allows the old company to sell its assets to the new company as a means of going forward with the business.

interests, Kmart brand rights, pharmacy customer relationships and other lease and license agreements.” As with a consolidation, any unallocated portion of the reorganization value is reported as goodwill. For example, General Motors reported goodwill of \$30.5 billion upon application of fresh start accounting whereas Eastman Kodak recognized only \$88 million.

At the same time, all liabilities (except for deferred income taxes) are reported at the present value of the future cash payments.

In making the necessary asset adjustments to fresh start accounting, Additional Paid-In Capital is normally increased or decreased. However, any write-down of a liability creates a recognized gain. Finally, because the company is viewed as a new entity, it must leave reorganization with a zero balance reported for retained earnings.

### Fresh Start Accounting Illustrated

Assume that the Hayes Company has the following trial balance just prior to emerging from bankruptcy:

	Debit	Credit
Current assets	\$ 50,000	
Land	100,000	
Buildings	400,000	
Equipment	250,000	
Accounts payable (incurred since the order for relief was granted)		\$ 100,000
Liabilities when the order for relief was granted:		
Accounts payable		60,000
Accrued expenses		50,000
Notes payable (due in 3 years)		300,000
Bonds payable (due in 5 years)		600,000
Common stock (50,000 shares with a \$1 par value)		50,000
Additional paid-in capital		40,000
Retained earnings (deficit)	400,000	
Totals	<u>\$1,200,000</u>	<u>\$1,200,000</u>

### Other Information

- **Assets.** The company’s land has a fair value of \$120,000, whereas the building is worth \$500,000. Other listed assets are worth the same as their book values. In addition, a trademark is worth \$10,000 although it has not previously been recorded by the company. The reorganization value of the company’s assets has been calculated to be between \$900,000 and \$1.3 million. A \$1 million figure was selected when the company exited bankruptcy by determining the enterprise value on that day and also by the use of discounted cash flows.
- **Liabilities.** The \$100,000 in accounts payable incurred after the order for relief was granted must be paid in full as those individual balances come due. Liabilities existing when the order for relief was granted total \$1,010,000 (\$60,000 + \$50,000 + \$300,000 + \$600,000). The accounts payable and accrued expenses that were owed at that time will be converted into one-year notes with a face value of \$70,000 and an annual interest rate of 10 percent. The \$300,000 in notes payable listed on the trial balance will be converted into a 10-year \$100,000 note paying annual interest of 8 percent. These note holders also get 20,000 shares of stock that the common stockholders are to turn in to the company. Finally, the \$600,000 of bonds payable will be converted into 8-year, 9 percent notes with a face value of \$430,000. The bondholders also get 15,000 shares of common stock turned in by the current owners. All of these interest rates are assumed to be reasonable so that no present value calculation is needed.
- **Stockholders’ equity:** The owners of common stock will return 70 percent of their shares (35,000) to the company to be issued as specified above. As mentioned, the reorganization value of the assets is set at \$1,000,000, and the remaining debts of the company after these events total \$700,000 (\$100,000 + \$70,000 + \$100,000 + \$430,000). Stockholders’ equity must be the \$300,000 difference in the assets and liabilities. Because all of the shares

(with a \$50,000 par value) will still be outstanding, Additional Paid-In Capital (APIC) is adjusted to \$250,000 (\$300,000 stockholders' equity less \$50,000 common stock). Retained earnings will be zero to show that the company coming out of bankruptcy is a new entity.

In reporting this reorganized company, the initial question to be resolved is whether fresh start accounting is appropriate. The first criterion is met because the reorganization value of the assets (\$1,000,000) is less than the sum of all postpetition liabilities (\$100,000 in Accounts Payable) plus allowed claims (the \$1,010,000 total of liabilities remaining from the date of the order for relief before any write-downs). The second criterion is also met because the previous stockholders retain less than 50 percent of the shares after the plan takes effect. At that point, they will hold only 15,000 of the 50,000 outstanding shares.

Because fresh start accounting is required, each of the assets must be adjusted to fair value rather than retain their historical book value. The reorganization value is \$1 million, but the individual assets' fair value totals only \$930,000 (current assets \$50,000, trademark \$10,000, land \$120,000 [adjusted], buildings \$500,000 [adjusted], and equipment \$250,000). Therefore, goodwill is recognized for the \$70,000 portion of the company's reorganization value in excess of the value assigned to the specific assets.

Because the asset accounts are recorded at book value, adjustment is necessary only when fair value differs from that book value:

Trademark .....	10,000	
Land .....	20,000	
Buildings .....	100,000	
Goodwill .....	70,000	
Additional Paid-In Capital .....		200,000
To adjust asset accounts from book value to fair value based on fresh start accounting and to recognize excess value as goodwill.		

Next, the 35,000 shares of common stock (with a \$1 per share par value) returned to the company by the previous owners are recorded as follows:

Common Stock .....	35,000	
Additional Paid-In Capital .....		35,000
To remove shares of common stock returned to the company by owners as part of the reorganization agreement.		

Liability accounts on the records at the date of the order for relief must now be adjusted for the provisions of the bankruptcy reorganization plan. Because the new debts in this illustration bear a reasonable interest rate, present value computations are not necessary. The first entry is a straight conversion of the accounts payable and accrued expenses with a gain recorded for the difference between the old debt and the new:

Accounts Payable .....	60,000	
Accrued Expenses .....	50,000	
Notes Payable (1 year) .....		70,000
Gain on Debt Discharge .....		40,000
To convert liabilities to a 1-year note as per reorganization plan.		

According to the information provided, the two remaining debts (the note payable and the bond payable) will be exchanged, at least in part, for shares of common stock. Each of these stock entries will require a computation of the amount to be assigned to additional paid-in capital (APIC). The reported total of APIC for the company was derived previously as \$250,000. Because the holders of the notes are to receive 20,000 shares of stock (or



## Discussion Question

### IS THIS THE REAL PURPOSE OF THE BANKRUPTCY LAWS?

Insolvency is not a necessary condition for bankruptcy. Moreover a firm may petition the court for protection under Chapter 11 even though it is not insolvent. If the business can demonstrate real financial trouble, the court will generally not dismiss the petition. In recent years, Chapter 11 has been looked upon as a safe harbor for gaining time to restructure the business and to head off more serious financial problems. *For example, when Johns Manville filed a petition under Chapter 11, it was a profitable, financially sound company. Yet it faced numerous lawsuits for damages resulting from asbestos products it sold. Reorganization helped Johns Manville deal with its financial problems. [emphasis added]*\*

Over the years, the filing of a voluntary Chapter 11 bankruptcy petition has been a tool that companies sometimes use to settle significant financial problems. Just as Johns Manville reorganized to settle the claims of asbestos victims, A. H. Robins followed a similar path to resolve thousands of lawsuits stemming from injuries resulting from the Dalkon Shield intrauterine device. Even if protection from litigation is not a primary driver of a bankruptcy, that can be one major result. "Chrysler is immune from new punitive-damage claims from any alleged manufacturing defects in vehicles sold before the auto maker's 2009 government-brokered restructuring. Chrysler's legal exemption, approved by a bankruptcy judge, is the product of rules embedded in the federal bankruptcy law. These rules allow sick companies at times to abandon product liability or other risks, overruling state laws that give consumers the right to seek damages."<sup>†</sup>

Not surprisingly, seeking protection under Chapter 11 to resolve a financial difficulty is controversial. Creditors and claimants often argue that this procedure is used to avoid responsibility.

Should companies be allowed to use the provisions of Chapter 11 in this manner?

\*Paul J. Corr and Donald D. Bourque, "Managing in a Reorganization," *Management Accounting*, January 1988, p. 34.

†Mike Spector, "Chrysler Got Legal Shield in Chapter 11," *The Wall Street Journal*, April 5, 2012, p. A1.

40 percent of the company's 50,000 share total), this stock is assigned APIC of \$100,000 (40 percent of the determined total). The holders of the bonds will receive 15,000 shares (30 percent of the total). Hence, APIC of \$75,000 (30 percent of the company total) is recorded. Gains are recognized for the differences.

Notes Payable (3 years) .....	300,000	
Notes Payable (10 years) .....		100,000
Common Stock (par value of 20,000 shares) .....		20,000
Additional Paid-In Capital (40% of company total) .....		100,000
Gain on Debt Discharge .....		80,000
To record exchange with gain recorded for difference between book value of old note payable and the amount recorded for new note and shares of stock.		
Bonds Payable .....	600,000	
Notes Payable (8 years) .....		430,000
Common Stock (par value of 15,000 shares) .....		15,000
Additional Paid-In Capital (30% of company total) .....		75,000
Gain on Debt Discharge .....		80,000
To record exchange with gain recorded for difference between book value of old bonds and the amount recorded for new notes and shares of stock.		



At this point, all asset, liability, and common stock amounts are reported appropriately for the company as it leaves reorganization. Only additional paid-in capital and retained earnings remain to be finalized. Additional Paid-In Capital now has a balance of \$450,000 (\$40,000 beginning balance plus \$200,000 for adjusting assets to fair value plus \$35,000 for shares returned by owners plus \$100,000 because of common stock shares issued for notes payable and \$75,000 because of shares issued for bonds). Therefore, the current balance is \$200,000 more than the amount to be reported (\$250,000) based on the provisions of the reorganization agreement. In addition, the Gain on Debt Discharge account has a balance of \$200,000 (\$40,000 + \$80,000 + \$80,000), a figure that must be closed out prior to emerging from bankruptcy. Adjusting and closing these accounts eliminates the \$400,000 deficit shown previously in retained earnings so that the emerging company has no balance in this equity account after reorganization.

Additional Paid-In Capital .....	200,000	
Gain on Debt Discharge .....	200,000	
Retained Earnings (Deficit) .....		400,000
To adjust Additional Paid-In Capital balance to correct amount, close out Gain account, and eliminate deficit balance.		

After posting these entries, this company emerges from bankruptcy with the following:

1. Assets are reported at fair value except for goodwill, which is a residual figure. The assets total is equal to reorganization value.
2. Debts equal the present value of the future cash payments (except for any deferred income taxes).
3. The deficit in retained earnings has been removed.

	Debit	Credit
Current assets .....	\$ 50,000	
Trademark .....	10,000	
Land .....	120,000	
Buildings .....	500,000	
Equipment .....	250,000	
Goodwill .....	70,000	
Accounts payable .....		\$ 100,000
Note payable (due in 1 year) .....		70,000
Note payable (due in 10 years) .....		100,000
Notes payable (due in 8 years) .....		430,000
Common stock (50,000 shares with a \$1 par value) .....		50,000
Additional paid-in capital .....		250,000
Retained earnings .....	-0-	-0-
Totals .....	<u>\$1,000,000</u>	<u>\$1,000,000</u>

## Summary

1. Every year a significant number of businesses in the United States become insolvent, unable to pay debts as they come due. Because creditors and investors hold financial interests in these failed companies, bankruptcy laws have been created to provide protection for all parties. The Bankruptcy Reform Act of 1978 (as amended) is the primary structure for these legal proceedings. This act was designed to ensure a fair distribution of all remaining properties while discharging an honest debtor's obligations.

2. Bankruptcy proceedings can be voluntary (initiated by the insolvent debtor) or involuntary (initiated by creditors). In either case, the court usually grants an order for relief. The automatic stay halts all actions against the debtor. Some creditors may have already gained protection by having a mortgage lien or security interest attached to specific assets. A creditor is considered fully secured if the value of any collateral exceeds the related debt balance. The creditor is only partially secured if the obligation is larger. All other liabilities are unsecured. These creditors have legal rights but not to any of the debtor's specific assets. The Bankruptcy Reform Act lists several types of unsecured liabilities (including administrative expenses and government claims for unpaid taxes) that have priority and must be paid before other unsecured debts are settled.
3. The parties involved in a bankruptcy need to be informed of the possible outcome, especially if liquidation is being considered. Thus, a statement of financial affairs can be prepared for an insolvent company. This document lists the estimated net realizable value of all remaining assets and indicates any property pledged to specific creditors. The liabilities of the business are segregated and disclosed within four classifications: fully secured, partially secured, unsecured with priority, and unsecured. The various parties can use this information to help decide whether liquidation or reorganization is the best course of action. However, this statement should be viewed as a projection because many reported values are merely estimates.
4. If the insolvent company's assets are to be liquidated to satisfy obligations (a Chapter 7 bankruptcy), a trustee is appointed to oversee the process. This individual must recover all property belonging to the company, liquidate noncash assets, possibly continue running operations to complete any business in progress, and make appropriate payments. To convey information about these events and transactions, the trustee can produce a statement of realization and liquidation to report remaining account balances and any transactions to date. This statement is not in conformity with U.S. GAAP but can be used during the liquidation of smaller companies.
5. If liquidation is imminent, the company must switch to the liquidation basis of accounting if it wants to be in conformity with U.S. GAAP. Assets are reported at the estimated amount of cash that is expected from the liquidation. Liabilities continue to be reported at the amount due rather than speculate on settlement amounts. A Statement of Changes in Net Assets in Liquidation is prepared along with a Statement of Net Assets in Liquidation.
6. Liquidation is not the only outcome available to an insolvent business. The company may seek to survive by developing a reorganization plan (a Chapter 11 bankruptcy). Reorganization is possible only if creditors, shareholders, and the court accept the plan. While a reorganization is in process, the owners and management must preserve the company's estate as of the date on which the order of relief was entered. Although ownership has the initial opportunity for creating a proposal for action, any interested party has the right to file a reorganization plan after a specified period of time.
7. Reorganization plans usually contain a number of provisions for modifying operations, generating new financing by equity or debt, and settling the liabilities existing when the order for relief was entered. To be accepted, each class of creditors and shareholders must support the agreement. Thereafter, the court must confirm the reorganization plan.
8. During reorganization, a company reports its liabilities as those subject to compromise or not subject to compromise. The first category includes all unsecured and partially secured debts that existed on the day the order for relief was granted. The balance to be reported is the amount of allowed claims rather than the estimated amount of settlement. Liabilities not subject to compromise are those debts fully secured or incurred following the granting of the order for relief.
9. An income statement prepared during the reorganization period should disclose operating activities separately from reorganization items. Professional fees associated with the reorganization such as lawyers' fees are classified as reorganization items and recorded as expenses as incurred. Interest revenue earned during this period because of an increase in the company's cash reserves should also be reported as a reorganization item.
10. Many companies that emerge from reorganization proceedings must apply fresh start accounting as a new entity. Such companies report all assets at fair value. Goodwill is recognized if the reorganization value is greater than the fair value of the identified assets. Liabilities (except for deferred income taxes) are reported at the present value of required cash flows. Any retained earnings balance (or a deficit) must be eliminated. Additional Paid-In Capital is adjusted to keep the balance sheet in equilibrium.

## Comprehensive Illustration

### Problem

(Estimated Time: 50 to 65 Minutes) Roth Company is insolvent and in the process of filing for relief under the provisions of the Bankruptcy Reform Act of 1978. Roth has no cash, and the company's balance sheet currently shows accounts payable of \$48,000. Roth owes an additional \$8,000 in connection with various expenses but has not yet recorded these amounts. The book value and anticipated net realizable value of the company's assets are as follows:

	Book Value	Expected Net Realizable Value
Accounts receivable	\$ 31,000	\$ 9,000
Inventory	48,000	36,000
Investments	10,000	18,000
Land	80,000	75,000
Buildings	190,000	160,000
Accumulated depreciation	(38,000)	
Equipment	110,000	20,000
Accumulated depreciation	(61,000)	
Other assets	5,000	—0—
Totals	<u>\$375,000</u>	<u>\$318,000</u>

Roth has three notes payable, each with a different maturity date:

- Note 1 due in 5 years—\$220,000, secured by a mortgage lien on Roth's land and buildings.
- Note 2 due in 8 years—\$30,000, secured by Roth's investments.
- Note 3 due in 10 years—\$35,000, unsecured.

Of the accounts payable that Roth owes, \$10,000 represents salaries to employees. However, no individual is entitled to receive more than \$4,100. An additional \$3,000 due to the U.S. government in connection with taxes is included in this liability amount.

The company is reporting a total for stockholders' equity of \$42,000 at the current date: common stock of \$140,000 and a deficit of \$98,000. Liquidating the company will lead to administrative expenses of approximately \$20,000.

### Required

- Prepare a statement of financial affairs for Roth to indicate the expected availability of funds if the company is liquidated.
- Assume that Roth owes Philip, Inc., \$2,000. This liability is unsecured. If Roth is liquidated, what amount can Philip expect to receive?
- What amount will be paid on note 2 above if Roth is liquidated?
- Assume that Roth is immediately reorganized. Assume that the company has a reorganization value of \$330,000, based on discounted cash flows, and each asset is to be recorded at its estimated net realizable value. By agreement of the parties, the accounts payable and accrued expenses are reduced to a total of \$20,000. Note 1 is decreased to a \$130,000 note due in four years with a 7 percent annual interest rate. This creditor also receives half of the company's outstanding stock from the owners. Note 2 is reduced to a \$12,000 note due in five years with an 8 percent annual interest rate. This creditor also receives 10 percent of the outstanding stock of the company from the owners. Note 3 is decreased to \$5,000 due in three years with a 9 percent annual interest rate. All interest rates are considered reasonable.

Prepare a trial balance for this company after it emerges from bankruptcy.

### Solution

- To develop a statement of financial affairs for the Roth Company, the following preliminary actions must be taken:
  - The \$8,000 total for the unrecorded accounts payable is entered into the company's accounting records. Because these debts were incurred in connection with expenses, the deficit is increased by a corresponding amount.
  - Unsecured liabilities that have priority are identified:

Administrative costs (estimated)	\$ 20,000
Salaries payable	10,000
Amount due to government for taxes	<u>3,000</u>
Total liabilities with priority	<u>\$ 33,000</u>

- Secured claims should be classified:

*Note 1* is fully secured because Roth's land and buildings can be sold for an amount in excess of the \$220,000 balance.

*Note 2* is only partially secured because Roth's investments are worth less than the \$30,000 balance.

With this information, the statement of financial affairs in Exhibit 13.7 can be produced.

## EXHIBIT 13.7

<b>ROTH COMPANY</b>			
<b>Statement of Financial Affairs</b>			
<b>Book Values</b>	<b>Assets</b>		<b>Available for Unsecured Creditors</b>
	<b>Pledged with fully secured creditors:</b>		
\$232,000	Land and buildings .....	\$235,000	
	Less: Note payable 1 .....	(220,000)	\$ 15,000
	<b>Pledged with partially secured creditors:</b>		
10,000	Investments .....	18,000	
	Less: Note payable 2 .....	(30,000)	—0—
	<b>Free assets:</b>		
31,000	Accounts receivable .....		9,000
48,000	Inventory .....		36,000
49,000	Equipment .....		20,000
5,000	Other assets .....		—0—
	Total available for liabilities with priority and unsecured creditors .....		80,000
	Less: Liabilities with priority (listed below) .....		(33,000)
	Available for unsecured creditors .....		47,000 <sup>(A)</sup>
	Estimated deficiency .....		43,000
<u>\$375,000</u>			<u>\$ 90,000</u>
<b>Book Values</b>	<b>Liabilities and Stockholders' Equity</b>		<b>Available for Nonpriority Liabilities</b>
	<b>Liabilities with priority:</b>		
\$ —0—	Administrative expenses (estimated) .....	\$ 20,000	
	Liabilities with priority currently owed:		
10,000	Salaries payable .....	10,000	
3,000	Taxes payable .....	3,000	
	Total .....	\$ 33,000	
	<b>Fully secured creditors:</b>		
220,000	Note payable 1 .....	220,000	
	Less: Land and buildings .....	(235,000)	\$ —0—
	<b>Partially secured creditors:</b>		
30,000	Note payable 2 .....	30,000	
	Less: Investments .....	(18,000)	12,000
	<b>Unsecured creditors:</b>		
35,000	Note payable 3 .....		35,000
43,000	Accounts payable (other than salaries and taxes plus \$8,000 in previously unrecorded liabilities) .....		43,000
34,000	Stockholders' equity (adjusted for unrecorded liabilities) .....		—0—
<u>\$375,000</u>			<u>\$ 90,000 <sup>(B)</sup></u>

- b. Based on the information provided by the statement of financial affairs, Roth anticipates having \$47,000 (Point A) in free assets remaining at the end of the liquidation. This amount must be distributed to unsecured creditors with total claims of \$90,000 (Point B). Therefore, only 52.2 percent of each obligation can be paid based on these projections:

$$\frac{\$47,000}{\$90,000} = 52.2\% \text{ (rounded)}$$

Philip, Inc., should receive 52.2 percent of its \$2,000 unsecured claim, or \$1,044.

- c. The \$30,000 note payable is partially secured by Roth’s investments, an asset having an estimated net realizable value of only \$18,000. The remaining \$12,000 is an unsecured claim, which (as computed in the previous requirement) will be paid 52.2 percent of face value. The holder of this note can expect to receive \$24,264:

Net realizable value of investments. . . . .	\$18,000
Payment on \$12,000 unsecured claim (52.2%) . . . . .	<u>6,264</u>
Amount to be received . . . . .	<u>\$24,264</u>

- d. Fresh start accounting is appropriate. The reorganization value of \$330,000 is less than the \$341,000 total amount of claims (no liabilities after the issuance of the order for relief are indicated).

Accounts payable . . . . .	\$ 48,000
Accrued expenses . . . . .	8,000
Note 1 . . . . .	220,000
Note 2 . . . . .	30,000
Note 3 . . . . .	<u>35,000</u>
Total claims . . . . .	<u>\$341,000</u>

In addition, the original owners retain only 40 percent of the stock after the company exits from bankruptcy.

The company’s assets are assigned values equal to their net realizable value based on the information provided. Because the reorganization value of \$330,000 is \$12,000 in excess of the \$318,000 total net realizable value of company assets, goodwill is recognized for that amount.

Each liability is adjusted to the newly agreed-on amounts. Present value computations are not required because a reasonable interest rate is included in each case. These debts now total \$167,000 (\$20,000 + \$130,000 + \$12,000 + \$5,000).

The reorganization value is \$330,000 and the liabilities are \$167,000 so that stockholders’ equity must be \$163,000 (\$330,000 – \$167,000). The number of outstanding shares of common stock has not changed. The equity account retains its balance of \$140,000. The other \$23,000 of stockholders’ equity is recorded as additional paid-in capital leaving the proper zero balance for retained earnings.

	Debit	Credit
Accounts receivable . . . . .	\$ 9,000	
Inventory . . . . .	36,000	
Investments . . . . .	18,000	
Land . . . . .	75,000	
Buildings . . . . .	160,000	
Equipment . . . . .	20,000	
Goodwill . . . . .	12,000	
Accounts payable and accrued expenses . . . . .		\$ 20,000
Note payable 1 . . . . .		130,000
Note payable 2 . . . . .		12,000
Note payable 3 . . . . .		5,000
Common stock . . . . .		140,000
Additional paid-in capital . . . . .		<u>23,000</u>
Totals . . . . .	<u>\$330,000</u>	<u>\$330,000</u>

## Questions

1. What does the term *insolvent* mean?
2. Why should a company monitor the reporting of goodwill prior to the filing of a bankruptcy petition?
3. What situations might raise substantial doubt that a company can meet its financial obligations as they come due for one year from the issuance of the financial statements?
4. A company believes that there might be substantial doubt that it can meet its financial obligations as they come due for one year from the issuance of its financial statements. What plans might mitigate this concern?
5. A company's management believes that substantial doubt exists that the company can meet its financial obligations as they come due for a one-year period from the issuance of its financial statements. Management is studying the plans that have been developed to avoid this problem. What two decisions must management make?
6. A company's management believes that substantial doubt exists that the company can meet its financial obligations as they come due for a one-year period of time from the issuance of its financial statements. What possible disclosures are required?
7. What federal legislation governs most bankruptcy proceedings?
8. What are the primary objectives of a bankruptcy proceeding?
9. A bankruptcy case can begin with either a voluntary or an involuntary petition. What is the difference? What are the requirements for an involuntary petition?
10. A bankruptcy court enters an order for relief. How does this action affect an insolvent company and its creditors?
11. What is the difference between fully secured liabilities, partially secured liabilities, and unsecured liabilities?
12. In a bankruptcy proceeding, what is the significance of a liability with priority? What are the general categories of liabilities that have priority in a liquidation?
13. Why are administrative expenses that are incurred during a liquidation classified as liabilities having priority?
14. What is the difference between a Chapter 7 bankruptcy and a Chapter 11 bankruptcy?
15. What is the purpose of a statement of financial affairs? Why might this statement be prepared before a bankruptcy petition is filed?
16. In a bankruptcy liquidation, what actions does the trustee perform?
17. A trustee for a company that is being liquidated voids a preference transfer. What has happened, and why did the trustee take this action?
18. If a company is not required to follow U.S. GAAP, a statement of realization and liquidation can be prepared during liquidation. What information can be gained from this statement?
19. When is a company required to use the liquidation basis of accounting to be in conformity with U.S. GAAP?
20. In determining whether a company needs to use the liquidation basis of accounting, how does the accountant determine that liquidation is imminent?
21. In following the liquidation basis of accounting, what financial statements must be presented?
22. How does a company report its assets when the liquidation basis of accounting is applied? How does a company report its liabilities when the liquidation basis of accounting is applied?
23. What does the term *debtor in possession* mean?
24. Who can develop reorganization plans in a Chapter 11 bankruptcy?
25. What types of proposals might a reorganization plan include?
26. Under normal conditions, how does a reorganization plan become effective?
27. In a bankruptcy proceeding, what is a *cram down*?
28. While a company goes through reorganization, how should its assets and liabilities be reported?
29. During reorganization, how should a company's income statement be structured?
30. What accounting is made of the professional fees incurred during a reorganization?
31. What is meant by the term *fresh start accounting*?
32. Under what conditions does a company that is emerging from a bankruptcy reorganization use fresh start accounting?
33. When fresh start accounting is utilized, how are a company's assets and its liabilities reported?
34. How is goodwill computed if fresh start accounting is applied to a reorganized company?

## Problems

LO 13-1

1. What are the objectives of the bankruptcy laws in the United States?
  - a. Provide relief for the court system and ensure that all debtors are treated the same.
  - b. Distribute assets fairly and discharge honest debtors from their obligations.
  - c. Protect the economy and stimulate growth.
  - d. Prevent insolvency and protect shareholders.

LO 13-2

2. A company's management has uncovered events that indicate that substantial doubt exists that the company can pay its debts as they come due over the following year. What should management do next?
  - a. Management should disclose that substantial doubt exists that the company can remain in existence.
  - b. Management should examine the plans created to address the concern.
  - c. Management should adjust all asset balances to fair value.
  - d. Management should adjust all liabilities to expected settlement amounts.

LO 13-2

3. A company's management has uncovered events that indicate that substantial doubt exists that the company can pay its debts as they come due over the following year. Management studies the plans created to address this risk. How can the company avoid disclosing that this substantial doubt exists?
  - a. The plans must be reviewed by the chief financial officer.
  - b. It must be probable that the plans will be implemented and it must be probable that the plans will mitigate the conditions that raised substantial doubt.
  - c. Disclosure of the substantial doubt is required regardless of the availability of the plans.
  - d. The plans must have been tested before the end of the financial year.

LO 13-1, 13-3, 13-4, 13-5, 13-6

4. In a bankruptcy, which of the following statements is true?
  - a. An order for relief results only from a voluntary petition.
  - b. Creditors entering an involuntary petition must have debts totaling at least \$21,625.
  - c. Secured notes payable are considered liabilities with priority on a statement of affairs.
  - d. A liquidation is referred to as a *Chapter 7 bankruptcy*, and a reorganization is referred to as a *Chapter 11 bankruptcy*.

LO 13-7

5. The Jackston Company is to be liquidated as a result of bankruptcy. Until the liquidation occurs, on what basis are its assets reported?
  - a. Present value calculated using an appropriate effective rate.
  - b. Net realizable value.
  - c. Historical cost.
  - d. Book value.

LO 13-3

6. An involuntary bankruptcy petition must be filed by
  - a. The insolvent company's attorney.
  - b. The holders of the insolvent company's debenture bonds.
  - c. Unsecured creditors with total debts of at least \$15,775.
  - d. The company's management.

LO 13-3

7. An order for relief creates an automatic stay that
  - a. Prohibits creditors from taking action to collect from an insolvent company without court approval.
  - b. Calls for the immediate distribution of free assets to unsecured creditors.
  - c. Can be entered only in an involuntary bankruptcy proceeding.
  - d. Gives an insolvent company time to file a voluntary bankruptcy petition.

LO 13-4

8. Which of the following is *not* a liability that has priority in a liquidation?
  - a. Administrative expenses incurred during the liquidation.
  - b. Salary payable of \$1,250 per person owed to 26 employees.
  - c. Payroll taxes due to the federal government.
  - d. Advertising expense incurred before the company became insolvent but not recorded until after the order of relief.

LO 13-3

9. Which of the following is the minimum limitation necessary for filing an involuntary bankruptcy petition in connection with a company that has 57 unsecured creditors?
  - a. The signature of 12 creditors to whom the debtor owes at least \$14,775 in unsecured debt.
  - b. The signature of six creditors to whom the debtor owes at least \$18,250 in unsecured debt.

LO 13-6

- c. The signature of three creditors to whom the debtor owes at least \$15,775 in unsecured debt.
  - d. The signature of nine creditors to whom the debtor owes at least \$23,225 in unsecured debt.
10. On a statement of financial affairs, how are liabilities classified?
- a. Current and noncurrent.
  - b. Secured and unsecured.
  - c. Monetary and nonmonetary.
  - d. Historic and futuristic.

LO 13-6

11. What is a *debtor in possession*?
- a. The holder of a note receivable issued by an insolvent company prior to the granting of an order for relief.
  - b. A fully secured creditor.
  - c. The ownership of an insolvent company that continues to control the organization during a bankruptcy reorganization.
  - d. The stockholders in a Chapter 7 bankruptcy.

LO 13-6

12. How are anticipated administrative expenses reported on a statement of financial affairs?
- a. As a footnote until actually incurred.
  - b. As a liability with priority.
  - c. As a partially secured liability.
  - d. As an unsecured liability.

LO 13-7

13. Prior to filing a voluntary Chapter 7 bankruptcy petition, Haynes Company pays a supplier \$13,000 to satisfy an unsecured claim. Haynes was insolvent at the time. Subsequently, the trustee appointed to oversee this liquidation forces the return of the \$13,000 by the supplier. Which of the following is true?
- a. A preference transfer has been voided.
  - b. All transactions just prior to a voluntary bankruptcy proceeding must be nullified.
  - c. The supplier should sue for the return of this money.
  - d. The \$13,000 claim becomes a liability with priority.

LO 13-7

14. Which of the following is *not* an expected function of a bankruptcy trustee?
- a. Filing a plan of reorganization.
  - b. Recovering all property belonging to a company.
  - c. Liquidating noncash assets.
  - d. Distributing assets to the proper claimants.

LO 13-6

15. What is an inherent limitation of the statement of financial affairs?
- a. Many of the amounts reported are only estimates that might prove to be inaccurate.
  - b. The statement is applicable only to a Chapter 11 bankruptcy.
  - c. The statement covers only a short time, whereas a bankruptcy may last much longer.
  - d. The figures on the statement vary as to a voluntary and an involuntary bankruptcy.

LO 13-8

16. What is a *cram down*?
- a. An agreement about the total amount of money to be reserved to pay creditors who have priority.
  - b. The bankruptcy court's confirmation of a reorganization even though a class of creditors or stockholders did not accept it.
  - c. The filing of an involuntary bankruptcy petition, especially by the holders of partially secured debts.
  - d. The court's decision as to whether a particular creditor has priority.

LO 13-9

17. On a balance sheet prepared for a company during reorganization, how are liabilities reported?
- a. As current and long term.
  - b. As monetary and nonmonetary.
  - c. As subject to compromise and not subject to compromise.
  - d. As equity related and debt related.

LO 13-7

18. When does the liquidation basis of accounting first have to be applied to financial statements of a liquidating entity to be viewed as in conformity with U.S. GAAP?
- a. When an involuntary bankruptcy petition is approved by the court.
  - b. When liquidation is imminent.
  - c. When the first asset is sold.
  - d. At least 90 days before the final asset is sold.



- LO 13-7**
19. What financial statements must be reported when the liquidation basis of accounting is being applied?
- Statement of activities and a statement of financial position.
  - Income statement and balance sheet.
  - Statement of liquidating cash flows and statement of current position during liquidation.
  - Statement of changes in net assets in liquidation and statement of net assets in liquidation.
- LO 13-7**
20. How are assets to be reported when the liquidation basis of accounting is being applied?
- At cost less accumulated depreciation.
  - At the estimated amount of cash to be received.
  - At fair value.
  - At the lower of cost or market value.
- LO 13-7**
21. The New England Company has a debt to a bank of \$55,000. The company is currently being liquidated and believes that between \$12,000 and \$20,000 will be paid on that debt. According to the liquidation basis of accounting, what amount is reported for this liability?
- \$12,000
  - \$16,000
  - \$20,000
  - \$55,000
- LO 13-9**
22. On a balance sheet prepared for a company during its reorganization, at what balance are liabilities reported?
- At the expected amount of the allowed claims.
  - At the present value of the expected future cash flows.
  - At the expected amount of the settlement.
  - At the amount of the anticipated final payment.
- LO 13-9**
23. Which of the following is *not* a reorganization item for purposes of reporting a company's income statement during a Chapter 11 bankruptcy?
- Professional fees.
  - Interest revenue.
  - Interest expense.
  - Gains and losses on closing facilities.
- LO 13-9**
24. What accounting is made for professional fees incurred during a bankruptcy reorganization?
- They must be expensed immediately.
  - They must be capitalized and written off over 180 months or less.
  - They must be capitalized until the company emerges from the reorganization.
  - They are either expensed or capitalized, depending on the nature of the expenditure.
- LO 13-10**
25. Which of the following is necessary for a company to use fresh start accounting?
- The previous owners must hold at least 50 percent of the stock of the company when it emerges from bankruptcy.
  - The reorganization value of the company must exceed the value of all assets.
  - The reorganization value of the company must exceed the value of all liabilities.
  - The original owners must hold less than 50 percent of the stock of the company when it emerges from bankruptcy.
- LO 13-10**
26. If the reorganization value of a company emerging from bankruptcy is larger than the fair values that can be assigned to specific assets, what accounting is made of the difference?
- Because of conservatism, the difference is simply ignored.
  - The difference is recorded as an expense immediately.
  - The difference is capitalized as goodwill.
  - The difference is recorded as a professional fee.
- LO 13-10**
27. For a company emerging from bankruptcy, how are liabilities (other than deferred income taxes) reported?
- At their historical value.
  - At zero because of fresh start accounting.
  - At the present value of the future cash flows.
  - At the negotiated value less all professional fees incurred in the reorganization.

LO 13-4, 13-6, 13-7

28. The Walston Company is to be liquidated and has the following liabilities:

Income taxes . . . . .	\$ 8,000
Notes payable (secured by land) . . . . .	120,000
Accounts payable . . . . .	85,000
Salaries payable (evenly divided between two employees) . . . . .	6,000
Bonds payable . . . . .	70,000
Administrative expenses for liquidation . . . . .	20,000

The company has the following assets:

	Book Value	Fair Value
Current assets . . . . .	\$ 80,000	\$ 35,000
Land . . . . .	100,000	90,000
Buildings and equipment . . . . .	100,000	110,000

How much money will the holders of the notes payable collect following liquidation?

LO 13-4, 13-7

29. Xavier Company is going through a Chapter 7 bankruptcy. All assets have been liquidated, and the company retains only \$26,200 in free cash. The following debts, totaling \$43,050, remain:

Government claims to unpaid taxes . . . . .	\$ 7,000
Salary during last month owed to Mr. Key (not an officer) . . . . .	19,200
Administrative expenses . . . . .	3,450
Salary during last month owed to Ms. Rankin (not an officer) . . . . .	5,850
Unsecured accounts payable . . . . .	7,550

Indicate how much money will be paid to the creditor associated with each debt.

LO 13-4, 13-6, 13-7

30. Ataway Company has severe financial difficulties and is considering filing a bankruptcy petition. At this time, it has the following assets and liabilities. The assets are stated at net realizable value.

Assets (pledged against debts of \$70,000) . . . . .	\$116,000
Assets (pledged against debts of \$130,000) . . . . .	50,000
Other assets . . . . .	80,000
Liabilities with priority . . . . .	42,000
Other unsecured creditors . . . . .	200,000

In a liquidation, how much money would be paid on the partially secured debt?

LO 13-4, 13-6, 13-7

31. Chesterfield Company holds cash of \$60,000, inventory worth \$110,000, and a building worth \$140,000. Unfortunately, the company also has accounts payable of \$190,000, a note payable of \$90,000 (secured by the inventory), liabilities with priority of \$22,800, and a bond payable of \$170,000 (secured by the building). In a Chapter 7 bankruptcy, how much money will the holder of the bond expect to receive?

LO 13-4, 13-7

32. Mondesto Company has the following debts:

Unsecured creditors . . . . .	\$230,000
Liabilities with priority . . . . .	110,000
Secured liabilities:	
Debt 1, \$210,000; value of pledged asset . . . . .	180,000
Debt 2, \$170,000; value of pledged asset . . . . .	100,000
Debt 3, \$120,000; value of pledged asset . . . . .	140,000

The company also has a number of other assets that are not pledged in any way. The creditors holding Debt 2 want to receive at least \$142,000. For how much do these free assets have to be sold so that the creditors associated with Debt 2 will receive exactly \$142,000?

## LO 13-4, 13-7

33. A statement of financial affairs created for an insolvent corporation that is beginning the process of liquidation discloses the following data (assets are shown at net realizable values):

Assets pledged with fully secured creditors . . . . .	\$220,000
Fully secured liabilities . . . . .	160,000
Assets pledged with partially secured creditors . . . . .	390,000
Partially secured liabilities . . . . .	510,000
Assets not pledged . . . . .	310,000
Unsecured liabilities with priority . . . . .	182,800
Accounts payable (unsecured) . . . . .	400,000

- a. This company owes \$13,000 to an unsecured creditor (without priority). How much money can this creditor expect to collect?
- b. This company owes \$120,000 to a bank on a note payable that is secured by a security interest attached to property with an estimated net realizable value of \$90,000. How much money can this bank expect to collect?

## LO 13-4, 13-7

34. A company preparing for a Chapter 7 liquidation has the following liabilities:

- Note payable A of \$90,000 secured by land having a book value of \$50,000 and a fair value of \$70,000.
- Note payable B of \$120,000 secured by a building having a \$60,000 book value and a \$40,000 fair value.
- Note payable C of \$60,000, unsecured.
- Administrative expenses payable of \$20,000.
- Accounts payable of \$120,000.
- Income taxes payable of \$30,000.

The company also has these other assets:

- Cash of \$10,000.
- Inventory of \$100,000 but with a net realizable value of \$60,000.
- Equipment of \$90,000 but with a net realizable value of \$50,000.

How much will each of the company's liabilities be paid at liquidation?

## LO 13-7

35. Olds Company declares Chapter 7 bankruptcy. The following are the asset and liability book values at that time. Administrative expenses are estimated to be \$20,000:

Cash . . . . .	\$ 32,000	
Accounts receivable . . . . .	68,000	(valued at \$36,000)
Inventory . . . . .	78,000	(valued at \$64,000)
Land (secures note A) . . . . .	208,000	(valued at \$168,000)
Building (secures bonds) . . . . .	408,000	(valued at \$336,000)
Equipment . . . . .	128,000	(value unknown)
Accounts payable . . . . .	188,000	
Taxes payable to government . . . . .	28,000	
Note payable A . . . . .	186,000	
Note payable B . . . . .	258,000	
Bonds payable . . . . .	308,000	

The holders of note payable B want to collect at least \$129,000. To achieve this goal, how much does the company have to receive in the liquidation of its equipment?

## LO 13-4, 13-7

36. A company going through a Chapter 7 bankruptcy has the following account balances:

Cash . . . . .	\$ 30,000
Receivables (30% collectible) . . . . .	50,000
Inventory (worth \$39,000) . . . . .	90,000
Land (worth \$120,000) (secures note payable) . . . . .	100,000
Buildings (worth \$180,000) (secures bonds payable) . . . . .	200,000

(Continued)

(Continued)

Salaries payable (Four workers owed equal amounts for last two weeks) . . .	10,000
Accounts payable . . . . .	90,000
Note payable (secured by land) . . . . .	110,000
Bonds payable (secured by building) . . . . .	300,000
Common stock . . . . .	100,000
Retained earnings . . . . .	(140,000)

How much will be paid to each of the following?

Salaries payable

Accounts payable

Note payable

Bonds payable

LO 13-9

37. Pumpkin Company is going through bankruptcy reorganization. It has a \$200,000 note payable incurred prior to the order for relief. The company believes that the note will be settled for \$60,000 in cash. It is also possible that the creditor will instead take a piece of land that cost the company \$50,000 but is valued at \$72,000. On a balance sheet prepared during the reorganization period, how will this debt be reported?

LO 13-10

38. The Larisa Company is exiting bankruptcy reorganization with the following accounts:

	Book Value	Fair Value
Receivables . . . . .	\$ 80,000	\$ 90,000
Inventory . . . . .	200,000	210,000
Buildings . . . . .	300,000	400,000
Liabilities . . . . .	300,000	300,000
Common stock . . . . .	330,000	
Additional paid-in capital . . . . .	20,000	
Retained earnings (deficit) . . . . .	(70,000)	

The company's assets have a \$760,000 reorganization value. As part of the reorganization, the company's owners transferred 80 percent of the outstanding stock to the creditors.

Prepare the journal entry that is necessary to adjust the company's records to fresh start accounting.

LO 13-9

39. Addison Corporation is currently going through a Chapter 11 bankruptcy. The company has the following account balances for the current year. Prepare an income statement for this organization. The effective tax rate is 20 percent (realization of any tax benefits is anticipated).

	Debit	Credit
Advertising expense . . . . .	\$ 24,000	
Cost of goods sold . . . . .	211,000	
Depreciation expense . . . . .	22,000	
Interest expense . . . . .	4,000	
Interest revenue . . . . .		\$ 32,000
Loss on closing of branch as part of reorganization . . . . .	109,000	
Professional fees . . . . .	71,000	
Rent expense . . . . .	16,000	
Revenues . . . . .		467,000
Salaries expense . . . . .	70,000	

LO 13-10

40. Kansas City Corporation holds three assets when it comes out of Chapter 11 bankruptcy:

	Book Value	Fair Value
Inventory . . . . .	\$ 86,000	\$ 50,000
Land and buildings . . . . .	250,000	400,000
Equipment . . . . .	123,000	110,000

The company has a reorganization value of \$600,000.

- Describe the rules to determine whether to apply fresh start accounting to Kansas City.
- If fresh start accounting is appropriate, how will this company's assets be reported?
- If a Goodwill account is recognized in a reorganization, where should it be reported? What happens to this balance?

## LO 13-9

41. Jaz Corporation is in the process of going through a reorganization. As of December 31, 2017, the company's accountant has determined the following information although the company is still several months away from emerging from the bankruptcy proceeding. Prepare a balance sheet in the appropriate form.

	Book Value	Fair Value
<b>Assets</b>		
Cash .....	\$ 23,000	\$ 23,000
Inventory.....	45,000	47,000
Land.....	140,000	210,000
Buildings.....	220,000	260,000
Equipment.....	154,000	157,000
<hr/>		
	Allowed Claims	Expected Settlement
<b>Liabilities as of the date of the order for relief</b>		
Accounts payable.....	\$ 123,000	\$ 20,000
Accrued expenses.....	30,000	4,000
Income taxes payable.....	22,000	18,000
Note payable (due 2020, secured by land).....	100,000	100,000
Note payable (due 2022).....	170,000	80,000
<b>Liabilities since the date of the order for relief</b>		
Accounts payable.....	\$ 60,000	
Note payable (due 2019).....	110,000	
<b>Stockholders' equity</b>		
Common stock.....	\$ 200,000	
Deficit.....	(233,000)	

## LO 13-10

42. Ristoni Company is in the process of emerging from a Chapter 11 bankruptcy. It will apply fresh start accounting as of December 31, 2017. The company currently has 30,000 shares of common stock outstanding with a \$240,000 par value. As part of the reorganization, the owners will contribute 18,000 shares of this stock back to the company. A retained earnings deficit balance of \$330,000 exists at the time of this reorganization.

The company has the following asset accounts:

	Book Value	Fair Value
Accounts receivable.....	\$ 100,000	\$ 80,000
Inventory.....	112,000	90,000
Land and buildings.....	420,000	500,000
Equipment.....	78,000	65,000

The company's liabilities will be settled as follows. Assume that all notes will be issued at reasonable interest rates.

- Accounts payable of \$80,000 will be settled with a note for \$5,000. These creditors will also get 1,000 shares of the stock contributed by the owners.
- Accrued expenses of \$35,000 will be settled with a note for \$4,000.

- Note payable of \$100,000 (due 2021) was fully secured and has not been renegotiated.
- Note payable of \$200,000 (due 2020) will be settled with a note for \$50,000 and 10,000 shares of the stock contributed by the owners.
- Note payable of \$185,000 (due 2018) will be settled with a note for \$71,000 and 7,000 shares of the stock contributed by the owners.
- Note payable of \$200,000 (due 2019) will be settled with a note for \$110,000.

The company has a reorganization value of \$780,000.

Prepare all journal entries for Ristoni so that the company can emerge from the bankruptcy proceeding.

## LO 13-10

43. Smith Corporation has gone through bankruptcy and is ready to emerge as a reorganized entity on December 31, 2017. On this date, the company has the following assets (fair value is based on discounting the anticipated future cash flows):

	Book Value	Fair Value
Accounts receivable. . . . .	\$ 20,000	\$ 18,000
Inventory. . . . .	143,000	111,000
Land and buildings. . . . .	250,000	278,000
Machinery. . . . .	144,000	121,000
Patents. . . . .	100,000	125,000

The company has a reorganization value of \$800,000.

Smith has 50,000 shares of \$10 par value common stock outstanding. A deficit retained earnings balance of \$670,000 also is reported. The owners will distribute 30,000 shares of this stock as part of the reorganization plan.

The company's liabilities will be settled as follows:

- Accounts payable of \$180,000 (existing at the date on which the order for relief was granted) will be settled with an 8 percent, two-year note for \$35,000.
  - Accounts payable of \$97,000 (incurred since the date on which the order for relief was granted) will be paid in the regular course of business.
  - Note payable—First Metropolitan Bank of \$200,000 will be settled with an 8 percent, five-year note for \$50,000 and 15,000 shares of the stock contributed by the owners.
  - Note payable—Northwestern Bank of Tulsa of \$350,000 will be settled with a 7 percent, eight-year note for \$100,000 and 15,000 shares of the stock contributed by the owners.
- a. How does Smith Corporation's accountant know that fresh start accounting must be utilized?
- b. Prepare a balance sheet for Smith Corporation upon its emergence from reorganization.

## LO 13-4, 13-7

44. Ambrose Corporation reports the following information:

	Book Value	Liquidation Value
Assets pledged with fully secured creditors . . . . .	\$220,000	\$245,000
Assets pledged with partially secured creditors. . . . .	111,000	103,000
Other assets. . . . .	140,000	81,000
Liabilities with priority. . . . .	36,000	
Fully secured liabilities. . . . .	200,000	
Partially secured liabilities. . . . .	180,000	
Accounts payable (unsecured). . . . .	283,000	

In liquidation, what amount of cash should each class of liabilities expect to collect?

## LO 13-4, 13-6

45. The following balance sheet has been prepared by the accountant for Limestone Company as of June 3, 2017, the date on which the company is to file a voluntary petition of bankruptcy:

<b>LIMESTONE COMPANY</b>	
<b>Balance Sheet</b>	
<b>June 3, 2017</b>	
<b>Assets</b>	
Cash .....	\$ 3,000
Accounts receivable (net) .....	65,000
Inventory .....	88,000
Land .....	100,000
Buildings (net) .....	300,000
Equipment (net) .....	180,000
Total assets .....	<u>\$736,000</u>
<b>Liabilities and Equities</b>	
Accounts payable .....	\$ 98,000
Notes payable—current (secured by equipment) .....	250,000
Notes payable—long term (secured by land and buildings) .....	190,000
Common stock .....	120,000
Retained earnings .....	78,000
Total liabilities and equities .....	<u>\$736,000</u>

**Additional Information**

- If the company is liquidated, administrative expenses are estimated at \$18,000.
- The accounts payable figure includes \$10,000 in wages earned by the company's 12 employees during May. No one earned more than \$2,200.
- Liabilities do not include taxes of \$14,000 owed to the U.S. government.
- Company officials estimate that 40 percent of the accounts receivable will be collected in a liquidation and that the inventory disposal will bring \$80,000. The land and buildings will be sold together for approximately \$310,000; the equipment should bring \$130,000 at auction.

Prepare a statement of financial affairs for Limestone Company as of June 3, 2017.

## LO 13-4, 13-6, 13-7

46. Creditors of Jones Corporation are considering petitioning the courts to force the company into Chapter 7 bankruptcy. The following information has been determined. Administrative expenses in connection with the liquidation are estimated to be \$22,000. Indicate the amount of money that each class of creditors can anticipate receiving.

	<b>Book Value</b>	<b>Net Realizable Value</b>
Cash .....	\$ 6,000	\$ 6,000
Accounts receivable .....	32,000	18,000
Inventory .....	45,000	31,000
Supplies .....	3,000	—0—
Investments .....	2,000	8,000
Land .....	60,000	72,000
Buildings .....	90,000	68,000
Equipment .....	50,000	35,000
Notes payable (secured by land) .....	65,000	
Notes payable (secured by buildings) .....	78,000	
Bonds payable (secured by equipment) .....	115,000	
Accounts payable .....	70,000	
Salaries payable (two weeks' salary for three employees) .....	6,000	
Taxes payable .....	10,000	

## LO 13-6, 13-7, 13-10

47. Anteium Company owes \$80,000 on a note payable that is currently due. The note is held by a local bank and is secured by a mortgage lien attached to three acres of land worth \$48,000. The land originally cost Anteium \$31,000 when acquired several years ago. The only other account balances for this company are Investments of \$20,000 (but worth \$25,000), Accounts Payable of \$20,000, Common Stock of \$40,000, and a deficit of \$89,000. Anteium is insolvent and attempting to arrange a reorganization so that the business can continue to operate. The reorganization value of the company is \$82,000.

View each of the following as an independent situation:

- On a statement of financial affairs, how would this note be reported? How would the land be shown?
  - Assume that Anteium develops an acceptable reorganization plan. Sixty percent of the common stock is transferred to the bank to settle that particular obligation. A 7 percent, three-year note payable for \$5,000 is used to settle the accounts payable. How would Anteium record the reorganization?
  - Assume that Anteium is liquidated. The land and investments are sold for \$50,000 and \$26,000, respectively. Administrative expenses amount to \$11,000. How much will the various parties collect?
48. The following balance sheet has been produced for Litz Corporation as of August 8, 2017, the date on which the company is to begin selling assets as part of a corporate liquidation:

## LO 13-4, 13-7

<b>LITZ CORPORATION</b>	
<b>Balance Sheet</b>	
<b>August 8, 2017</b>	
<b>Assets</b>	
Cash .....	\$ 16,000
Accounts receivable (net) .....	82,000
Investments .....	32,000
Inventory (net realizable value is expected to approximate cost) .....	69,000
Land .....	30,000
Buildings (net) .....	340,000
Equipment (net) .....	<u>210,000</u>
Total assets .....	<u>\$779,000</u>
<b>Liabilities and Equities</b>	
Accounts payable .....	\$150,000
Notes payable—current (secured by inventory) .....	132,000
Notes payable—long term [secured by land and buildings (valued at \$300,000)] .....	259,000
Common stock .....	135,000
Retained earnings .....	<u>103,000</u>
Total liabilities and equities .....	<u>\$779,000</u>

The following events occur during the liquidation process:

- The investments are sold for \$39,000.
  - The inventory is sold at auction for \$48,000.
  - The money derived from the inventory is applied against the current notes payable.
  - Administrative expenses of \$15,000 are incurred in connection with the liquidation.
  - The land and buildings are sold for \$315,000. The long-term notes payable are paid.
  - The accountant determines that \$34,000 of the accounts payable are liabilities with priority.
  - The company's equipment is sold for \$84,000.
  - Accounts receivable of \$34,000 are collected. The remainder of the receivables is considered uncollectible.
  - The administrative expenses are paid.
- Prepare a statement of realization and liquidation for the period just described.
  - What percentage of their claims should the unsecured creditors receive?



## LO 13-4, 13-10

49. Becket Corporation's accountant has prepared the following balance sheet as of November 10, 2017, the date on which the company is to release a plan for reorganizing operations under Chapter 11 of the Bankruptcy Reform Act:

<b>BECKET CORPORATION</b>	
<b>Balance Sheet</b>	
<b>November 10, 2017</b>	
<b>Assets</b>	
Cash	\$ 12,000
Accounts receivable (net) . . . . .	61,000
Investments . . . . .	26,000
Inventory (net realizable value is expected to approximate 80% of cost) . . . . .	80,000
Land . . . . .	57,000
Buildings (net) . . . . .	248,000
Equipment (net) . . . . .	117,000
Total assets . . . . .	<b>\$ 601,000</b>
<b>Liabilities and Equities</b>	
Accounts payable	\$ 129,000
Notes payable—current (secured by equipment) . . . . .	220,000
Notes payable—(due in 2020) (secured by land and buildings) . . . . .	325,000
Common stock (\$10 par value) . . . . .	60,000
Retained earnings (deficit) . . . . .	(133,000)
Total liabilities and equities . . . . .	<b>\$ 601,000</b>

The company has presented the following proposal:

- The reorganization value of the company's assets just prior to issuing additional shares below, selling the company's investment, and conveying title to the land is set at \$650,000 based on discounted future cash flows.
- Accounts receivable of \$20,000 are written off as uncollectible. Investments are worth \$40,000, land is worth \$80,000, the buildings are worth \$300,000, and the equipment is worth \$86,000.
- An outside investor has been found to buy 7,000 shares of common stock at \$11 per share.
- The company's investments are to be sold for \$40,000 in cash with the proceeds going to the holders of the current note payable. The remainder of these short-term notes will be converted into \$130,000 of notes due in 2021 and paying 10 percent annual cash interest.
- All accounts payable will be exchanged for \$40,000 in notes payable due in 2018 that pay 8 percent annual interest.
- Title to land costing \$20,000 but worth \$50,000 will be transferred to the holders of the note payable due in 2020. In addition, these creditors will receive \$180,000 in notes payable (paying 10 percent annual interest) coming due in 2024. These creditors also are issued 3,000 shares of previously unissued common stock. Becket retains the remainder of its land.

Prepare journal entries for Becket to record the transactions as put forth in this reorganization plan.

## LO 13-4, 13-6

50. Oregon Corporation has filed a voluntary petition to reorganize under Chapter 11 of the Bankruptcy Reform Act. Its creditors are considering an attempt to force liquidation. The company currently holds cash of \$6,000 and accounts receivable of \$25,000. In addition, the company owns four plots of land. The first two (labeled A and B) cost \$8,000 each. Plots C and D cost the company \$20,000 and \$25,000, respectively. A mortgage lien is attached to each parcel of land as security for four different notes payable of \$15,000 each. Presently, the land can be sold for the following:

Plot A . . . . .	\$16,000
Plot B . . . . .	\$11,000
Plot C . . . . .	\$14,000
Plot D . . . . .	\$27,000

Another \$25,000 note payable is unsecured. Accounts payable at this time total \$32,000. Of this amount, \$12,000 is salary owed to the company's workers. No employee is due more than \$3,400. The company expects to collect \$12,000 from the accounts receivable if liquidation becomes necessary. Administrative expenses required for liquidation are anticipated to be \$16,000.

- Prepare a statement of financial affairs for Oregon Corporation.
- If the company is liquidated, how much cash would be paid on the note payable secured by plot B?
- If the company is liquidated, how much cash would be paid on the unsecured note payable?
- If the company is liquidated and plot D is sold for \$30,000, how much cash would be paid on the note payable secured by plot B?

**LO 13-4, 13-6**

51. Lynch, Inc., is a hardware store operating in Boulder, Colorado. Management recently made some poor inventory acquisitions that have loaded the store with unsalable merchandise. Because of the drop in revenues, the company is now insolvent. The entire inventory can be sold for only \$33,000. Following is a trial balance as of March 14, 2017, the day the company files for a Chapter 7 liquidation:

	Debit	Credit
Accounts payable . . . . .		\$ 33,000
Accounts receivable . . . . .	\$ 25,000	
Accumulated depreciation, building . . . . .		50,000
Accumulated depreciation, equipment . . . . .		16,000
Additional paid-in capital . . . . .		8,000
Advertising payable . . . . .		4,000
Building . . . . .	80,000	
Cash . . . . .	1,000	
Common stock . . . . .		50,000
Equipment . . . . .	30,000	
Inventory . . . . .	100,000	
Investments . . . . .	15,000	
Land . . . . .	10,000	
Note payable—Colorado Savings and Loan (secured by lien on land and building) . . . . .		70,000
Note payable—First National Bank (secured by equipment) . . . . .		150,000
Payroll taxes payable . . . . .		1,000
Retained earnings (deficit) . . . . .	126,000	
Salaries payable (owed equally to two employees) . . . . .		5,000
Totals . . . . .	<u>\$387,000</u>	<u>\$387,000</u>

Company officials believe that 60 percent of the accounts receivable can be collected if the company is liquidated. The building and land have a fair value of \$75,000, and the equipment is worth \$19,000. The investments represent shares of a nationally traded company that can be sold at the current time for \$21,000. Administrative expenses necessary to carry out a liquidation would approximate \$16,000.

Prepare a statement of financial affairs for Lynch, Inc., as of March 14, 2017.

**LO 13-4, 13-7**

52. Use the trial balance presented for Lynch, Inc., in problem (51). Assume that the company will be liquidated and the following transactions will occur:
- Accounts receivable of \$18,000 are collected with remainder written off.
  - All of the company's inventory is sold for \$40,000.
  - Additional accounts payable of \$10,000 incurred for various expenses such as utilities and maintenance are discovered.
  - The land and building are sold for \$71,000.
  - The note payable due to the Colorado Savings and Loan is paid.
  - The equipment is sold at auction for only \$11,000 with the proceeds applied to the note owed to the First National Bank.

- The investments are sold for \$21,000.
  - Administrative expenses total \$20,000 as of July 23, 2017, but no payment has yet been made.
- a. Prepare a statement of realization and liquidation for the period from March 14, 2017, through July 23, 2017.
  - b. How much cash would be paid to an unsecured, nonpriority creditor that Lynch, Inc., owes a total of \$1,000?

**LO 13-4, 13-8, 13-9, 13-10**

53. Holmes Corporation has filed a voluntary petition with the bankruptcy court in hopes of reorganizing. A statement of financial affairs has been prepared for the company showing these debts:

Liabilities with priority:	
Salaries payable . . . . .	\$ 18,000
Fully secured creditors:	
Notes payable (secured by land and buildings valued at \$84,000) . . .	70,000
Partially secured creditors:	
Notes payable (secured by inventory valued at \$30,000) . . . . .	140,000
Unsecured creditors:	
Notes payable . . . . .	50,000
Accounts payable . . . . .	10,000
Accrued expenses . . . . .	4,000

Holmes has 10,000 shares of common stock outstanding with a par value of \$5 per share. In addition, it is currently reporting a deficit balance of \$132,000.

Company officials have proposed the following reorganization plan:

- The company's assets have a total book value of \$210,000, an amount considered to be equal to fair value. The reorganization value of the assets as a whole, though, is set at \$225,000.
- Employees will receive a one-year note in lieu of all salaries owed. Interest will be 10 percent, a normal rate for this type of liability.
- The fully secured note will have all future interest dropped from a 15 percent rate, which is now unrealistic, to a 10 percent rate.
- The partially secured note payable will be satisfied by signing a new 6-year \$30,000 note paying 10 percent annual interest. In addition, this creditor will receive 5,000 new shares of Holmes's common stock.
- An outside investor has been enlisted to buy 6,000 new shares of common stock at \$6 per share.
- The unsecured creditors will be offered 20 cents on the dollar to settle the remaining liabilities.

If this plan of reorganization is accepted and becomes effective, what journal entries would Holmes Corporation record?

## Develop Your Skills

### RESEARCH CASE 1



Aberdeen Corporation is considering the possibility of filing a voluntary petition of bankruptcy because of a particularly high level of debt. The company is publicly traded on a national stock exchange and, therefore, company officials are concerned about the role of the Securities and Exchange Commission in this legal action.

#### Required

Go to the following website: [www.sec.gov/investor/pubs/bankrupt.htm](http://www.sec.gov/investor/pubs/bankrupt.htm). List the information that the SEC provides in connection with the bankruptcy of a publicly held company.

## RESEARCH CASE 2



An investment analyst has been studying the long-term prospects of Six Flags Entertainment Corporation and has asked for assistance. Go to [www.sixflags.com](http://www.sixflags.com) and click on “Investors” at the top of the page. Then, click on “Annual Reports” on the left side of the next page. Finally, click on “2013 Annual Report.” Scroll down until you find the company’s financial statements. Look them over carefully. Focus on Note 2, “Chapter 11 Reorganization.”

### Required

Write a memo to summarize the information found in this note and the impact on the financial statements of applying fresh start accounting.

## ANALYSIS CASE 1



Go the following story about the bankruptcy filing of the Great Atlantic & Pacific Tea Company (better known as A & P): <http://www.usatoday.com/story/money/2015/07/20/p-grocery-chain-files-bankruptcy-again/30404517/>

Then go to the Securities and Exchange Commission website ([www.sec.gov](http://www.sec.gov)) and click on “Search for Company Filings” under “Filings.” Then click on “Company or Fund Name” and enter this company’s name. Click on the most recent 10-K form. What information is available in this document about the company’s bankruptcy reorganization plan?

### Required

Assume a client of your firm holds an ownership stake in this company. Based on these searches, write a memo to the client to describe the information available about the bankruptcy filing of the Great Atlantic & Pacific Tea company.

## ANALYSIS CASE 2



Go to [www.epiqbankruptcysolutions.com](http://www.epiqbankruptcysolutions.com) or [www.kccllc.net](http://www.kccllc.net) and select one of the current active bankruptcy cases.

### Required

Look through all of the information that is available for the case that you selected. Assume that your boss needs information about the current status of this particular bankruptcy. Compose a memo to present the information that you uncovered about this company and its bankruptcy.

## COMMUNICATION CASE 1



Go to [www.epiqbankruptcysolutions.com](http://www.epiqbankruptcysolutions.com) or [www.kccllc.net](http://www.kccllc.net) and select one of the current active bankruptcy cases. If available, go to an online business publication database such as Factiva or ABI-Inform. Search for articles that discuss the issues and problems that led the selected company to file for bankruptcy and any progress that has been made since that time.

### Required

Write a report on the selected company and the problems and mistakes that led to its insolvency and declaration of bankruptcy. If possible, indicate actions that the company might have to take as a result of filing for bankruptcy.

## COMMUNICATION CASE 2



Read several of the following articles as well as any other published pieces that describe the work of the accountant in bankruptcy cases:

“Restructuring for a Positive Return,” *CMA Management*, December 2005/January 2006.

“Alternatives to Bankruptcy Liquidation,” *Agency Sales*, February 2005.

“The Use of Crystal Balls in Financial Reporting: The Case Against Three Recent FASB Developments,” *Internal Auditing*, March/April 2015.

“Fresh-start Reporting: An Opportunity for Debtor Companies Emerging from Bankruptcy,” *American Bankruptcy Journal*, July/August 2009.

“Statements of Financial Affairs and Schedules as a Corporate X-Ray,” *American Bankruptcy Institute Journal*, March 2010.

“Predicting the Financial Failure of Retail Companies in the United States,” *Journal of Business & Economics Research*, August 2013.

“Fresh-Start Accounting Becomes Part of the Daily Financial Intake,” *American Bankruptcy Institute Journal*, February 2010.

“Assisting Troubled Business Clients: A Midsize Dilemma for CPAs,” *Journal of Accountancy*, March 2008.

“Stanford Business School Research: Financial Statements Are Still Valuable Tools for Predicting Bankruptcy,” *Business Wire*, May 12, 2006.

### Required

Write a report describing the services that an accountant can perform before and during a corporate bankruptcy. Include activities to be carried out prior to filing a petition and thereafter.

# Partnerships: Formation and Operation

A reader of college accounting textbooks might well conclude that business activity is carried out exclusively by corporations. Because most large companies are legally incorporated, a vast majority of textbook references and illustrations concern corporate organizations. Contrary to the perception being relayed, partnerships (as well as sole proprietorships) make up a vital element of the business community. The Internal Revenue Service projects that by 2016, nearly 4.7 million partnership income tax returns will be filed (as compared to nearly 8.1 million corporation income tax returns).<sup>1</sup>

The partnership form serves a wide range of business activities, from small local operations to worldwide enterprises. The following examples exist in the U.S. economy:

- Individual proprietors often join together to form a partnership as a way to reduce expenses, expand services, and add increased expertise. As will be discussed, partnerships also provide important tax benefits.
- A partnership is a common means by which friends and relatives can easily create and organize a business endeavor.
- Historically, doctors, lawyers, and other professionals have formed partnerships because of legal prohibitions against the incorporation of their practices. Although most states now permit alternative forms for such organizations, operating as a partnership or sole proprietorship is still necessary in many areas.

Over the years, some partnerships have grown to enormous sizes. Buckeye Partners, for example, primarily operates pipeline systems in the United States; in 2015 Buckeye had revenues of more than \$3.4 billion. The international accounting firm of PricewaterhouseCoopers recently reported revenues of more than \$35 billion.<sup>2</sup> In 2015, Deloitte indicated operations in more than 150 countries,<sup>3</sup> and Ernst & Young reported having more than 212,000 employees.<sup>4</sup>

<sup>1</sup> [www.irs.gov/taxstats](http://www.irs.gov/taxstats).

<sup>2</sup> "Global Annual Review 2015," [pwc.com](http://pwc.com).

<sup>3</sup> "Deloitte 2015 Global Report," [deloitte.com](http://deloitte.com).

<sup>4</sup> "EY at a glance," [ey.com](http://ey.com).

## Learning Objectives

After studying this chapter, you should be able to:

- LO 14-1** Explain the advantages and disadvantages of the partnership versus the corporate form of business.
- LO 14-2** Describe the purpose of the articles of partnership and list specific items that should be included in this agreement.
- LO 14-3** Prepare the journal entry to record the initial capital investment made by a partner.
- LO 14-4** Use both the bonus method and the goodwill method to record a partner's capital investment.
- LO 14-5** Demonstrate the impact that the allocation of partnership income has on the partners' individual capital balances.
- LO 14-6** Allocate income to partners when interest and/or salary factors are included.
- LO 14-7** Explain the meaning of partnership dissolution and understand that a dissolution will often have little or no effect on the operations of the partnership business.
- LO 14-8** Prepare journal entries to record the acquisition by a new partner of either all or a portion of a current partner's interest.
- LO 14-9** Prepare journal entries to record a new partner's admission by a contribution made directly to the partnership.
- LO 14-10** Prepare journal entries to record the withdrawal of a current partner.

## LO 14-1

Explain the advantages and disadvantages of the partnership versus the corporate form of business.

## Partnerships—Advantages and Disadvantages

The popularity of partnerships derives from several advantages inherent to this type of organization. An analysis of these attributes explains why millions of enterprises in the United States are partnerships rather than corporations.

One of the most common motives is the ease of formation. Only an oral agreement is necessary to create a legally binding partnership. In contrast, depending on specific state laws, incorporation requires filing a formal application and completing various other forms and documents. Operators of small businesses may find the convenience and reduced cost involved in creating a partnership to be an especially appealing characteristic. As the American Bar Association notes:

The principal advantage of partnerships is the ability to make virtually any arrangements defining their relationship to each other that the partners desire. There is no necessity, as there is in a corporation, to have the ownership interest in capital and profits proportionate to the investment made; and losses can be allocated on a different basis from profits. It is also generally much easier to achieve a desirable format for control of the business in a partnership than in a corporation, since the control of a corporation, which is based on ownership of voting stock, is much more difficult to alter.

Partnerships are taxed on a conduit or flow-through basis under subchapter K of the Internal Revenue Code. This means that the partnership itself does not pay any taxes. Instead the net income and various deductions and tax credits from the partnership are passed through to the partners based on their respective percentage interest in the profits and losses of the partnership, and the partners include the income and deductions in their individual tax returns.<sup>5</sup>

Thus, partnership revenue and expense items (as defined by the tax laws) must be assigned directly each year to the individual partners who pay the income taxes. Passing income balances through to the partners in this manner avoids double taxation of the profits that are earned by a business and then distributed to its owners. A corporation's income is taxed twice: when earned and again when conveyed as a dividend. A partnership's income is taxed only at the time that the business initially earns it.

For example, assume that a business earns \$100. After paying any income taxes, the remainder is immediately conveyed to its owners. An income tax rate of 30 percent is assumed for both individuals and corporations. Corporate dividends paid to owners, however, are taxed either 0 percent, 15 percent, or 20 percent depending on their overall earnings level.<sup>6</sup> As the following table shows, if this business is a partnership rather than a corporation, the owners have \$10.50 more expendable income, which is 10.5 percent of the business income. Although significant in amount, this difference narrows as tax rates are lowered.

	Partnership	Corporation
Income before income taxes . . . . .	\$ 100.00	\$ 100.00
Income taxes paid by business (30%) . . . . .	<u>—0—</u>	<u>(30.00)</u>
Income distributed to owners . . . . .	\$ 100.00	\$ 70.00
Income taxes paid by owners* . . . . .	<u>(30.00)</u>	<u>(10.50)</u>
Expendable income . . . . .	<u>\$ 70.00</u>	<u>\$ 59.50</u>

\*30 percent assumed rate on ordinary income.  
15 percent assumed rate on dividend income.

Historically, a second tax advantage has long been associated with partnerships. Because income is taxable to the partners as the business earns it, any operating losses can be used to reduce their personal taxable income directly. In contrast, a corporation is viewed as legally

<sup>5</sup>American Bar Association, *Family Legal Guide*, 3rd ed. (New York: Random House Reference, 2004).

<sup>6</sup>The American Taxpayer Relief Act of 2012 increased capital gains and dividend tax rates from 15 percent to 20 percent for single taxpayers and married taxpayers with incomes in the top tax bracket. Capital gains will continue to be taxed at 15 percent for individuals in the middle tax brackets. Earners in the lowest two income tax brackets will pay 0 percent on investment income. An additional 3.8 percent Medicare tax on net investment income applies to capital gains and dividends for those with modified adjusted gross incomes over various upper income thresholds.

separate from its owners, so losses cannot be passed through to them. A corporation has the ability to carry back any net operating losses and reduce previously taxed income (usually for the two prior years) and carry forward remaining losses to decrease future taxable income (for up to 20 years). However, if a corporation is newly formed or has not been profitable, operating losses provide no immediate benefit to a corporation or its owners as losses do for a partnership.

The tax advantage of deducting partnership losses is limited, however. For tax purposes, ownership of a partnership is labeled as a passive activity unless the partner materially participates in the actual business activities. Passive activity losses thus serve only to offset other passive activity profits. In most cases, these partnership losses cannot be used to reduce earned income such as salaries. Thus, unless a taxpayer has significant passive activity income (from rents, for example), losses reported by a partnership create little or no tax advantage unless the partner materially participates in the actual business activity.

The partnership form of business also has certain significant disadvantages. Perhaps the most severe problem is the unlimited liability that each partner automatically incurs. Partnership law specifies that any partner can be held personally liable for *all* debts of the business. The potential risk is especially significant when coupled with the concept of *mutual agency*. This legal term refers to the right that each partner has to incur liabilities in the name of the partnership. Consequently, partners acting within the normal scope of the business have the power to obligate the company for any amount. If the partnership fails to pay these debts, creditors can seek satisfactory remuneration from any partner that they choose.

Such legal concepts as unlimited liability and mutual agency describe partnership characteristics that have been defined and interpreted over a number of years. To provide consistent application across state lines in regard to these terms as well as many other legal aspects of a partnership, the Uniform Partnership Act (UPA) was created. This act, which was first proposed in 1914 (and revised in 1997), now has been adopted by all states in some form. It establishes uniform standards in such areas as the nature of a partnership, the relationship of the partners to outside parties, and the dissolution of the partnership. For example, Section 6 of the act provides the most common legal definition of a partnership: “an association of two or more persons to carry on a business as co-owners for profit.”

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## Alternative Legal Forms

Because of the possible owner liability, partnerships often experience difficulty in attracting large amounts of capital. Potential partners frequently prefer to avoid the risk that is a basic characteristic of a partnership. However, the tax benefits of avoiding double taxation still provide a strong pull toward the partnership form. Hence, in recent years, a number of alternative types of organizations have been developed. The availability of these legal forms depends on state laws as well as applicable tax laws. In each case, however, the purpose is to limit the owners' personal liability while providing the tax benefits of a partnership.<sup>7</sup>

### Subchapter S Corporation

A Subchapter S corporation (often referred to as an *S corporation*) is created as a corporation and, therefore, has all of the legal characteristics of that form.<sup>8</sup> According to the U.S. tax laws, if the corporation meets certain regulations, it will be taxed in virtually the same way as a partnership. Thus, the Subchapter S corporation pays no income taxes although any income (and losses) pass directly through to the taxable income of the individual owners. This form avoids double taxation, and the owners do not face unlimited liability. To qualify, the business can have only one class of stock and is limited to 100 stockholders. All owners must be individuals, estates, certain tax-exempt entities, or certain types of trusts. The most significant problem associated with this business form is that its growth potential is limited because of the restriction on the number and type of owners.

<sup>7</sup> Many factors should be considered in choosing a specific legal form for an organization. The information shown here is merely an overview. For more information, consult a tax guide or a business law textbook. Also see Hopson and Hopson, “Making the Right Choice of Business Entity,” *CPA Journal*, October 2014.

<sup>8</sup> Unless a corporation qualifies as a Subchapter S corporation or some other legal variation, it is referred to as a *Subchapter C corporation*. Therefore, a vast majority of all businesses are C corporations.



### Limited Partnerships (LPs)

A *limited partnership* is a type of investment designed primarily for individuals who want the tax benefits of a partnership but who do not wish to work in a partnership or have unlimited liability. In such organizations, a number of limited partners invest money as owners but are not allowed to participate in the company's management. These partners can still incur a loss on their investment, but the amount is restricted to what has been contributed. To protect the creditors of a limited partnership, one or more general partners must be designated to assume responsibility for all obligations created in the name of the business.

Buckeye Partners, L.P. is an example of a limited partnership that trades on the New York Stock Exchange. Buckeye's December 31, 2015, balance sheet reported capital of \$3.7 billion for its limited partners.

Many limited partnerships were originally formed as tax shelters to create immediate losses (to reduce the taxable income of the partners) with profits spread out into the future. As mentioned earlier, tax laws limit the deduction of passive activity losses, and this significantly reduced the formation of limited partnerships.

### Limited Liability Partnerships (LLPs)

The *limited liability partnership* has most of the characteristics of a general partnership except that it significantly reduces the partners' liability. Partners may lose their investment in the business and are responsible for the contractual debts of the business. The advantage here is created in connection with any liability resulting from damages. In such cases, the partners are responsible for only their own acts or omissions plus the acts and omissions of individuals under their supervision.

As Section 306(c) of the Uniform Partnership Act notes,

An obligation of a partnership incurred while the partnership is a limited liability partnership, whether arising in contract, tort, or otherwise, is solely the obligation of the partnership. A partner is not personally liable, directly or indirectly, by way of contribution or otherwise, for such an obligation solely by reason of being or so acting as a partner.

Thus, a partner in the Houston office of a public accounting firm would probably not be held liable for a poor audit performed by that firm's San Francisco office. Not surprisingly, limited liability partnerships have become very popular with professional service organizations that have multiple offices. For example, all of the four largest accounting firms are LLPs.

### Limited Liability Companies (LLCs)

The limited liability company is a relatively new type of organization in the United States although it has long been used in Europe and other areas of the world. It is classified as a partnership for tax purposes and court purposes. However, depending on state laws, the owners risk only their own investments. Thus, similar to a Subchapter S entity, the LLC provides liability protection for its owners and managers. In contrast to a Subchapter S corporation, the number of owners is not usually restricted so that growth may be easier to accomplish.

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## Partnership Accounting—Capital Accounts

Despite legal distinctions, questions should be raised as to the need for an entirely separate study of partnership accounting:

- Does an association of two or more persons require accounting procedures significantly different from those of a corporation?
- Does proper accounting depend on the legal form of an organization?

The answers to these questions are both yes and no. Accounting procedures are normally standardized for assets, liabilities, revenues, and expenses regardless of the legal form of a business. *Partnership accounting, though, does exhibit unique aspects that warrant study, but they lie primarily in the handling of the partners' capital accounts.*

The stockholders' equity accounts of a corporation do not correspond directly with the capital balances found in a partnership's financial records. The various equity accounts reported by an incorporated enterprise display a greater range of information. This characteristic reflects the wide variety of equity transactions that can occur in a corporation as well as the influence of state and federal laws. Government regulation has had an enormous effect on the accounting for corporate equity transactions in that extensive disclosure is required to protect stockholders and other outside parties such as potential investors.

To provide adequate information and to meet legal requirements, corporate accounting must provide details about numerous equity transactions and account balances. For example, the amount of a corporation's paid-in capital is shown separately from earned capital and other comprehensive income; the par value of each class of stock is disclosed; treasury stock, stock options, stock dividends, and other capital transactions are reported based on prescribed accounting principles.

In contrast, partnerships provide only a limited amount of equity disclosure primarily in the form of individual capital accounts that are accumulated for every partner or every class of partners. These balances measure each partner's or group's interest in the book value of the net assets of the business. Thus, the equity section of a partnership balance sheet is composed solely of capital accounts that can be affected by many different events: contributions from partners as well as distributions to them, earnings, and any other equity transactions.

However, partnership accounting does not differentiate between the various sources of ownership capital. Disclosing the composition of the partners' capital balances has not been judged necessary because partnerships have historically tended to be small with equity transactions that were rarely complex. Additionally, absentee ownership is not common, a factor that minimizes both the need for government regulation and outside interest in detailed information about the capital balances.

#### LO 14-2

Describe the purpose of the articles of partnership and list specific items that should be included in this agreement.

### Articles of Partnership

Because the demand for information about capital balances is limited, accounting principles specific to partnerships are based primarily on traditional approaches that have evolved over the years rather than on official pronouncements. These procedures attempt to mirror the relationship between the partners and their business especially as defined by the partnership agreement. This legal covenant, which may be either oral or written, is often referred to as the *articles of partnership* and forms the central governance for a partnership's operation. The financial arrangements spelled out in this contract establish guidelines for the various capital transactions. Therefore, the articles of partnership, rather than either laws or official rules, provide much of the underlying basis for partnership accounting.

Because the articles of partnership are a negotiated agreement that the partners create, an unlimited number of variations can be encountered in practice. Partners' rights and responsibilities frequently differ from business to business. Consequently, firms often hire accountants in an advisory capacity to participate in creating this document to ensure the equitable treatment of all parties. Although the articles of partnership may contain a number of provisions, an explicit understanding should always be reached in regard to the following:

- Name and address of each partner.
- Business location.
- Description of the nature of the business.
- Rights and responsibilities of each partner.
- Initial contribution to be made by each partner and the method to be used for valuation.
- Specific method by which profits and losses are to be allocated.
- Periodic withdrawal of assets by each partner.
- Procedure for admitting new partners.
- Method for arbitrating partnership disputes.
- Life insurance provisions enabling remaining partners to acquire the interest of any deceased partner.
- Method for settling a partner's share in the business upon withdrawal, retirement, or death.



## Discussion Question

### WHAT KIND OF BUSINESS IS THIS?

After graduating from college, Shelley Williams held several different jobs but found that she did not enjoy working for other people. Finally, she and Yvonne Hargrove, her college roommate, decided to start a business of their own. They rented a small building and opened a florist shop selling cut flowers such as roses and chrysanthemums that they bought from a local greenhouse.

Williams and Hargrove agreed orally to share profits and losses equally, although they also decided to take no money from the operation for at least four months. No other arrangements were made, but the business did reasonably well and, after the first four months had passed, each began to draw out \$500 in cash every week.

At year-end, they took their financial records to a local accountant so that they could get their income tax returns completed. He informed them that they had been operating as a partnership and that they should draw up a formal articles of partnership agreement or consider incorporation or some other legal form of organization. They confessed that they had never really considered the issue and asked for his advice on the matter.

What advice should the accountant give to these clients?

### LO 14-3

Prepare the journal entry to record the initial capital investment made by a partner.

### Accounting for Capital Contributions

Several types of capital transactions occur in a partnership: allocation of profits and losses, retirement of a current partner, admission of a new partner, and so on. The initial transaction, however, is the contribution the original partners make to begin the business. In the simplest situation, the partners invest only cash amounts. For example, assume that Carter and Green form a business to be operated as a partnership. Carter contributes \$50,000 in cash and Green invests \$20,000. The initial journal entry to record the creation of this partnership follows:

Cash .....	70,000	
Carter, Capital .....		50,000
Green, Capital .....		20,000
To record cash contributed to start new partnership.		

The assumption that only cash was invested avoids complications in this first illustration. Often, though, one or more of the partners transfers noncash assets such as inventory, land, equipment, or a building to the business. Although fair value is used to record these assets, a case could be developed for initially valuing any contributed asset at the partner's current book value. According to the concept of unlimited liability (as well as present tax laws), a partnership does not exist as an entity apart from its owners. A logical extension of the idea is that the investment of an asset is not a transaction occurring between two independent parties such as would warrant revaluation. This contention holds that the semblance of an arm's-length transaction is necessary to justify a change in the book value of any account.

Although retaining the recorded value for assets contributed to a partnership may seem reasonable, this method of valuation proves to be inequitable to any partner investing appreciated property. A \$50,000 capital balance always results from a cash investment of that amount, but recording other assets depends entirely on the original book value.

For example, should a partner who contributes a building having a recorded value of \$18,000 but a fair value of \$50,000 be credited with only an \$18,000 interest in the partnership? Because \$50,000 in cash and \$50,000 in appreciated property are equivalent

contributions, a \$32,000 difference in the partners' capital balances cannot be justified. To prevent such inequities, each item transferred to a partnership is initially recorded for external reporting purposes at current value.<sup>9</sup>

Requiring revaluation of contributed assets can, however, be advocated for reasons other than just the fair treatment of all partners. Despite some evidence to the contrary, a partnership can be viewed legitimately as an entity standing apart from its owners. As an example, a partnership maintains legal ownership of its assets and (depending on state law) can initiate lawsuits. For this reason, accounting practice traditionally has held that the contribution of assets (and liabilities) to a partnership is an exchange between two separately identifiable parties that should be recorded based on fair values.

Determining an appropriate valuation for each capital balance is more than just an accounting exercise. Over the life of a partnership, these figures serve in a number of important capacities:

1. The totals in the individual capital accounts often influence the assignment of profits and losses to the partners.
2. The capital account balance is usually one factor in determining the final distribution that will be received by a partner at the time of withdrawal or retirement.
3. Ending capital balances indicate the allocation to be made of any assets that remain following the liquidation of a partnership.

To demonstrate, assume that Carter invests \$50,000 in cash to begin the previously discussed partnership and Green contributes the following assets:

	<b>Book Value to Green</b>	<b>Fair Value</b>
Inventory .....	\$ 9,000	\$10,000
Land .....	14,000	11,000
Building .....	<u>32,000</u>	<u>46,000</u>
Totals .....	<u>\$55,000</u>	<u>\$67,000</u>

As an added factor, Green's building is encumbered by a \$23,600 mortgage that the partnership has agreed to assume.

Green's net investment is equal to \$43,400 (\$67,000 less \$23,600). The following journal entry records the formation of the partnership created by these contributions:

Cash .....	50,000	
Inventory .....	10,000	
Land .....	11,000	
Building .....	46,000	
Mortgage Payable .....		23,600
Carter, Capital .....		50,000
Green, Capital .....		43,400
To record properties contributed to start partnership. Assets and liabilities are recorded at fair value.		

We should make one additional point before leaving this illustration. Although having contributed inventory, land, and a building, Green holds no further right to these individual assets; they now belong to the partnership. The \$43,400 capital balance represents an ownership interest in the business as a whole but does not constitute a specific claim to any asset. Having transferred title to the partnership, Green has no more right to these assets than does Carter.

<sup>9</sup>For federal income tax purposes, the \$18,000 book value is retained as the basis for this building, even after transfer to the partnership. Within the tax laws, no difference is seen between partners and their partnership so that no adjustment to fair value is warranted.

## LO 14-4

Use both the bonus method and the goodwill method to record a partner's capital investment.

### Intangible Contributions

In forming a partnership, the contributions made by one or more of the partners may go beyond assets and liabilities. A doctor, for example, can bring a particular line of expertise to a partnership, and a practicing dentist might have already developed an established patient list. These attributes, as well as many others, are frequently as valuable to a partnership as cash and fixed assets. Hence, formal accounting recognition of such special contributions may be appropriately included as a provision of any partnership agreement.

To illustrate, assume that James and Joyce plan to open an advertising agency and decide to organize the endeavor as a partnership. James contributes cash of \$70,000, and Joyce invests only \$10,000. Joyce, however, is an accomplished graphic artist, a skill that is considered especially valuable to this business. Therefore, in producing the articles of partnership, the partners agree to start the business with equal capital balances. Often such decisions result only after long, and sometimes heated, negotiations. Because the value assigned to an intangible contribution such as artistic talent is arbitrary at best, proper reporting depends on the partners' ability to arrive at an equitable arrangement.

In recording this agreement, James and Joyce have two options: (1) the bonus method and (2) the goodwill method. Each of these approaches achieves the desired result of establishing equal capital account balances. Recorded figures can vary significantly, however, depending on the procedure selected. Thus, the partners should reach an understanding prior to beginning business operations as to the method to be used. The accountant can help avoid conflicts by assisting the partners in evaluating the impact created by each of these alternatives.

**The Bonus Method** The bonus method assumes that a specialization such as Joyce's artistic abilities does *not* constitute a recordable partnership asset with a measurable cost. Hence, this approach recognizes only the assets that are physically transferred to the business (such as cash, patents, inventory). Although these contributions determine total partnership capital, the establishment of specific capital balances is viewed as an independent process based solely on the partners' agreement. Because the initial equity figures result from negotiation, they do not need to correspond directly with the individual investments.

James and Joyce have contributed a total of \$80,000 in identifiable assets to their partnership and have decided on equal capital balances. According to the bonus method, this agreement is fulfilled simply by splitting the \$80,000 capital evenly between the two partners. The following entry records the formation of this partnership under this assumption:

Cash .....	80,000	
James, Capital .....		40,000
Joyce, Capital .....		40,000
To record cash contributions with bonus to Joyce because of artistic abilities.		

Joyce received a *capital bonus* here of \$30,000 (the \$40,000 recorded capital balance in excess of the \$10,000 cash contribution) from James in recognition of the artistic abilities she brought into the business.

**The Goodwill Method** The goodwill method is based on the assumption that an implied value can be calculated mathematically and recorded for any intangible contribution made by a partner. In the present illustration, Joyce invested \$60,000 less cash than James but receives an equal amount of capital according to the partnership agreement. Proponents of the goodwill method argue that Joyce's artistic talent has an apparent value of \$60,000, a figure that should be included as part of this partner's capital investment. If not recorded, Joyce's primary contribution to the business is ignored completely within the accounting records.

Cash .....	80,000	
Goodwill .....	60,000	
James, Capital .....		70,000
Joyce, Capital .....		70,000
To record cash contributions with goodwill attributed to Joyce in recognition of artistic abilities.		

**Comparison of Methods** Both approaches achieve the intent of the partnership agreement: to record equal capital balances despite a difference in the partners' cash contributions. The bonus method allocates the \$80,000 invested capital according to the percentages designated by the partners, whereas the goodwill method capitalizes the implied value of Joyce's intangible contribution.

Although nothing prohibits the use of either technique, the recognition of goodwill poses definite theoretical problems. In previous discussions of both the equity method (Chapter 1) and business combinations (Chapter 2), goodwill was recognized but only as a result of an acquisition made by the reporting entity. Consequently, this asset had a historical cost in the traditional accounting sense. Partnership goodwill has no such cost; the business recognizes an asset even though no funds have been spent.

The partnership of James and Joyce, for example, is able to record \$60,000 in goodwill without any expenditure. Furthermore, the value attributed to this asset is based solely on a negotiated agreement between the partners; the \$60,000 balance has no objectively verifiable basis. Thus, although partnership goodwill is sometimes encountered in actual practice, this "asset" should be viewed with a strong degree of professional skepticism.

### Additional Capital Contributions and Withdrawals

Subsequent to forming a partnership, the owners may choose to contribute additional capital amounts during the life of the business. These investments can be made to stimulate expansion or to assist the business in overcoming working capital shortages or other problems. Regardless of the reason, the contribution is again recorded as an increment in the partner's capital account based on fair value. For example, in the previous illustration, assume that James decides to invest another \$5,000 cash in the partnership to help finance the purchase of new office furnishings. The partner's capital account balance is immediately increased by this amount to reflect the transfer to the partnership.<sup>10</sup>

In many instances, the articles of partnership allow withdrawals on a regular periodic basis as a reward for ownership or as compensation for work performed for the business. Often such distributions are recorded initially in a separate drawing account that is closed into the individual partner's capital account at year-end. Assume, for illustration purposes, that James and Joyce take out \$1,200 and \$1,500, respectively, from their business. The journal entry to record these payments is as follows:

James, Drawing .....	1,200	
Joyce, Drawing .....	1,500	
Cash .....		2,700
To record withdrawal of cash by partners.		

Larger amounts might also be withdrawn from a partnership on occasion. A partner may have a special need for money or just desire to reduce the basic investment that has been made in the business. Such transactions are usually sporadic occurrences and entail amounts significantly higher than the partner's periodic drawing. The articles of partnership may require prior approval by the other partners.

<sup>10</sup> The partners also may reverse this process by withdrawing assets from the business for their own personal use. To protect the interests of the other partners, the articles of partnership should clearly specify the amount and timing of such withdrawals.



## Discussion Question

### HOW WILL THE PROFITS BE SPLIT?

James J. Dewars has been the sole owner of a small CPA firm for the past 20 years. Now 52 years old, Dewars is concerned about the continuation of his practice after he retires. He would like to begin taking more time off now although he wants to remain active in the firm for at least another 8 to 10 years. He has worked hard over the decades to build up the practice so that he presently makes a profit of \$180,000 annually.

Lewis Huffman has been working for Dewars for the past four years. He now earns a salary of \$68,000 per year. He is a very dedicated employee who generally works 44 to 60 hours per week. In the past, Dewars has been in charge of the larger, more profitable audit clients whereas Huffman, with less experience, worked with the smaller clients. Both Dewars and Huffman do some tax work although that segment of the business has never been emphasized.

Sally Scriba has been employed for the past seven years with another CPA firm as a tax specialist. She has no auditing experience but has a great reputation in tax planning and preparation. She currently earns an annual salary of \$80,000.

Dewars, Huffman, and Scriba are negotiating the creation of a new CPA firm as a partnership. Dewars plans to reduce his time in this firm although he will continue to work with many of the clients that he has served for the past two decades. Huffman will begin to take over some of the major audit jobs. Scriba will start to develop an extensive tax practice for the firm.

Because of the changes in the firm, the three potential partners anticipate earning a total net income in the first year of operations of between \$130,000 and \$260,000. Thereafter, they hope that profits will increase at the rate of 10 to 20 percent annually for the next five years or so.

How should this new partnership allocate its future net income among these partners?

#### LO 14-5

Demonstrate the impact that the allocation of partnership income has on the partners' individual capital balances.

### Allocation of Income

At the end of each fiscal period, partnership revenues and expenses are closed out, accompanied by an allocation of the resulting net income or loss to the partners' capital accounts. Because a separate capital balance is maintained for each partner, a method must be devised for this assignment of annual income. Because of the importance of the process, the articles of partnership should always stipulate the procedure the partners established. If no arrangement has been specified, state partnership law normally holds that all partners receive an equal allocation of any income or loss earned by the business. If the partnership agreement specifies only the division of profits, then losses must be divided in the same manner as directed for profit allocation.

The profit allocation pattern can be important to the success of any organization because it can help emphasize and reward outstanding performance. Therefore, many partner compensation plans recognize contributions to revenue, growth, time spent with the firm, management skill development, or any other attribute the partnership deems important. Profit allocations plans can thus become complex in attempting to recognize and reward the various elements of each partner's contributions to the firm's success. Alternatively, partnerships can avoid all complications by assigning net income on an equal basis among all partners.

As an initial illustration, assume that Tinker, Evers, and Chance form a partnership by investing cash of \$120,000, \$90,000, and \$75,000, respectively. The articles of partnership agreement specifies that Evers will be allotted 40 percent of all profits and losses because of previous business experience. Tinker and Chance are to divide the remaining 60 percent equally. This agreement also stipulates that each partner is allowed to withdraw \$10,000 in cash annually from the business. The amount of this withdrawal does not directly depend on the method utilized for income allocation. *From an accounting perspective, the assignment of income and the setting of withdrawal limits are two separate decisions.*

At the end of the first year of operations, the partnership reports net income of \$60,000. To reflect the changes made in the partners' capital balances, the closing process consists of the following two journal entries. The assumption is made here that each partner has taken the allowed amount of drawing during the year. In addition, for convenience, all revenues and expenses already have been closed into the Income Summary account.

Tinker, Capital .....	10,000	
Evers, Capital .....	10,000	
Chance, Capital .....	10,000	
Tinker, Drawing .....		10,000
Evers, Drawing .....		10,000
Chance, Drawing .....		10,000
To close out drawing accounts recording payments made to the three partners.		
Income Summary .....	60,000	
Tinker, Capital (30%) .....		18,000
Evers, Capital (40%) .....		24,000
Chance, Capital (30%) .....		18,000
To allocate net income based on provisions of partnership agreement.		

### Statement of Partners' Capital

Because a partnership does not separately disclose a retained earnings balance, the statement of retained earnings usually reported by a corporation is replaced by a statement of partners' capital. The following financial statement is based on the data presented for the partnership of Tinker, Evers, and Chance. The changes made during the year in the individual capital accounts are outlined along with totals representing the partnership as a whole:

<b>TINKER, EVERS, AND CHANCE</b>				
<b>Statement of Partners' Capital</b>				
<b>For Year Ending December 31, Year 1</b>				
	<b>Tinker, Capital</b>	<b>Evers, Capital</b>	<b>Chance, Capital</b>	<b>Totals</b>
Capital balances beginning of year .....	\$ 120,000	\$ 90,000	\$ 75,000	\$ 285,000
Allocation of net income .....	18,000	24,000	18,000	60,000
Drawings .....	<u>(10,000)</u>	<u>(10,000)</u>	<u>(10,000)</u>	<u>(30,000)</u>
Capital balances end of year .....	<u>\$128,000</u>	<u>\$104,000</u>	<u>\$ 83,000</u>	<u>\$ 315,000</u>

#### LO 14-6

Allocate income to partners when interest and/or salary factors are included.

### Alternative Allocation Techniques—Example 1

Assigning net income based on a ratio may be simple, but this approach is not necessarily equitable to all partners. For example, assume that Tinker does not participate in the partnership's operations but is the contributor of the highest amount of capital. Evers and Chance both work full-time in the business, but Evers has considerably more experience in this line of work.

Under these circumstances, no single ratio is likely to reflect properly the various contributions made by each partner. Indeed, an unlimited number of alternative allocation plans could be devised in hopes of achieving fair treatment for all parties. For example, because of the different levels of capital investments, consideration should be given to including interest within the allocation process to reward the contributions. A compensation allowance is also a possibility, usually in an amount corresponding to the number of hours worked or the level of a partner's business expertise.

To demonstrate one possible option, assume that Tinker, Evers, and Chance begin their partnership based on the original facts except that they arrive at a more detailed method of allocating profits and losses. After considerable negotiation, an articles of partnership agreement



credits each partner annually for interest in an amount equal to 10 percent of that partner's beginning capital balance for the year. Evers and Chance also will be allotted \$15,000 each as a compensation allowance in recognition of their participation in daily operations. Any remaining profit or loss will be split 3:4:3, with the largest share going to Evers because of the work experience that this partner brings to the business. As with any appropriate allocation, this pattern attempts to provide fair treatment for all three partners.

Under this arrangement, the \$60,000 net income earned by the partnership in the first year of operation would be allocated as follows. The sequential alignment of the various provisions is irrelevant except that the ratio, which is used to assign the remaining profit or loss, must be calculated last.

<b>Allocation of Partnership Net Income</b>				
	<b>Tinker</b>	<b>Evers</b>	<b>Chance</b>	<b>Total</b>
Net Income . . . . .				\$ 60,000
Interest (10% of beginning capital) . . . . .	\$12,000	\$9,000	\$7,500	<u>(28,500)</u>
Net income remaining after interest . . . . .				\$ 31,500
Compensation allowance . . . . .	0	15,000	15,000	<u>(30,000)</u>
Net income remaining after interest and compensation . . . . .				\$ 1,500
Remaining income distribution . . . . .	<u>450 (30%)</u>	<u>600 (40%)</u>	<u>450 (30%)</u>	<u>(1,500)</u>
Net income allocation totals . . . . .	<u>\$12,450</u>	<u>\$24,600</u>	<u>\$22,950</u>	<u>\$ 0</u>

Importantly, the schedule computing the division of income must be completed prior to determining the final capital balances for the partners. For the Tinker, Evers, and Chance partnership, the allocations just calculated lead to the following year-end closing entry:

Income Summary . . . . .	60,000	
Tinker, Capital . . . . .		12,450
Evers, Capital . . . . .		24,600
Chance, Capital . . . . .		22,950
To allocate income for the year to the individual partners' capital accounts based on partnership agreement.		

### **Alternative Allocation Techniques—Example 2**

As the preceding illustration indicates, the assignment process is no more than a series of mechanical steps reflecting the change in each partner's capital balance resulting from the provisions of the partnership agreement. The number of different allocation procedures that could be employed is limited solely by the partners' imagination. Although interest, compensation allowances, and various ratios are the predominant factors encountered in practice, other possibilities exist. Therefore, another approach to the allocation process is presented to further illustrate some of the variations that can be utilized. A two-person partnership is used here to simplify the computations.

Assume that Webber and Rice formed a partnership several years ago to operate a coffee shop. Webber contributed the initial capital, and Rice manages the business. With the assistance of their accountant, they wrote an articles of partnership agreement that contains the following provisions:

1. Each partner is allowed to draw \$1,000 in cash from the business every month. Any withdrawal in excess of that figure will be accounted for as a direct reduction to the partner's capital balance.
2. Partnership profits and losses will be allocated each year according to the following plan:
  - a. Each partner will earn 15 percent interest based on the monthly average capital balance for the year (calculated without regard for normal drawings or current income).

- b. As a reward for operating the business, Rice is to receive credit for a bonus equal to 20 percent of the year's net income. However, no bonus is earned if the partnership reports a net loss.
- c. The two partners will divide any remaining profit or loss equally.

Assume that Webber and Rice subsequently begin the current year with capital balances of \$150,000 and \$30,000, respectively. On April 1 of that year, Webber invests an additional \$8,000 cash in the business, and on July 1, Rice withdraws \$6,000 in excess of the specified drawing allowance. Assume further that the partnership reports income of \$30,000 for the current year.

Because the interest factor established in this allocation plan is based on a monthly average figure, the specific amount to be credited to each partner is determined by means of a preliminary calculation:

#### Webber—Interest Allocation

Beginning balance . . .	\$150,000 × 3 months =	\$ 450,000
Balance, April 1 . . . . .	\$158,000 × 9 months =	1,422,000
		1,872,000
		× ½
Monthly average capital balance . . . . .		156,000
Interest rate . . . . .		× 15%
Interest credited to Webber . . . . .		<u>\$ 23,400</u>

#### Rice—Interest Allocation

Beginning balance . . .	\$30,000 × 6 months =	\$180,000
Balance, July 1 . . . . .	\$24,000 × 6 months =	144,000
		324,000
		× ½
Monthly average capital balance . . . . .		27,000
Interest rate . . . . .		× 15%
Interest credited to Rice . . . . .		<u>\$ 4,050</u>

Following this initial computation, the actual income assignment can proceed according to the provisions specified in the articles of partnership. The stipulations drawn by Webber and Rice must be followed exactly, even though the business's \$30,000 profit for the current year is not sufficient to cover both the interest and the bonus. Income allocation is a mechanical process that should always be carried out as stated in the articles of partnership without regard to the specific level of income or loss.

Based on the plan that was created, Webber's capital increases by \$21,675 during the current year but Rice's account increases by only \$8,325:

Allocation of Partnership Net Income	Weber	Rice	Total
Net Income . . . . .			\$ 30,000
Interest (above). . . . .	\$23,400	\$4,050	<u>(27,450)</u>
Net income remaining after interest. . . . .			\$ 2,550
Bonus to Rice (20% × \$30,000) . . . . .	0	6,000	<u>(6,000)</u>
Net income remaining after interest and bonus. . . . .			(3,450)
Remaining income (loss) distribution . . . . .	<u>(1,725) (50%)</u>	<u>(1,725) (50%)</u>	<u>\$ 3,450</u>
Net income allocation totals . . . . .	<u>\$21,675</u>	<u>\$8,325</u>	<u>\$ 0</u>

As discussed above, the interest and bonus allocations sum to \$33,450 and thus exceed the available net income of \$30,000. The remaining overallocation of \$3,450 is then treated as a loss in allocating the partnership's income to the individual partners.

## LO 14-7

Explain the meaning of partnership dissolution and understand that a dissolution will often have little or no effect on the operations of the partnership business.

## Accounting for Partnership Dissolution

Many partnerships limit capital transactions almost exclusively to contributions, drawings, and profit and loss allocations. Normally, though, over any extended period, changes in the members who make up a partnership occur. Employees may be promoted into the partnership or new owners brought in from outside the organization to add capital or expertise to the business. Current partners eventually retire, die, or simply elect to leave the partnership. Large operations may even experience such changes on a routine basis.

Regardless of the nature or the frequency of the event, any alteration in the specific individuals composing a partnership automatically leads to legal dissolution. In many instances, the breakup is merely a prerequisite to the formation of a new partnership. For example, if Abernethy and Chapman decide to allow Miller to become a partner in their business, the legally recognized partnership of Abernethy and Chapman has to be dissolved first. The business property as well as the right to future profits can then be conveyed to the newly formed partnership of Abernethy, Chapman, and Miller. The change is a legal one. Actual operations of the business would probably continue unimpeded by this alteration in ownership.

Conversely, should the partners so choose, dissolution can be a preliminary step in the termination and liquidation of the business. The death of a partner, lack of sufficient profits, or internal management differences can lead the partners to break up the partnership business. Under this circumstance, the partnership sells properties, pays debts, and distributes any remaining assets to the individual partners. Thus, in liquidations (which are analyzed in detail in the next chapter), both the partnership and the business cease to exist.

### Dissolution—Admission of a New Partner

One of the most prevalent changes in the makeup of a partnership is the addition of a new partner. An employee may have worked for years to gain this opportunity, or a prospective partner might offer the new investment capital or business experience necessary for future business success. An individual can gain admittance to a partnership in one of two ways: (1) by purchasing an ownership interest from a current partner or (2) by contributing assets directly to the business.

In recording either type of transaction, the accountant has the option, once again, to retain the book value of all partnership assets and liabilities (as exemplified by the bonus method) or revalue these accounts to their present fair values (the goodwill method). The decision as to a theoretical preference between the bonus and goodwill methods hinges on one single question: *Should the dissolved partnership and the newly formed partnership be viewed as two separate reporting entities?*

If the new partnership is merely an extension of the old, no basis exists for restatement. The transfer of ownership is a change only in a legal sense and has no direct impact on business assets and liabilities. However, if the continuation of the business represents a legitimate transfer of property from one partnership to another, revaluation of all accounts and recognition of goodwill can be justified.

Because both approaches are encountered in practice, this textbook presents each. However, the concerns previously discussed in connection with partnership goodwill still exist: Recognition is not based on historical cost, and no objective verification of the capitalized amount can be made. One alternative revaluation approach that attempts to circumvent the problems involved with partnership goodwill has been devised. This hybrid method revalues all partnership assets and liabilities to fair value without making any corresponding recognition of goodwill.

### Admission through Purchase of a Current Interest

As mentioned, one method of gaining admittance to a partnership is by the purchase of a current interest. One or more partners can choose to sell their portion of the business to an outside party. This type of transaction is most common in operations that rely primarily on monetary capital rather than on the business expertise of the partners.

In making a transfer of ownership, a partner can actually convey only three rights:

1. *The right of co-ownership in the business property.* This right justifies the partner's periodic drawings from the business as well as the distribution settlement paid at liquidation or at the time of a partner's withdrawal.

## LO 14-8

Prepare journal entries to record the acquisition by a new partner of either all or a portion of a current partner's interest.

2. The right to share in profits and losses as specified in the articles of partnership.
3. The right to participate in the management of the business.

Unless restricted by the articles of partnership, every partner has the power to sell or assign the first two of these rights at any time. Their transfer poses no threat of financial harm to the remaining partners. In contrast, partnership law states that the right to participate in the management of the business can be conveyed only with the consent of all partners. This particular right is considered essential to the future earning power of the enterprise as well as the maintenance of business assets. Therefore, current partners are protected from the intrusion of parties who might be considered detrimental to the management of the company.

As an illustration, assume that Scott, Thompson, and York formed a partnership several years ago. Subsequently, York decides to leave the partnership and offers to sell his interest to Morgan. Although York may transfer the right of property ownership as well as the specified share of future profits and losses, the partnership does not automatically admit Morgan. York legally remains a partner until such time as both Scott and Thompson agree to allow Morgan to participate in the management of the business.

To demonstrate the accounting procedures applicable to the transfer of a partnership interest, assume that the following information is available relating to the partnership of Scott, Thompson, and York:

Partner	Capital Balance	Profit and Loss Ratio
Scott .....	\$ 50,000	20%
Thompson .....	30,000	50
York .....	20,000	30
Total capital .....	<u>\$100,000</u>	

As often happens, the relationship of the capital accounts to one another does not correspond with the partners' profit and loss ratio. Capital balances are historical cost figures. They result from contributions and withdrawals made throughout the life of the business as well as from the allocation of partnership income. Therefore, any correlation between a partner's recorded capital at a particular point in time and the profit and loss percentage would probably be coincidental. Scott, for example, has 50 percent of the current partnership capital (\$50,000/\$100,000) but is entitled to only a 20 percent allocation of income.

Instead of York selling his interest to Morgan, assume that each of these three partners elects to transfer a 20 percent interest to Morgan for a total payment of \$30,000. According to the sales contract, *the money is to be paid directly to the owners*.

One approach to recording this transaction is that, because Morgan's purchase is carried out between the individual parties, the acquisition has no impact on partnership assets and liabilities. Because the business is not involved directly, the transfer of ownership requires a simple capital reclassification without any accompanying revaluation. This approach is similar to the bonus method; only a legal change in ownership is occurring so that revaluation of neither assets or liabilities nor goodwill is appropriate.

#### Book Value Method

Scott, Capital (20% of capital balance) .....	10,000	
Thompson, Capital (20%) .....	6,000	
York, Capital (20%) .....	4,000	
Morgan, Capital (20% of total) .....		20,000
To reclassify capital to reflect Morgan's acquisition. Money is paid directly to partners.		

An alternative for recording Morgan's acquisition relies on a different perspective of the new partner's admission. Legally, the partnership of Scott, Thompson, and York is transferring all assets and liabilities to the partnership of Scott, Thompson, York, and Morgan.

Therefore, according to the logic underlying the goodwill method, a transaction is occurring between two separate reporting entities, an event that necessitates the complete revaluation of all assets and liabilities.

Because Morgan is paying \$30,000 for a 20 percent interest in the partnership, the implied value of the business as a whole is \$150,000 ( $\$30,000/20\%$ ). However, the book value is only \$100,000; thus, a \$50,000 upward revaluation is indicated. This adjustment is reflected by restating specific partnership asset and liability accounts to fair value with any remaining balance recorded as goodwill.

<b>Goodwill (Revaluation) Method</b>	
Goodwill (or specific accounts) . . . . .	50,000
Scott, Capital (20% of goodwill) . . . . .	10,000
Thompson, Capital (50%) . . . . .	25,000
York, Capital (30%) . . . . .	15,000
To recognize goodwill and revaluation of assets and liabilities based on value of business implied by Morgan's purchase price.	

Note that this entry credits the \$50,000 revaluation to the original partners based on the profit and loss ratio rather than on capital percentages. Recognition of goodwill (or an increase in the book value of specific accounts) indicates that unrecorded gains have accrued to the business during previous years of operation. Therefore, the equitable treatment is to allocate this increment among the partners according to their profit and loss percentages. After the implied value of the partnership is established, the reclassification of ownership can be recorded based on the new capital balances as follows:

Scott, Capital (20% × new \$60,000 capital balance) . . . . .	12,000
Thompson, Capital (20% × \$55,000) . . . . .	11,000
York, Capital (20% × \$35,000) . . . . .	7,000
Morgan, Capital (20% × \$150,000 new total) . . . . .	30,000
To reclassify capital to reflect Morgan's acquisition. Money is paid directly to partners.	

#### LO 14-9

Prepare journal entries to record a new partner's admission by a contribution made directly to the partnership.

### **Admission by a Contribution Made to the Partnership**

Entrance into a partnership is not limited solely to the purchase of a current partner's interest. An outsider may be admitted to the ownership by contributing cash or other assets directly to the business rather than to the partners. For example, assume that King and Wilson maintain a partnership and presently report capital balances of \$80,000 and \$20,000, respectively. According to the articles of partnership, King is entitled to 60 percent of all profits and losses with the remaining 40 percent credited each year to Wilson. By agreement of the partners, Goldman is allowed to enter the partnership for a payment of \$20,000 *with this money going into the business*. Based on negotiations that preceded the acquisition, all parties have agreed that Goldman receives an initial 10 percent interest in the net assets of the partnership.

**Bonus Credited to Original Partners** The bonus (or no revaluation) method maintains the same recorded value for all partnership assets and liabilities despite Goldman's admittance. The capital balance for this new partner is simply set at the appropriate 10 percent level based on the total net assets of the partnership after the payment is recorded. Because \$20,000 is invested, total reported capital increases to \$120,000. Thus, Goldman's 10 percent interest is computed as \$12,000. *The \$8,000 difference between the amount contributed and this allotted capital balance is viewed as a bonus.* Because Goldman is willing to accept a capital balance that is less than his investment, this bonus is attributed to the original partners (again based on their profit and loss ratio). As a result of the nature of the transaction, no need exists to recognize goodwill or revalue any of the assets or liabilities.

Cash .....	20,000	
Goldman, Capital (10% of total capital) .....		12,000
King, Capital (60% of bonus) .....		4,800
Wilson, Capital (40% of bonus) .....		3,200
To record Goldman's entrance into partnership with \$8,000 extra payment recorded as a bonus to the original partners.		

**Goodwill Credited to Original Partners** The goodwill method views Goldman's payment as evidence that the partnership as a whole possesses an actual value of \$200,000 (\$20,000/10%). Because, even with the new partner's investment, only \$120,000 in net assets is reported, a valuation adjustment of \$80,000 is implied.<sup>11</sup> Over the previous years, unrecorded gains have apparently accrued to the business. This \$80,000 figure might reflect the need to revalue specific accounts such as inventory or equipment, although the entire amount, or some portion of it, may simply be recorded as goodwill.

Goodwill (or specific accounts) .....	80,000	
King, Capital (60% of goodwill) .....		48,000
Wilson, Capital (40%) .....		32,000
To recognize goodwill based on Goldman's purchase price.		
Cash .....	20,000	
Goldman, Capital .....		20,000
To record Goldman's admission into partnership.		

**Comparison of Bonus Method and Goodwill Method** Completely different capital balances as well as asset and liability figures result from these two approaches. In both cases, however, the new partner is credited with the appropriate 10 percent of total partnership capital.

	Bonus Method	Goodwill Method
Assets less liabilities (as reported) .....	\$100,000	\$100,000
Goldman's contribution .....	20,000	20,000
Goodwill .....	-0-	80,000
Total .....	<u>\$120,000</u>	<u>\$200,000</u>
Goldman's capital .....	<u>\$ 12,000</u>	<u>\$ 20,000</u>

Because Goldman contributed an amount more than 10 percent of the partnership's resulting book value, this business is perceived as being worth more than the recorded accounts indicate. Therefore, the bonus in the first instance and the goodwill in the second were both assumed as accruing to the two original partners. Such a presumption is not unusual in an established business, especially if profitable operations have developed over a number of years.

**Hybrid Method of Recording Admission of New Partner** One other approach to Goldman's admission can be devised. Assume that the assets and liabilities of the King and Wilson partnership have a book value of \$100,000 as stated earlier. Also assume that a piece of land held by the business is actually worth \$30,000 more than its currently recorded book value. Thus, the identifiable assets of the partnership are worth \$130,000. Goldman pays \$20,000 for a 10 percent interest.

<sup>11</sup>In this example, because \$20,000 is invested in the business, total capital to be used in the goodwill computation has increased to \$120,000. If, as in the previous illustration, payment had been made directly to the partners, the original capital of \$100,000 is retained in determining goodwill.

In this approach, the identifiable assets (such as land) are revalued but no goodwill is recognized.

Land. ....	30,000	
King, Capital (60% of revaluation) .....		18,000
Wilson, Capital (40%) .....		12,000
To record current fair value of land in preparation for admission of new partner.		

The admission of Goldman and the payment of \$20,000 bring the total capital balance to \$150,000. Because Goldman is acquiring a 10 percent interest, a capital balance of \$15,000 is recorded. The extra \$5,000 payment (\$20,000 – \$15,000) is attributed as a bonus to the original partners. In this way, asset revaluation and a capital bonus are both used to align the accounts.

Cash .....	20,000	
Goldman, Capital (10% of total capital) .....		15,000
King, Capital (60% of bonus) .....		3,000
Wilson, Capital (40% of bonus) .....		2,000
To record entrance of Goldman into partnership and bonus assigned to original partners.		

**Bonus or Goodwill Credited to New Partner** As previously discussed, Goldman also may be contributing some attribute other than tangible assets to this partnership. Therefore, the articles of partnership may be written to credit the new partner, rather than the original partners, with either a bonus or goodwill. Because of an excellent professional reputation, valuable business contacts, or myriad other possible factors, Goldman might be able to negotiate a beginning capital balance in excess of the \$20,000 cash contribution. This same circumstance may also result if the business is desperate for new capital and is willing to offer favorable terms as an enticement to the potential partner.

To illustrate, assume that Goldman receives a 20 percent interest in the partnership (rather than the originally stated 10 percent) in exchange for the \$20,000 cash investment. The specific rationale for the higher ownership percentage need not be identified.

The bonus method sets Goldman's initial capital at \$24,000 (20 percent of the \$120,000 book value). To achieve this balance, a capital bonus of \$4,000 must be credited to Goldman and taken from the present partners:

Cash .....	20,000	
King, Capital (60% of bonus) .....		2,400
Wilson, Capital (40% of bonus) .....		1,600
Goldman, Capital .....		24,000
To record Goldman's entrance into partnership with reduced payment reported as a bonus from original partners.		

If goodwill rather than a bonus is attributed to the *entering partner*, a mathematical problem arises in determining the implicit value of the business as a whole. In the current illustration, Goldman paid \$20,000 for a 20 percent interest. Therefore, the value of the company is calculated as only \$100,000 ( $\$20,000/20\%$ ), a figure that is less than the \$120,000 in net assets reported after the new contribution. Negative goodwill appears to exist. One possibility is that individual partnership assets are overvalued and require reduction. As an alternative, the cash contribution might not be an accurate representation of the new partner's investment. Goldman could be bringing an intangible contribution (goodwill) to the business along with the \$20,000. This additional amount must be determined algebraically:

Goldman's capital = 20% of partnership capital

Therefore:

$$\$20,000 + \text{Goodwill} = 0.20 (\$100,000 + \$20,000 + \text{Goodwill})$$

$$\$20,000 + \text{Goodwill} = \$20,000 + \$4,000 + 0.20 \text{ Goodwill}$$

$$0.80 \text{ Goodwill} = \$4,000$$

$$\text{Goodwill} = \$5,000$$

If the partners determine that Goldman is, indeed, making an intangible contribution (a particular skill, for example, or a loyal clientele), Goldman should be credited with a \$25,000 capital investment: \$20,000 cash and \$5,000 goodwill. When added to the original \$100,000 in net assets reported by the partnership, this contribution raises the total capital for the business to \$125,000. As the articles of partnership specified, Goldman's interest now represents a 20 percent share of the partnership (\$25,000/\$125,000).

Recognizing \$5,000 in goodwill has established the proper relationship between the new partner and the partnership. Therefore, the following journal entry reflects this transaction:

Cash .....	20,000	
Goodwill .....	5,000	
Goldman, Capital .....		25,000
To record Goldman's entrance into partnership with goodwill attributed to this new partner.		

#### LO 14-10

Prepare journal entries to record the withdrawal of a current partner.

### Dissolution—Withdrawal of a Partner

Admission of a new partner is not the only method by which a partnership can undergo a change in composition. Over the life of the business, partners might leave the organization. Death or retirement can occur, or a partner may simply elect to withdraw from the partnership. The articles of partnership also can allow for the expulsion of a partner under certain conditions. Again, any change in membership legally dissolves the partnership, although its operations usually continue uninterrupted under the remaining partners' ownership.

Regardless of the reason for dissolution, some method of establishing an equitable settlement of the withdrawing partner's interest in the business is necessary. Often, the partner (or the partner's estate) may simply sell the interest to an outside party, with approval, or to one or more of the remaining partners. As an alternative, the business can distribute cash or other assets as a means of settling a partner's right of co-ownership. Consequently, many partnerships hold life insurance policies solely to provide adequate cash to liquidate a partner's interest upon death.

Whether death or some other reason caused the withdrawal, a final distribution will not necessarily equal the book value of the partner's capital account. A capital balance is only a recording of historical transactions and rarely represents the true value inherent in a business. Instead, payment is frequently based on the value of the partner's interest as ascertained by either negotiation or appraisal. Because a settlement determination can be derived in many ways, the articles of partnership should contain exact provisions regulating this procedure.

The withdrawal of an individual partner and the resulting distribution of partnership property can, as before, be accounted for by either the bonus (no revaluation) method or the goodwill (revaluation) method. Again, a hybrid option is also available.

As in earlier illustrations, if a bonus is recorded, the amount can be attributed to either of the parties involved: the withdrawing partner or the remaining partners. Conversely, any revaluation of partnership property (as well as the establishment of a goodwill balance) is allocated among all partners to recognize possible unrecorded gains. The hybrid approach restates assets and liabilities to fair value but does not record goodwill. This last alternative reflects the legal change in ownership but avoids the theoretical problems associated with partnership goodwill.



### Accounting for the Withdrawal of a Partner

To demonstrate the various approaches that can be taken to account for a partner's withdrawal, assume that the partnership of Duncan, Smith, and Windsor has existed for a number of years. At the present time, the partners have the following capital balances as well as the indicated profit and loss percentages:

Partner	Capital Balance	Profit and Loss Ratio
Duncan.....	\$ 70,000	50%
Smith.....	20,000	30
Windsor.....	10,000	20
Total capital.....	<u>\$ 100,000</u>	

Windsor decides to withdraw from the partnership, but Duncan and Smith plan to continue operating the business. As per the original partnership agreement, a final settlement distribution for any withdrawing partner is computed based on the following specified provisions:

- An independent expert will appraise the business to determine its estimated fair value.
- Any individual who leaves the partnership will receive cash or other assets equal to that partner's current capital balance after including an appropriate share of any adjustment indicated by the previous valuation. The allocation of unrecorded gains and losses is based on the normal profit and loss ratio.

Following Windsor's decision to withdraw from the partnership, its property is immediately appraised. Total fair value is estimated at \$180,000, a figure \$80,000 in excess of book value. According to this valuation, land held by the partnership is currently worth \$50,000 more than its original cost. In addition, \$30,000 in goodwill is attributed to the partnership based on its value as a going concern. *Therefore, Windsor receives \$26,000 on leaving the partnership: the original \$10,000 capital balance plus a 20 percent share of this \$80,000 increment.* The amount of payment is not in dispute, but the method of recording the withdrawal is.

**Bonus Method Applied** If the partnership used the bonus method to record this transaction, the extra \$16,000 paid to Windsor is simply assigned as a decrease in the remaining partners' capital accounts. Historically, Duncan and Smith have been credited with 50 percent and 30 percent of all profits and losses, respectively. This same relative ratio is used now to allocate the reduction between these two remaining partners on a  $\frac{2}{3}$  and  $\frac{1}{3}$  basis:

Bonus Method	
Windsor, Capital (to remove account balance) .....	10,000
Duncan, Capital ( $\frac{2}{3}$ of excess distribution) .....	10,000
Smith, Capital ( $\frac{1}{3}$ of excess distribution) .....	6,000
Cash .....	26,000
To record Windsor's withdrawal with \$16,000 excess distribution taken from remaining partners.	

**Goodwill Method Applied** This same transaction can also be accounted for by means of the goodwill (or revaluation) approach. The appraisal indicates that land is undervalued on the partnership's records by \$50,000 and that goodwill of \$30,000 has apparently accrued to the business over the years. The first two of the following entries recognize these valuations. The adjustments properly equate Windsor's capital balance with the \$26,000 cash amount to be distributed. Windsor's equity balance is merely removed in the final entry at the time of payment.

<b>Land Revaluation</b>		
Land.....	50,000	
Duncan, Capital (50%) .....		25,000
Smith, Capital (30%) .....		15,000
Windsor, Capital (20%).....		10,000
To recognize land value as a preliminary step to Windsor's withdrawal.		
<b>Goodwill Recognition</b>		
Goodwill .....	30,000	
Duncan, Capital (50%) .....		15,000
Smith, Capital (30%) .....		9,000
Windsor, Capital (20%).....		6,000
To recognize goodwill at the time of ownership change.		
Windsor, Capital (to remove account balance) .....	26,000	
Cash .....		26,000
To distribute cash to Windsor in settlement of partnership interest.		

After the land revaluation, Windsor's recorded capital balance increases to \$20,000. The remaining unrecorded increase in partnership value is then assigned to the intangible asset goodwill. Goodwill represents an asset that captures the intangible increase in partnership value attributable to the past efforts of the individual partners.<sup>12</sup> Upon withdrawal, a partner is entitled to share in any unrecorded increase in partnership value based on his or her profit and loss ratio. The extra \$6,000 paid to Windsor (beyond the \$20,000 adjusted capital balance) thus is consistent with the \$30,000 overall recognition of partnership goodwill:  $(\$6,000 \div 20\%) = \$30,000$ .

*The implied value of a partnership as a whole, however, cannot be determined directly from the amount distributed to a withdrawing partner.* For example, paying Windsor \$26,000 did not indicate that total capital should be \$130,000 ( $\$26,000 \div 20\%$ ). This computation is appropriate only when (1) a new partner is admitted or (2) the percentage of capital is the same as the profit and loss ratio. Here, an outside valuation of the business indicated that it was worth \$80,000 more than book value. As a 20 percent owner, Windsor was entitled to \$16,000 of that amount, raising the partner's capital account from \$10,000 to \$26,000, the amount of the final payment.

**Hybrid Method Applied** As indicated previously, a hybrid approach also can be adopted to record a partner's withdrawal. It also recognizes asset and liability revaluations but ignores goodwill. A bonus must then be recorded to reconcile the partner's adjusted capital balance with the final distribution.

The following journal entry, for example, does not record goodwill. However, the book value of the land is increased by \$50,000 in recognition of present worth. This adjustment increases Windsor's capital balance to \$20,000, a figure that is still less than the \$26,000 distribution. The \$6,000 difference is recorded as a bonus taken from the remaining two partners according to their relative profit and loss ratio.

<b>Hybrid Method</b>		
Land.....	50,000	
Duncan, Capital (50%) .....		25,000
Smith, Capital (30%) .....		15,000
Windsor, Capital (20%).....		10,000
To adjust Land account to fair value as a preliminary step in Windsor's withdrawal.		

<sup>12</sup> The value of many partnerships derives overwhelmingly from intangibles such as professional reputation and expertise. Because increases in intangible partnership value are difficult to quantify on an ongoing basis, they typically go unrecorded until a change in partnership ownership forces a reckoning.

Windsor, Capital (to remove account balance) .....	20,000	
Duncan, Capital (% of bonus) .....	3,750	
Smith, Capital (% of bonus) .....	2,250	
Cash .....		26,000
To record final distribution to Windsor with \$6,000 bonus taken from remaining partners.		

## Summary

1. A partnership is defined as “an association of two or more persons to carry on a business as co-owners for profit.” This form of business organization exists throughout the U.S. economy ranging in size from small, part-time operations to international enterprises. The partnership format is popular for many reasons, including the ease of creation and the avoidance of the double taxation that is inherent in corporate ownership. However, the unlimited liability incurred by each general partner normally restricts the growth potential of most partnerships. Thus, although the number of partnerships in the United States is large, the size of each tends to be small.
2. Over the years, a number of different types of organizations have been developed to take advantage of both the single taxation of partnerships and the limited liability afforded to corporate stockholders. Such legal forms include S corporations, limited partnerships, limited liability partnerships, and limited liability companies.
3. The unique elements of partnership accounting are found primarily in the capital accounts accumulated for each partner. The basis for recording these balances is the articles of partnership, a document that should be established as a prerequisite to the formation of any partnership. One of the principal provisions of this agreement is each partner’s initial investment. Noncash contributions such as inventory or land are entered into the partnership’s accounting records at fair value.
4. In forming a partnership, the partners’ contributions need not be limited to tangible assets. A particular line of expertise possessed by a partner and an established clientele are attributes that can have a significant value to a partnership. Two methods of recording this type of investment are found in practice. The bonus method recognizes only identifiable assets. The capital accounts are then aligned to indicate the balances negotiated by the partners. According to the goodwill approach, all contributions (even those of a nebulous nature such as expertise) are valued and recorded, often as goodwill.
5. Another accounting issue to be resolved in forming a partnership is the allocation of annual net income. In closing out the revenue and expense accounts at the end of each period, some assignment must be made to the individual capital balances. Although an equal division can be used to allocate any profit or loss, partners frequently devise unique plans in an attempt to be equitable. Such factors as time worked, expertise, and invested capital should be considered in creating an allocation procedure.
6. Over time, changes occur in the makeup of a partnership because of death or retirement or because of the admission of new partners. Such changes dissolve the existing partnership, although the business frequently continues uninterrupted through a newly formed partnership. If, for example, a new partner is admitted by the acquisition of a present interest, the capital balances can simply be reclassified to reflect the change in ownership. As an alternative, the purchase price may be viewed as evidence of the underlying value of the organization as a whole. Based on this calculation, asset and liability balances are adjusted to fair value, and any residual goodwill is recognized.
7. Admission into an existing partnership also can be achieved by a direct capital contribution from the new partner. Because of the parties’ negotiations, the amount invested will not always agree with the beginning capital balance attributed to the new partner. The bonus method resolves this conflict by simply reclassifying the various capital accounts to align the balances with specified totals and percentages. No revaluation is carried out under this approach. Conversely, according to the goodwill method, all asset and liability accounts are adjusted first to fair value. The price the new partner paid is used to compute an implied value for the partnership, and any excess over fair value is recorded as goodwill.
8. The composition of a partnership also can undergo changes because of the death or retirement of a partner. Individuals may decide to withdraw. Such changes legally dissolve the partnership, although business operations frequently continue under the remaining partners’ ownership. In compensating the departing partner, the final asset distribution may differ from the ending capital balance. This disparity can, again, be accounted for by means of the bonus method, which adjusts the remaining capital accounts to absorb the bonus. The goodwill approach by which all assets and liabilities are restated to fair value with any goodwill being recognized also can be applied. Finally, a hybrid method revalues the assets and liabilities but ignores goodwill. Under this last approach, any amount paid to the departing partner in excess of the newly adjusted capital balance is accounted for by means of the bonus method.

## Comprehensive Illustration

### Problem

(Estimated Time: 30 to 55 Minutes) Heyman and Mullins begin a partnership on January 1, 2017. Heyman invests \$40,000 cash and inventory costing \$15,000 but with a current appraised value of only \$12,000. Mullins contributes a building with a \$40,000 book value and a \$48,000 fair value. The partnership also accepts responsibility for a \$10,000 note payable owed in connection with this building.

The partners agree to begin operations with equal capital balances. The articles of partnership also provide that at each year-end profits and losses are allocated as follows:

1. For managing the business, Heyman is credited with a bonus of 10 percent of partnership income after subtracting the bonus. No bonus is accrued if the partnership records a loss.
2. Both partners are entitled to interest equal to 10 percent of the average monthly capital balance for the year without regard for the income or drawings of that year.
3. Any remaining profit or loss is divided 60 percent to Heyman and 40 percent to Mullins.
4. Each partner is allowed to withdraw \$800 per month in cash from the business.

On October 1, 2017, Heyman invested an additional \$12,000 cash in the business. For 2017, the partnership reported income of \$33,000.

Lewis, an employee, is allowed to join the partnership on January 1, 2018. The new partner invests \$66,000 directly into the business for a one-third interest in the partnership property. The revised partnership agreement still allows for both the bonus to Heyman and the 10 percent interest, but all remaining profits and losses are now split 40 percent each to Heyman and Lewis with the remaining 20 percent to Mullins. Lewis is also entitled to \$800 per month in drawings.

Mullins chooses to withdraw from the partnership a few years later. After negotiations, all parties agree that Mullins should be paid a \$90,000 settlement. The capital balances on that date were as follows:

Heyman, capital . . . . .	\$88,000
Mullins, capital . . . . .	78,000
Lewis, capital . . . . .	72,000

### Required:

- a. Assuming that this partnership uses the bonus method exclusively, make all necessary journal entries. Entries for the monthly drawings of the partners are not required.
- b. Assuming that this partnership uses the goodwill method exclusively, make all necessary journal entries. Again, entries for the monthly drawings are not required.

### Solution

#### a. Bonus Method 2017

Jan. 1 All contributed property is recorded at fair value. Under the bonus method, total capital is then divided as specified between the partners.

Cash . . . . .	40,000	
Inventory . . . . .	12,000	
Building . . . . .	48,000	
Note Payable . . . . .		10,000
Heyman, Capital (50%) . . . . .		45,000
Mullins, Capital (50%) . . . . .		45,000
To record initial contributions to partnership along with equal capital balances.		

Oct. 1

Cash . . . . .	12,000	
Heyman, Capital . . . . .		12,000
To record additional investment by partner.		

Dec. 31 Both the bonus assigned to Heyman and the interest accrual must be computed as preliminary steps in the income allocation process. Because the bonus is based on income after subtracting the bonus, the amount must be calculated algebraically:

$$\begin{aligned} \text{Bonus} &= 0.10 (\$33,000 - \text{Bonus}) \\ \text{Bonus} &= \$3,300 - 0.10 \text{ Bonus} \\ 1.10 \text{ Bonus} &= \$3,300 \\ \text{Bonus} &= \$3,000 \end{aligned}$$

According to the articles of partnership, the interest allocation is based on a monthly average figure. Mullins's capital balance of \$45,000 did not change during the year; therefore \$4,500 (10 percent) is the appropriate interest accrual for that partner. However, because of the October 1, 2017, contribution, Heyman's interest must be determined as follows:

Beginning balance .....	\$45,000 × 9 months =	\$405,000
New balance .....	\$57,000 × 3 months =	<u>171,000</u>
		576,000
		× 1/2
Monthly average—capital balance .....		48,000
Interest rate .....		<u>× 10%</u>
Interest credited to Heyman.....		<u>\$ 4,800</u>

Following the bonus and interest computations, the \$33,000 income earned by the business is allocated according to the previously specified arrangement:

	Heyman	Mullins	Totals
Net Income .....			\$ 33,000
Bonus to Heyman .....	3,000		<u>(3,000)</u>
Income remaining after bonus.....			\$ 30,000
Interest on monthly average capital balance .....	4,800	4,500	<u>(9,300)</u>
Income remaining after bonus and interest .....			\$ 20,700
Remaining income allocation.....	<u>12,420</u> (60%)	<u>8,280</u> (40%)	<u>(20,700)</u>
Net income allocation total .....	<u>\$ 20,220</u>	<u>\$ 12,780</u>	<u>\$ 0</u>

The partnership's closing entries for the year would be recorded as follows:

Heyman, Capital .....	9,600	
Mullins, Capital.....	9,600	
Heyman, Drawing.....		9,600
Mullins, Drawing .....		9,600
To close out \$800 per month drawing accounts for the year.		
Income Summary .....	33,000	
Heyman, Capital .....		20,220
Mullins, Capital .....		12,780
To close out profit for year to capital accounts as computed above.		

At the end of this initial year of operation, the partners' capital accounts hold these balances:

	Heyman	Mullins	Totals
Beginning balance.....	\$45,000	\$45,000	\$ 90,000
Additional investment.....	12,000	—0—	12,000
Drawing .....	(9,600)	(9,600)	(19,200)
Net income (above) .....	<u>20,220</u>	<u>12,780</u>	<u>33,000</u>
Total capital.....	<u>\$67,620</u>	<u>\$48,180</u>	<u>\$115,800</u>

2018

- Jan. 1 Lewis contributed \$66,000 to the business for a one-third interest in the partnership property. Combined with the \$115,800 balance previously computed, the partnership now has total capital of \$181,800. Because no revaluation is recorded under the bonus approach, a one-third interest in the partnership equals \$60,600 ( $\$181,800 \times \frac{1}{3}$ ). Lewis has invested \$5,400 in excess of this amount, a balance viewed as a bonus accruing to the original partners:

Cash .....	66,000	
Lewis, Capital .....		60,600
Heyman, Capital (60% of bonus) .....		3,240
Mullins, Capital (40% of bonus) .....		2,160
To record Lewis's entrance into partnership with bonus to original partners.		

- Several years later The final event in this illustration is Mullins's withdrawal from the partnership. Although this partner's capital balance reports only \$78,000, the final distribution is set at \$90,000. The extra \$12,000 payment represents a bonus assigned to Mullins, an amount that decreases the capital of the remaining two partners. Because Heyman and Lewis have previously accrued equal 40 percent shares of all profits and losses, the reduction is split evenly between the two.

Mullins, Capital .....	78,000	
Heyman, Capital (½ of bonus payment) .....	6,000	
Lewis, Capital (½ of bonus payment) .....	6,000	
Cash .....		90,000
To record withdrawal of Mullins with a bonus from remaining partners.		

#### b. Goodwill Method

2017

- Jan. 1 The fair value of Heyman's contribution is \$52,000, whereas Mullins is investing only a net \$38,000 (the value of the building less the accompanying debt). Because the capital accounts are initially to be equal, Mullins is presumed to be contributing goodwill of \$14,000.

Cash .....	40,000	
Inventory .....	12,000	
Building .....	48,000	
Goodwill .....	14,000	
Note payable .....		10,000
Heyman, Capital .....		52,000
Mullins, Capital .....		52,000
Creation of partnership with goodwill attributed to Mullins.		

Oct. 1

Cash .....	12,000	
Heyman, Capital .....		12,000
To record additional contribution by partner.		

- Dec. 31 Although Heyman's bonus is still \$3,000 as derived in requirement (a), the interest accruals must be recalculated because the capital balances are different. Mullins's capital for the entire year was \$52,000; thus, interest of \$5,200 (10 percent) is appropriate. However, Heyman's balance changed during the year so that a monthly average must be determined as a basis for computing interest:

Beginning balance .....	$\$52,000 \times 9 \text{ months} =$	\$468,000
New balance .....	$\$64,000 \times 3 \text{ months} =$	192,000
		<u>660,000</u>
		× $\frac{1}{2}$
Monthly average—capital balance .....		55,000
Interest rate .....		× 10%
Interest credited to Heyman .....		<u>\$ 5,500</u>

The \$33,000 partnership income is allocated as follows:

	Heyman	Mullins	Totals
Net Income			\$ 33,000
Bonus to Heyman	\$ 3,000		(3,000)
Income remaining after bonus			\$ 30,000
Interest on monthly average capital balance	5,500	5,200	(10,700)
Income remaining after bonus and interest			\$ 19,300
Remaining income allocation	<u>11,580 (60%)</u>	<u>7,720 (40%)</u>	<u>(19,300)</u>
Net income allocation total	<u>\$ 20,080</u>	<u>\$ 12,920</u>	<u>\$ 0</u>

The closing entries made under the goodwill approach would be as follows:

Heyman, Capital	9,600	
Mullins, Capital	9,600	
Heyman, Drawing		9,600
Mullins, Drawing		9,600
To close out drawing accounts for the year		
Income Summary	33,000	
Heyman, Capital		20,080
Mullins, Capital		12,920
To assign profits per allocation schedule.		

After the closing process, the capital balances are composed of the following items:

	Heyman	Mullins	Totals
Beginning balance	\$ 52,000	\$52,000	\$104,000
Additional investment	12,000	—0—	12,000
Drawing	(9,600)	(9,600)	(19,200)
Net income	<u>20,080</u>	<u>12,920</u>	<u>33,000</u>
Total capital	<u>\$ 74,480</u>	<u>\$55,320</u>	<u>\$129,800</u>

2018

Jan. 1 Lewis's investment of \$66,000 for a one-third interest in the partnership property implies that the business as a whole is worth \$198,000 (\$66,000 divided by  $\frac{1}{3}$ ). After adding Lewis's contribution to the present capital balance of \$129,800, the business reports total net assets of only \$195,800. Thus, a \$2,200 increase in value (\$198,000 – \$195,800) is indicated and will be recognized at this time. Under the assumption that all partnership assets and liabilities are valued appropriately, this entire balance is attributed to goodwill.

Goodwill	2,200	
Heyman, Capital (60%)		1,320
Mullins, Capital (40%)		880
To recognize goodwill based on Lewis's acquisition price.		
Cash	66,000	
Lewis, Capital		66,000
To admit Lewis to the partnership.		

Several years later To conclude this illustration, Mullins's withdrawal must be recorded. This partner is to receive a distribution that is \$12,000 more than the corresponding capital balance of \$78,000. Because Mullins is entitled to a 20 percent share of profits and losses, the additional \$12,000 payment indicates that the partnership as a whole is undervalued by \$60,000 (\$12,000/20%). Only in that circumstance would the extra payment to Mullins be justified. Therefore, once again, goodwill is recognized and is followed by the final distribution.

Goodwill .....	60,000	
Heyman, Capital (40%) .....		24,000
Mullins, Capital (20%) .....		12,000
Lewis, Capital (40%) .....		24,000
Recognition of goodwill based on withdrawal amount paid to Mullins.		
Mullins, Capital .....	90,000	
Cash .....		90,000
To distribute money to partner.		

## Questions

1. What are the advantages of operating a business as a partnership rather than as a corporation? What are the disadvantages?
2. How does partnership accounting differ from corporate accounting?
3. What information do the capital accounts found in partnership accounting convey?
4. Describe the differences between a Subchapter S corporation and a Subchapter C corporation.
5. A company is being created and the owners are trying to decide whether to form a general partnership, a limited liability partnership, or a limited liability company. What are the advantages and disadvantages of each of these legal forms?
6. What is an articles of partnership agreement, and what information should this document contain?
7. What valuation should be recorded for noncash assets transferred to a partnership by one of the partners?
8. If a partner is contributing attributes to a partnership such as an established clientele or a particular expertise, what two methods can be used to record the contribution? Describe each method.
9. What is the purpose of a drawing account in a partnership's financial records?
10. At what point in the accounting process does the allocation of partnership income become significant?
11. What provisions in a partnership agreement can be used to establish an equitable allocation of income among all partners?
12. If no agreement exists in a partnership as to the allocation of income, what method is appropriate?
13. What is a partnership dissolution? Does dissolution automatically necessitate the cessation of business and the liquidation of partnership assets?
14. By what methods can a new partner gain admittance into a partnership?
15. When a partner sells an ownership interest in a partnership, what rights are conveyed to the new owner?
16. A new partner enters a partnership and goodwill is calculated and credited to the original partners. How is the specific amount of goodwill assigned to these partners?
17. Under what circumstance might goodwill be allocated to a new partner entering a partnership?
18. When a partner withdraws from a partnership, why is the final distribution often based on the appraised value of the business rather than on the book value of the capital account balance?

## Problems

LO 14-1

1. Which of the following is *not* a reason for the popularity of partnerships as a legal form for businesses?
  - a. Partnerships may be formed merely by an oral agreement.
  - b. Partnerships can more easily generate significant amounts of capital.
  - c. Partnerships avoid the double taxation of income that is found in corporations.
  - d. In some cases, losses may be used to offset gains for tax purposes.

LO 14-1

2. How does partnership accounting differ from corporate accounting?
  - a. The matching principle is not considered appropriate for partnership accounting.
  - b. Revenues are recognized at a different time by a partnership than is appropriate for a corporation.
  - c. Individual capital accounts replace the contributed capital and retained earnings balances found in corporate accounting.
  - d. Partnerships report all assets at fair value as of the latest balance sheet date.



## LO 14-2

3. Which of the following best describes the articles of partnership agreement?
- The purpose of the partnership and partners' rights and responsibilities are required elements of the articles of partnership.
  - The articles of partnership are a legal covenant and must be expressed in writing to be valid.
  - The articles of partnership are an agreement that limits partners' liability to partnership assets.
  - The articles of partnership are a legal covenant that may be expressed orally or in writing, and forms the central governance for a partnership's operations.

## LO 14-9

4. Pat, Jean Lou, and Diane are partners with capital balances of \$50,000, \$30,000, and \$20,000, respectively. These three partners share profits and losses equally. For an investment of \$50,000 cash (paid to the business), MaryAnn will be admitted as a partner with a one-fourth interest in capital and profits. Based on this information, which of the following best justifies the amount of MaryAnn's investment?
- MaryAnn will receive a bonus from the other partners upon her admission to the partnership.
  - Assets of the partnership were overvalued immediately prior to MaryAnn's investment.
  - The book value of the partnership's net assets was less than the fair value immediately prior to MaryAnn's investment.
  - MaryAnn is apparently bringing goodwill into the partnership, and her capital account will be credited for the appropriate amount.

## LO 14-10

5. A partnership has the following capital balances:

Henry (50% of gains and losses) . . . . .	\$ 135,000
Thomas (30%) . . . . .	85,000
Catherine (20%) . . . . .	80,000

Anne is going to invest \$125,000 into the business to acquire a 40 percent ownership interest. Goodwill is to be recorded. What will be Anne's beginning capital balance?

- \$125,000
- \$170,000
- \$200,000
- \$245,000

## LO 14-8

6. A partnership has the following capital balances:

Comprix (35% of gains and losses) . . . . .	\$150,000
Heflin (40%) . . . . .	300,000
Kaplan (25%) . . . . .	320,000

Mahar is going to pay a total of \$200,000 directly to these three partners to acquire a 25 percent ownership interest from each. Goodwill is to be recorded. What is Heflin's capital balance after the transaction?

- \$225,000
- \$234,000
- \$312,000
- \$360,000

## LO 14-9

7. The capital balance for Maxwell is \$110,000 and for Russell is \$40,000. These two partners share profits and losses 70 percent (Maxwell) and 30 percent (Russell). Evan invests \$50,000 in cash into the partnership for a 30 percent ownership. The bonus method will be used. What is Russell's capital balance after Evan's investment?

- \$35,000
- \$37,000
- \$40,000
- \$43,000

## LO 14-9

8. Bishop has a capital balance of \$120,000 in a local partnership, and Cotton has a \$90,000 balance. These two partners share profits and losses by a ratio of 60 percent to Bishop and 40 percent to Cotton. Lovett invests \$60,000 in cash in the partnership for a 20 percent ownership. The goodwill method will be used. What is Cotton's capital balance after this new investment?

- \$99,600
- \$102,000
- \$112,000
- \$126,000

## LO 14-9

9. The capital balance for Messalina is \$210,000 and for Romulus is \$140,000. These two partners share profits and losses 60 percent (Messalina) and 40 percent (Romulus). Claudius invests \$100,000 in cash in the partnership for a 20 percent ownership. The bonus method will be used. What are the capital balances for Messalina, Romulus, and Claudius after this investment is recorded?
- \$216,000, \$144,000, \$90,000
  - \$218,000, \$142,000, \$88,000
  - \$222,000, \$148,000, \$80,000
  - \$240,000, \$160,000, \$100,000

## LO 14-6

10. A partnership begins its first year with the following capital balances:

Alfred, Capital . . . . .	\$ 50,000
Bernard, Capital . . . . .	60,000
Collins, Capital . . . . .	70,000

The articles of partnership stipulate that profits and losses be assigned in the following manner:

- Each partner is allocated interest equal to 5 percent of the beginning capital balance.
- Bernard is allocated compensation of \$18,000 per year.
- Any remaining profits and losses are allocated on a 3:3:4 basis, respectively.
- Each partner is allowed to withdraw up to \$5,000 cash per year.

Assuming that the net income is \$60,000 and that each partner withdraws the maximum amount allowed, what is the balance in Collins capital account at the end of that year?

- \$70,800
- \$86,700
- \$73,500
- \$81,700

## LO 14-4, 14-5, 14-6

11. A partnership begins its first year of operations with the following capital balances:

Winston, Capital . . . . .	\$110,000
Durham, Capital . . . . .	80,000
Salem, Capital . . . . .	110,000

According to the articles of partnership, all profits will be assigned as follows:

- Winston will be awarded an annual salary of \$20,000 with \$10,000 assigned to Salem.
- The partners will be attributed interest equal to 10 percent of the capital balance as of the first day of the year.
- The remainder will be assigned on a 5:2:3 basis, respectively.
- Each partner is allowed to withdraw up to \$10,000 per year.

The net loss for the first year of operations is \$20,000 and net income for the subsequent year is \$40,000. Each partner withdraws the maximum amount from the business each period. What is the balance in Winston's capital account at the end of the second year?

- \$102,600
- \$104,400
- \$108,600
- \$109,200

## LO 14-10

12. A partnership has the following capital balances:

Allen, Capital . . . . .	\$60,000
Burns, Capital . . . . .	30,000
Costello, Capital . . . . .	90,000

Profits and losses are split as follows: Allen (20 percent), Burns (30 percent), and Costello (50 percent). Costello wants to leave the partnership and is paid \$100,000 from the business based on provisions in the articles of partnership. If the partnership uses the bonus method, what is the balance of Burns's capital account after Costello withdraws?

- \$24,000
- \$27,000
- \$33,000
- \$36,000

**Problems 13 and 14 are independent problems based on the following scenario:**

At year-end, the Circle City partnership has the following capital balances:

Manning, Capital . . . . .	\$130,000
Gonzalez, Capital . . . . .	110,000
Clark, Capital . . . . .	80,000
Freeney, Capital . . . . .	70,000

Profits and losses are split on a 3:3:2:2 basis, respectively. Clark decides to leave the partnership and is paid \$90,000 from the business based on the original contractual agreement.

**LO 14-10**

13. The payment made to Clark beyond his capital account was for Clark's share of previously unrecognized goodwill. After recognizing partnership goodwill, what is Manning's capital balance after Clark withdraws?
- \$133,000
  - \$137,500
  - \$140,000
  - \$145,000

**LO 14-10**

14. If instead the partnership uses the bonus method, what is the balance of Manning's capital account after Clark withdraws?
- \$100,000
  - \$126,250
  - \$130,000
  - \$133,750

**Problems 15 and 16 are independent problems based on the following capital account balances:**

William (40% of gains and losses) . . . . .	\$ 220,000
Jennings (40%) . . . . .	160,000
Bryan (20%) . . . . .	110,000

**LO 14-8**

15. Darrow invests \$270,000 in cash for a 30 percent ownership interest. The money goes to the original partners. Goodwill is to be recorded. How much goodwill should be recognized, and what is Darrow's beginning capital balance?
- \$410,000 and \$270,000
  - \$140,000 and \$270,000
  - \$140,000 and \$189,000
  - \$410,000 and \$189,000

**LO 14-9**

16. Darrow invests \$250,000 in cash for a 30 percent ownership interest. The money goes to the business. No goodwill or other revaluation is to be recorded. After the transaction, what is Jennings's capital balance?
- \$160,000
  - \$168,000
  - \$170,200
  - \$171,200

**LO 14-9**

17. Lear is to become a partner in the WS partnership by paying \$80,000 in cash to the business. At present, the capital balance for Hamlet is \$70,000 and for MacBeth is \$40,000. Hamlet and MacBeth share profits on a 7:3 basis. Lear is acquiring 40 percent of the new partnership.
- If the goodwill method is applied, what will the three capital balances be following the payment by Lear?
  - If the bonus method is applied, what will the three capital balances be following the payment by Lear?

**LO 14-9**

18. The Distance Plus partnership has the following capital balances at the beginning of the current year:

Tiger (50% of profits and losses) . . . . .	\$85,000
Phil (30%) . . . . .	60,000
Ernie (20%) . . . . .	55,000

Each of the following questions should be viewed independently.

- a. If Sergio invests \$100,000 in cash in the business for a 25 percent interest, what journal entry is recorded? Assume that the bonus method is used.
- b. If Sergio invests \$60,000 in cash in the business for a 25 percent interest, what journal entry is recorded? Assume that the bonus method is used.
- c. If Sergio invests \$72,000 in cash in the business for a 25 percent interest, what journal entry is recorded? Assume that the goodwill method is used.

**LO 14-9**

19. A partnership has the following account balances: Cash \$50,000; Other Assets \$600,000; Liabilities \$240,000; Nixon, Capital (50 percent of profits and losses) \$200,000; Hoover, Capital (20 percent) \$120,000; and Polk, Capital (30 percent) \$90,000. Each of the following questions should be viewed as an independent situation:

- a. Grant invests \$80,000 in the partnership for an 18 percent capital interest. Goodwill is to be recognized. What are the capital accounts thereafter?
- b. Grant invests \$100,000 in the partnership to get a 20 percent capital balance. Goodwill is not to be recorded. What are the capital accounts thereafter?

**LO 14-9**

20. The Prince-Robbins partnership has the following capital account balances on January 1, 2018:

Prince, Capital . . . . .	\$70,000
Robbins, Capital . . . . .	60,000

Prince is allocated 80 percent of all profits and losses with the remaining 20 percent assigned to Robbins after interest of 10 percent is given to each partner based on beginning capital balances.

On January 2, 2018, Jeffrey invests \$37,000 cash for a 20 percent interest in the partnership. This transaction is recorded by the goodwill method. After this transaction, 10 percent interest is still to go to each partner. Profits and losses will then be split as follows: Prince (50 percent), Robbins (30 percent), and Jeffrey (20 percent). In 2018, the partnership reports a net income of \$15,000.

- a. Prepare the journal entry to record Jeffrey's entrance into the partnership on January 2, 2018.
- b. Determine the allocation of income at the end of 2018.

**LO 14-6**

21. The partnership agreement of Jones, King, and Lane provides for the annual allocation of the business's profit or loss in the following sequence:

- Jones, the managing partner, receives a bonus equal to 20 percent of the business's profit.
- Each partner receives 15 percent interest on average capital investment.
- Any residual profit or loss is divided equally.

The average capital investments for 2018 were as follows:

Jones . . . . .	\$100,000
King . . . . .	200,000
Lane . . . . .	300,000

How much of the \$90,000 partnership profit for 2018 should be assigned to each partner?

**LO 14-4, 14-5, 14-6**

22. Purkerson, Smith, and Traynor have operated a bookstore for a number of years as a partnership. At the beginning of 2018, capital balances were as follows:

Purkerson . . . . .	\$60,000
Smith . . . . .	40,000
Traynor . . . . .	20,000

Due to a cash shortage, Purkerson invests an additional \$8,000 in the business on April 1, 2018.

Each partner is allowed to withdraw \$1,000 cash each month.

The partners have used the same method of allocating profits and losses since the business's inception:

- Each partner is given the following compensation allowance for work done in the business: Purkerson, \$18,000; Smith, \$25,000; and Traynor, \$8,000.
- Each partner is credited with interest equal to 10 percent of the average monthly capital balance for the year without regard for normal drawings.
- Any remaining profit or loss is allocated 4:2:4 to Purkerson, Smith, and Traynor, respectively. The net income for 2018 is \$23,600. Each partner withdraws the allotted amount each month.

What are the ending capital balances for 2018?

## LO 14-4, 14-5, 14-6

23. On January 1, 2017, the dental partnership of Angela, Diaz, and Krause was formed when the partners contributed \$30,000, \$58,000, and \$60,000, respectively. Over the next three years, the business reported net income and (loss) as follows:

2017 .....	\$70,000
2018 .....	42,000
2019 .....	(25,000)

During this period, each partner withdrew cash of \$15,000 per year. Krause invested an additional \$5,000 in cash on February 9, 2018.

At the time that the partnership was created, the three partners agreed to allocate all profits and losses according to a specified plan written as follows:

- Each partner is entitled to interest computed at the rate of 10 percent per year based on the individual capital balances at the beginning of that year.
- Because of prior work experience, Angela is entitled to an annual salary allowance of \$12,000 per year and Diaz is entitled to an annual salary allowance of \$9,000 per year.
- Any remaining profit will be split as follows: Angela, 20 percent; Diaz, 40 percent; and Krause, 40 percent. If a net loss remains after the initial allocations to the partners, the balance will be allocated: Angela, 30 percent; Diaz, 50 percent; and Krause, 20 percent.

Determine the ending capital balance for each partner as of the end of each of these three years.

## LO 14-10

24. The E.N.D. partnership has the following capital balances as of the end of the current year:

Pineda .....	\$230,000
Adams .....	190,000
Fergie .....	160,000
Gomez .....	140,000
Total capital .....	<u>\$720,000</u>

Answer each of the following *independent* questions:

- Assume that the partners share profits and losses 3:3:2:2, respectively. Fergie retires and is paid \$190,000 based on the terms of the original partnership agreement. If the goodwill method is used, what is the capital balance of the remaining three partners?
  - Assume that the partners share profits and losses 4:3:2:1, respectively. Pineda retires and is paid \$280,000 based on the terms of the original partnership agreement. If the bonus method is used, what is the capital balance of the remaining three partners?
25. The partnership of Matteson, Richton, and O'Toole has existed for a number of years. At the present time the partners have the following capital balances and profit and loss sharing percentages:

## LO 14-10

Partner	Capital Balance	Profit and Loss Percentage
Matteson	\$ 90,000	30%
Richton	150,000	50
O'Toole	100,000	20

O'Toole elects to withdraw from the partnership, leaving Matteson and Richton to operate the business. Following the original partnership agreement, when a partner withdraws, the partnership and all of its individual assets are to be reassessed to current fair values by an independent appraiser. The withdrawing partner will receive cash or other assets equal to that partner's current capital balance after including an appropriate share of any adjustment indicated by the appraisal. Gains and losses indicated by the appraisal are allocated using the regular profit and loss percentages.

An independent appraiser is hired and estimates that the partnership as a whole is worth \$600,000. Regarding the individual assets, the appraiser finds that a building with a book value of \$180,000 has a fair value of \$220,000. The book values for all other identifiable assets and liabilities are the same as their appraised fair values.

Accordingly, the partnership agrees to pay O'Toole \$120,000 upon withdrawal. Matteson and Richton, however, do not wish to record any goodwill in connection with the change in ownership. Prepare the journal entry to record O'Toole's withdrawal from the partnership.

## LO 14-2, 14-4, 14-6, 14-9

26. In the early part of 2018, the partners of Hugh, Jacobs, and Thomas sought assistance from a local accountant. They had begun a new business in 2017 but had never used an accountant's services.

Hugh and Jacobs began the partnership by contributing \$150,000 and \$100,000 in cash, respectively. Hugh was to work occasionally at the business, and Jacobs was to be employed full-time. They decided that year-end profits and losses should be assigned as follows:

- Each partner was to be allocated 10 percent interest computed on the beginning capital balances for the period.
- A compensation allowance of \$5,000 was to go to Hugh with a \$25,000 amount assigned to Jacobs.
- Any remaining income would be split on a 4:6 basis to Hugh and Jacobs, respectively.

In 2017, revenues totaled \$175,000, and expenses were \$146,000 (not including the partners' compensation allowance). Hugh withdrew cash of \$9,000 during the year, and Jacobs took out \$14,000. In addition, the business paid \$7,500 for repairs made to Hugh's home and charged it to repair expense.

On January 1, 2018, the partnership sold a 15 percent interest to Thomas for \$64,000 cash. This money was contributed to the business with the bonus method used for accounting purposes.

Answer the following questions:

- a. Why was the original profit and loss allocation, as just outlined, designed by the partners?
- b. Why did the drawings for 2017 not agree with the compensation allowances provided for in the partnership agreement?
- c. What journal entries should the partnership have recorded on December 31, 2017?
- d. What journal entry should the partnership have recorded on January 1, 2018?

## LO 14-3, 14-9, 14-10

27. Following is the current balance sheet for a local partnership of doctors:

Cash and current assets .....	\$ 30,000	Liabilities .....	\$ 40,000
Land .....	180,000	A, capital .....	20,000
Building and equipment (net) .....	<u>100,000</u>	B, capital .....	40,000
Totals .....	<u>\$310,000</u>	C, capital .....	90,000
		D, capital .....	<u>120,000</u>
		Totals .....	<u>\$310,000</u>

The following questions represent *independent* situations:

- a. E is going to invest enough money in this partnership to receive a 25 percent interest. No goodwill or bonus is to be recorded. How much should E invest?
  - b. E contributes \$36,000 in cash to the business to receive a 10 percent interest in the partnership. Goodwill is to be recorded. Profits and losses have previously been split according to the following percentages: A, 30 percent; B, 10 percent; C, 40 percent; and D, 20 percent. After E makes this investment, what are the individual capital balances?
  - c. E contributes \$42,000 in cash to the business to receive a 20 percent interest in the partnership. Goodwill is to be recorded. The four original partners share all profits and losses equally. After E makes this investment, what are the individual capital balances?
  - d. E contributes \$55,000 in cash to the business to receive a 20 percent interest in the partnership. No goodwill or other asset revaluation is to be recorded. Profits and losses have previously been split according to the following percentages: A, 10 percent; B, 30 percent; C, 20 percent; and D, 40 percent. After E makes this investment, what are the individual capital balances?
  - e. C retires from the partnership and, as per the original partnership agreement, is to receive cash equal to 125 percent of her final capital balance. No goodwill or other asset revaluation is to be recognized. All partners share profits and losses equally. After the withdrawal, what are the individual capital balances of the remaining partners?
28. Boswell and Johnson form a partnership on May 1, 2016. Boswell contributes cash of \$50,000; Johnson conveys title to the following properties to the partnership:

## LO 14-5, 14-6, 14-9

	Book Value	Fair Value
Land .....	\$15,000	\$28,000
Building and equipment .....	35,000	36,000

The partners agree to start their partnership with equal capital balances. No goodwill is to be recognized.

According to the articles of partnership written by the partners, profits and losses are allocated based on the following formula:

- Boswell receives a compensation allowance of \$1,000 per month.
- All remaining profits and losses are split 60:40 to Johnson and Boswell, respectively.
- Each partner can make annual cash drawings of \$5,000 beginning in 2017.

Net income of \$11,000 is earned by the business during 2016.

Walpole is invited to join the partnership on January 1, 2017. Because of her business reputation and financial expertise, she is given a 40 percent interest for \$54,000 cash. The bonus approach is used to record this investment, made directly to the business. The articles of partnership are amended to give Walpole a \$2,000 compensation allowance per month and an annual cash drawing of \$10,000. Remaining profits are now allocated:

Johnson .....	48%
Boswell .....	12
Walpole .....	40

All drawings are taken by the partners during 2017. At year-end, the partnership reports an earned net income of \$28,000.

On January 1, 2018, Pope (previously a partnership employee) is admitted into the partnership. Each partner transfers 10 percent to Pope, who makes the following payments directly to the partners:

Johnson .....	\$ 5,672
Boswell .....	7,880
Walpole .....	8,688

Once again, the articles of partnership must be amended to allow for the entrance of the new partner. This change entitles Pope to a compensation allowance of \$800 per month and an annual drawing of \$4,000. Profits and losses are now assigned as follows:

Johnson .....	40.5%
Boswell .....	13.5
Walpole .....	36.0
Pope .....	10.0

For the year of 2018, the partnership earned a profit of \$46,000, and each partner withdrew the allowed amount of cash.

Determine the capital balances for the individual partners as of the end of each year: 2016 through 2018.

**LO 14-4, 14-5, 14-6, 14-9**

29. Gray, Stone, and Lawson open an accounting practice on January 1, 2016, in San Diego, California, to be operated as a partnership. Gray and Stone will serve as the senior partners because of their years of experience. To establish the business, Gray, Stone, and Lawson contribute cash and other properties valued at \$210,000, \$180,000, and \$90,000, respectively. An articles of partnership agreement is drawn up. It has the following stipulations:
- Personal drawings are allowed annually up to an amount equal to 10 percent of the beginning capital balance for the year.
  - Profits and losses are allocated according to the following plan:
    1. A salary allowance is credited to each partner in an amount equal to \$8 per billable hour worked by that individual during the year.
    2. Interest is credited to the partners' capital accounts at the rate of 12 percent of the average monthly balance for the year (computed without regard for current income or drawings).
    3. An annual bonus is to be credited to Gray and Stone. Each bonus is to be 10 percent of net income after subtracting the bonus, the salary allowance, and the interest. Also included in the agreement is the provision that there will be no bonus if there is a net loss or if salary and interest result in a negative remainder of net income to be distributed.
    4. Any remaining partnership profit or loss is to be divided evenly among all partners.

Because of financial shortfalls encountered in getting the business started, Gray invests an additional \$9,100 on May 1, 2016. On January 1, 2017, the partners allow Monet to buy into the partnership. Monet contributes cash directly to the business in an amount equal to a 25 percent interest in the book value of the partnership property subsequent to this contribution. The partnership agreement as to splitting profits and losses is not altered upon Monet's entrance into the firm; the general provisions continue to be applicable.

The billable hours for the partners during the first three years of operation follow:

	2016	2017	2018
Gray . . . . .	1,710	1,800	1,880
Stone . . . . .	1,440	1,500	1,620
Lawson . . . . .	1,300	1,380	1,310
Monet . . . . .	–0–	1,190	1,580

The partnership reports net income for 2016 through 2018 as follows:

2016 . . . . .	\$ 65,000
2017 . . . . .	(20,400)
2018 . . . . .	152,800

Each partner withdraws the maximum allowable amount each year.

- Determine the allocation of income for each of these three years (to the nearest dollar).
- Prepare in appropriate form a statement of partners' capital for the year ending December 31, 2018.

LO 14-8, 14-9, 14-10

30. A partnership of attorneys in the St. Louis, Missouri, area has the following balance sheet accounts as of January 1, 2018:

Assets . . . . .	\$320,000	Liabilities . . . . .	\$120,000
		Athos, capital . . . . .	80,000
		Porthos, capital . . . . .	70,000
		Aramis, capital . . . . .	50,000

According to the articles of partnership, Athos is to receive an allocation of 50 percent of all partnership profits and losses while Porthos receives 30 percent and Aramis, 20 percent. The book value of each asset and liability should be considered an accurate representation of fair value.

For each of the following *independent* situations, prepare the journal entry or entries to be recorded by the partnership. (Round to nearest dollar.)

- Porthos, with permission of the other partners, decides to sell half of his partnership interest to D'Artagnan for \$50,000 in cash. No asset revaluation or goodwill is to be recorded by the partnership.
- All three of the present partners agree to sell 10 percent of each partnership interest to D'Artagnan for a total cash payment of \$25,000. Each partner receives a negotiated portion of this amount. Goodwill is recorded as a result of the transaction.
- D'Artagnan is allowed to become a partner with a 10 percent ownership interest by contributing \$30,000 in cash directly into the business. The bonus method is used to record this admission.
- Use the same facts as in requirement (c) except that the entrance into the partnership is recorded by the goodwill method.
- D'Artagnan is allowed to become a partner with a 10 percent ownership interest by contributing \$12,222 in cash directly to the business. The goodwill method is used to record this transaction.
- Aramis decides to retire and leave the partnership. An independent appraisal of the business and its assets indicates a current fair value of \$280,000. Goodwill is to be recorded. Aramis will then be given the exact amount of cash that will close out his capital account.

LO 14-2, 14-3, 14-5, 14-6,

LO 14-8, 14-10

31. Steve Reese is a well-known interior designer in Fort Worth, Texas. He wants to start his own business and convinces Rob O'Donnell, a local merchant, to contribute the capital to form a partnership. On January 1, 2016, O'Donnell invests a building worth \$52,000 and equipment valued at \$16,000 as well as \$12,000 in cash. Although Reese makes no tangible contribution to the partnership, he will operate the business and be an equal partner in the beginning capital balances.



To entice O'Donnell to join this partnership, Reese draws up the following profit and loss agreement:

- O'Donnell will be credited annually with interest equal to 20 percent of the beginning capital balance for the year.
- O'Donnell will also have added to his capital account 15 percent of partnership income each year (without regard for the preceding interest figure) or \$4,000, whichever is larger. All remaining income is credited to Reese.
- Neither partner is allowed to withdraw funds from the partnership during 2016. Thereafter, each can draw \$5,000 annually or 20 percent of the beginning capital balance for the year, whichever is larger.

The partnership reported a net loss of \$10,000 during the first year of its operation. On January 1, 2017, Terri Dunn becomes a third partner in this business by contributing \$15,000 cash to the partnership. Dunn receives a 20 percent share of the business's capital. The profit and loss agreement is altered as follows:

- O'Donnell is still entitled to (1) interest on his beginning capital balance as well as (2) the share of partnership income just specified.
- Any remaining profit or loss will be split on a 6:4 basis between Reese and Dunn, respectively.

Partnership income for 2017 is reported as \$44,000. Each partner withdraws the full amount that is allowed.

On January 1, 2018, Dunn becomes ill and sells her interest in the partnership (with the consent of the other two partners) to Judy Postner. Postner pays \$46,000 directly to Dunn. Net income for 2018 is \$61,000 with the partners again taking their full drawing allowance.

On January 1, 2019, Postner withdraws from the business for personal reasons. The articles of partnership state that any partner may leave the partnership at any time and is entitled to receive cash in an amount equal to the recorded capital balance at that time plus 10 percent.

- Prepare journal entries to record the preceding transactions on the assumption that the bonus (or no revaluation) method is used. Drawings need not be recorded, although the balances should be included in the closing entries.
- Prepare journal entries to record the previous transactions on the assumption that the goodwill (or revaluation) method is used. Drawings need not be recorded, although the balances should be included in the closing entries.

*(Round all amounts to the nearest dollar.)*

## Develop Your Skills

### RESEARCH CASE



Go to the Buckeye Partners, L.P. website where forms filed with the SEC are available through the Investor Center. Find Buckeye's recent annual financial statements in their 10-K report for the partnership.

#### Required

Review Buckeye's financial statements as well as the accompanying notes. List and briefly discuss information included for this partnership that would typically not appear in financial statements produced for a corporation.

### ANALYSIS CASE



Erin Carson, Megyn Delaney, and Caitlin Erikson form a partnership as a first step in creating a business. Carson invests most of the capital but does not plan to be actively involved in the day-to-day operations. Delaney has had some experience and is expected to do a majority of the daily work. Erikson has been in this line of business for some time and has many connections. Therefore, she will devote a majority of her time to getting new clients.

**Required**

Write a memo to these three partners suggesting at least two different ways in which the profits of the partnership can be allocated each year in order to be fair to all parties.

**COMMUNICATION CASE 1**

Kelly Fernandez and Michael Webster have decided to create a business. They have financing available and have a well-developed business plan. However, they have not yet decided which type of legal business structure would be best for them.

**Required**

Write a report for these two individuals outlining the types of situations in which the corporate form of legal structure would be the best choice.

**COMMUNICATION CASE 2**

Use the information in Communication Case 1.

**Required**

Write a report for these two individuals outlining the types of situations in which the partnership form of legal structure would be the best choice.

**EXCEL CASE**

The Ace and Deuce partnership has been created to operate a law firm. The partners are attempting to devise a fair system to allocate profits and losses. Ace plans to work more billable hours each year than Deuce. However, Deuce has more experience and can charge a higher hourly rate. Ace expects to invest more money in the business than Deuce.

**Required**

Build a spreadsheet that can be used to allocate profits and losses to these two partners each year. The spreadsheet should be constructed so that the following variables can be entered:

- Net income for the year.
- Number of billable hours for each partner.
- Hourly rate for each partner.
- Capital investment by each partner.
- Interest rate on capital investment.
- Profit and loss ratio.

Use this spreadsheet to determine the allocation if partnership net income for the current year is \$200,000, the number of billable hours is 2,000 for Ace and 1,500 for Deuce, the hourly rate for Ace is \$20 and for Deuce is \$30, and investment by Ace is \$80,000 and by Deuce is \$50,000. Interest on capital will be accrued each year at 10 percent of the beginning balance. Any remaining income amount will be split 50–50.

Use the spreadsheet a second time but make these changes: Deuce reports 1,700 billable hours, Ace invests \$100,000, and interest will be recognized at a 12 percent annual rate. How do these three changes impact the allocation of the \$200,000?



# Partnerships: Termination and Liquidation

**P**artnerships can be rather frail organizations. Termination of business activities followed by the liquidation of partnership property can take place for a variety of reasons, both legal and personal.

In any firm, unless there is continuous open and candid communication among equity partners, and acceptance and buy-in for the business plan chosen by the firm, sooner or later there will be a dissolution of the firm.

The form of the dissolution is irrelevant, whether by withdrawal of individual partners or wholesale departure and formal liquidation. The end result will be the same: The original dream of harmonious and collegial growth of the firm will come to an end.<sup>1</sup>

Although a business organized as a partnership can exist indefinitely through periodic changes within the ownership, the actual cessation of operations is not an uncommon occurrence. “Sooner or later, all partnerships end, whether a partner dies, moves to Hawaii, or gets into a different line of business.”<sup>2</sup> The partners simply might become incompatible and choose to cease operations. The same decision could be made if profits fail to reach projected levels.<sup>3</sup>

The liquidation of a partnership generally involves three important steps:

1. Noncash partnership assets are sold for cash, and gains and losses on the sales are allocated to the capital accounts of individual partners on the basis of their profit and loss ratios.
2. Partnership liabilities and expenses incurred during the liquidation are paid from the partnership’s available cash. Liquidation expenses are allocated to partners’ capital accounts on the basis of profit and loss ratios.
3. Any partnership cash remaining after paying liabilities and liquidation expenses is distributed to the individual partners on the basis of their respective capital balances.

The accountant can summarize and keep track of these steps in a *statement of partnership liquidation*.

<sup>1</sup>Edward Poll, “Commentary: Coach’s Corner: Reuniting a Firm Divided,” *Massachusetts Lawyers Weekly*, pNA. Retrieved July 11, 2007, from *InfoTrac OneFile* via Thomson Gale.

<sup>2</sup>Camilla Cornell, “Breaking Up (with a Business Partner) Is Hard to Do,” *Profit*, November 2004, p. 69.

<sup>3</sup>Sue Shellenbarger, “Cutting Losses When Partners Face a Breakup,” *The Wall Street Journal*, May 21, 1991, p. B1.

## Learning Objectives

**After studying this chapter, you should be able to:**

- LO 15-1** Determine amounts to be paid to partners in a liquidation.
- LO 15-2** Prepare journal entries to record the transactions incurred in the liquidation of a partnership.
- LO 15-3** Determine the distribution of available cash when one or more partners has a deficit capital balance or becomes personally insolvent.
- LO 15-4** Prepare a proposed schedule of liquidation based on safe capital balances to determine an equitable preliminary distribution of available partnership assets.
- LO 15-5** Develop a predistribution plan to guide the distribution of assets in a partnership liquidation.

The liquidation of a partnership becomes more complicated when:

- One or more partners have a negative (deficit) capital balance. A deficit (debit) capital balance can exist either at the beginning of the liquidation process or can arise during the liquidation as partners' capital balances absorb losses from noncash asset sales and liquidation expenses. In some cases, a partner with a deficit capital balance will have sufficient personal assets to be able to make a contribution to the partnership to eliminate the deficit. In other cases, a partner will be personally insolvent and the other partners will have to absorb the deficit through reductions in their capital accounts.
- The liquidation takes place over an extended period of time. In this case, the partners are likely to request that cash be distributed to them as it becomes available through the liquidation of partnership assets. The accountant can facilitate the distribution of cash in installments by calculating the *safe payments* that can be made without running the risk that an individual partner will incur a deficit capital balance. The accountant might choose to prepare a cash *predistribution plan* in advance of any sales of noncash assets to guide the distribution of installment payments during the course of the partnership liquidation.

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## Termination and Liquidation—Protecting the Interests of All Parties

As the chapter on bankruptcy discussed, accounting for the termination and liquidation of a business can prove to be a delicate task.

Beyond the goal of merely reporting transactions, the accountant must work to ensure the equitable treatment of all parties involved in the liquidation. The accounting records are the basis for allocating available assets to creditors and to the individual partners. If assets are limited, the accountant also might have to make recommendations as to the appropriate method for distributing any remaining funds. Protecting the interests of partnership creditors is an especially significant duty because the Uniform Partnership Act specifies that they have first priority to the assets held by the business at dissolution. The accountant's desire for an equitable settlement is enhanced, no doubt, in that any party to a liquidation who is not treated fairly can seek legal recovery from the responsible party.

Not only the creditors but also the partners themselves have a great interest in the financial data produced during the period of liquidation. They must be concerned with the possibility of incurring substantial monetary losses. The potential for loss is especially significant because of the unlimited liability to which the partners are exposed.

As long as a partnership can meet all of its obligations, the risk of partners is normally no more than that of corporate stockholders; the most they can lose is their capital investment. However, should the partnership become insolvent, each partner faces the possibility of having to satisfy *all* remaining partnership obligations personally. Although any partner suffering more than a proportionate share of these losses can seek legal retribution from the other partners, this process is not always an effective remedy. The other partners may themselves be personally insolvent, or anticipated legal costs might discourage the damaged party from seeking recovery. Therefore, each partner usually has a keen interest in monitoring the progress of a liquidation as it transpires.

### LO 15-1

Determine amounts to be paid to partners in a liquidation.

### Termination and Liquidation Procedures Illustrated

The procedures involved in terminating and liquidating a partnership are basically mechanical. Partnership assets are converted into cash that is then used to pay business obligations as well as liquidation expenses. *Any remaining assets are distributed to the individual partners based on their final capital balances.* Once assets have been distributed, the partnership's books are permanently closed. If each partner has a capital balance large enough to absorb all

liquidation losses, the accountant should experience little difficulty in recording this series of transactions.

To illustrate the typical process, assume that Morgan and Houseman have been operating an art gallery as a partnership for a number of years. Morgan and Houseman allocate all profits and losses on a 6:4 basis, respectively. On May 1, 2017, the partners decide to terminate business activities, liquidate all noncash assets, and dissolve their partnership. Although they give no specific explanation for this action, any number of reasons could exist. The partners, for example, could have come to a disagreement so that they no longer believe they can work together. Another possibility is that business profits have become inadequate to warrant the continuing investment of their time and capital.

Following is a balance sheet for the partnership of Morgan and Houseman as of the termination date. The partnership has \$75,000 of noncash assets to be liquidated. The revenue, expense, and drawing accounts have been closed as a preliminary step in terminating the business. A separate reporting of the gains and losses that occur during the final winding-down process will subsequently be made.

<b>MORGAN AND HOUSEMAN</b>			
<b>Balance Sheet</b>			
<b>May 1, 2017</b>			
<b>Assets</b>		<b>Liabilities and Capital</b>	
Cash .....	\$ 45,000	Liabilities .....	\$ 32,000
Accounts receivable .....	12,000	Morgan, capital .....	50,000
Inventory .....	22,000	Houseman, capital .....	38,000
Land, building, and equipment (net) .....	41,000		
Total assets .....	<u>\$120,000</u>	Total liabilities and capital .....	<u>\$120,000</u>

We assume that the liquidation of Morgan and Houseman proceeds in an orderly fashion through the following events:

### 2017

- June 1      The inventory is sold at auction for \$15,000.
- July 15     Of the total accounts receivable, the partnership collected \$9,000 and wrote off the remainder as bad debts.
- Aug. 20    The fixed assets are sold for a total of \$29,000.
- Aug. 25    All partnership liabilities are paid.
- Sept. 10   A total of \$3,000 in liquidation expenses is paid to cover costs such as accounting and legal fees as well as the commissions incurred in disposing of partnership property.
- Oct. 15    All remaining cash is distributed to the owners based on their final capital account balances.

The partnership of Morgan and Houseman incurred a number of losses in liquidating its property. Losses often are expected because the need for immediate sale usually holds a high priority in a liquidation. Furthermore, a portion of the assets used by any business, such as its equipment and buildings, could have value that is strictly limited to a particular type of operation. If the assets are not easily adaptable, disposal at any reasonable price often proves to be a problem.

To record the liquidation of Morgan and Houseman, the following journal entries would be made. Rather than report specific income and expense balances, gains and losses are traditionally recorded directly to the partners' capital accounts. Because operations have ceased, determination of a separate net income figure for this period would provide little informational value. *Instead, a primary concern of the parties involved in any liquidation is keeping track of the continuing changes in each partner's capital balance.*

#### LO 15-2

Prepare journal entries to record the transactions incurred in the liquidation of a partnership.

6/1/17	Cash .....	15,000	
	Morgan, Capital (60% of loss) .....	4,200	
	Houseman, Capital (40% of loss) .....	2,800	
	Inventory .....		22,000
	To record sale of partnership inventory at a \$7,000 loss.		
7/15/17	Cash .....	9,000	
	Morgan, Capital .....	1,800	
	Houseman, Capital .....	1,200	
	Accounts Receivable .....		12,000
	To record collection of accounts receivable with write-off of remaining \$3,000 in accounts as bad debts.		
8/20/17	Cash .....	29,000	
	Morgan, Capital .....	7,200	
	Houseman, Capital .....	4,800	
	Land, Building, and Equipment (net) .....		41,000
	To record sale of fixed assets and allocation of \$12,000 loss.		
8/25/17	Liabilities .....	32,000	
	Cash .....		32,000
	To record payment made to settle the liabilities of the partnership.		
9/10/17	Morgan, Capital .....	1,800	
	Houseman, Capital .....	1,200	
	Cash .....		3,000
	To record payment of liquidation expenses with the amounts recorded as direct reductions to the partners' capital accounts.		

After liquidating the partnership assets and paying off all obligations, the \$63,000 cash that remains can be distributed to Morgan and Houseman on the basis of their capital balances. The following schedule determines the partners' ending capital account balances and, thus, the appropriate distribution of the final cash balance.

### *Cash and Capital Account Balances*

	Cash	Morgan, Capital	Houseman, Capital
Beginning balances* .....	\$ 45,000	\$50,000	\$38,000
Sold inventory .....	15,000	(4,200)	(2,800)
Collected accounts receivable .....	9,000	(1,800)	(1,200)
Sold fixed assets .....	29,000	(7,200)	(4,800)
Paid liabilities .....	(32,000)	—0—	—0—
Paid liquidation expenses .....	(3,000)	(1,800)	(1,200)
Final totals .....	<u>\$ 63,000</u>	<u>\$35,000</u>	<u>\$28,000</u>

\*Because of the presence of other assets as well as liabilities, the beginning balances in Cash and in the capital accounts are not equal.

After the ending capital balances have been calculated, the remaining cash can be distributed to the partners to close out the financial records of the partnership:

10/15/17	Morgan, Capital .....	35,000	
	Houseman, Capital .....	28,000	
	Cash .....		63,000
	To record distribution of cash to partners in accordance with final capital balances.		

## Statement of Liquidation

Liquidation can take a considerable length of time to complete. Because the various parties involved seek continually updated financial information, the accountant should produce frequent reports summarizing transactions as they occur. Consequently, a statement (often referred to as the *statement of liquidation*) can be prepared at periodic intervals to disclose

- Transactions to date.
- Assets still held by the partnership.
- Liabilities remaining to be paid.
- Current cash and capital balances.

Although the preceding Morgan and Houseman example has been condensed into a few events occurring during a relatively brief period of time, partnership liquidations usually require numerous transactions that transpire over months and, perhaps, even years. By receiving frequent statements of liquidation, both the creditors and the partners are able to stay apprised of the results of this lengthy process.

See Exhibit 15.1 for the final statement of liquidation for the partnership of Morgan and Houseman. The accountant should have distributed previous statements at each important juncture of this liquidation to meet the informational needs of the parties involved. The example here demonstrates the stair-step approach incorporated in preparing a statement of liquidation. The effects of each transaction (or group of transactions) are outlined in a horizontal fashion so that current account balances and all prior transactions are evident. This structuring also facilitates the preparation of future statements: A new layer summarizing recent events can simply be added at the bottom each time a new statement is to be produced.

### LO 15-3

Determine the distribution of available cash when one or more partners has a deficit capital balance or becomes personally insolvent.

## Deficit Capital Balance—Contribution by Partner

In Exhibit 15.1, the liquidation process ended with both partners having positive capital balances. Thus, each partner was able to share in the remaining \$63,000 cash. Unfortunately, such an outcome is not always the case. At the end of a liquidation, one or more partners could have a negative capital account, or the partnership could be unable to generate even enough cash to satisfy all of its creditors' claims. Such deficits are most likely to occur when

### EXHIBIT 15.1

<b>MORGAN AND HOUSEMAN</b>					
<b>Statement of Partnership Liquidation</b>					
<b>Final Balances</b>					
	<b>Cash</b>	<b>Noncash Assets</b>	<b>Liabilities</b>	<b>Morgan, Capital (60%)</b>	<b>Houseman, Capital (40%)</b>
Beginning balances, 5/1/17 .....	\$ 45,000	\$ 75,000	\$ 32,000	\$ 50,000	\$ 38,000
Sold inventory, 6/1/17 .....	15,000	(22,000)	—0—	(4,200)	(2,800)
Updated balances .....	60,000	53,000	32,000	45,800	35,200
Collected receivables, 7/15/17 .....	9,000	(12,000)	—0—	(1,800)	(1,200)
Updated balances .....	69,000	41,000	32,000	44,000	34,000
Sold fixed assets, 8/20/17 .....	29,000	(41,000)	—0—	(7,200)	(4,800)
Updated balances .....	98,000	—0—	32,000	36,800	29,200
Paid liabilities, 8/25/17 .....	(32,000)	—	(32,000)	—0—	—0—
Updated balances .....	66,000	—0—	—0—	36,800	29,200
Paid liquidation expenses, 9/10/17 .....	(3,000)	—	—	(1,800)	(1,200)
Updated balances .....	63,000	—0—	—0—	35,000	28,000
Distributed remaining cash, 10/15/17 .....	(63,000)	—	—	(35,000)	(28,000)
Closing balances .....	<u>\$ —0—</u>	<u>\$ —0—</u>	<u>\$ —0—</u>	<u>\$ —0—</u>	<u>\$ —0—</u>



the partnership is already insolvent at the start of the liquidation or when the disposal of non-cash assets results in material losses. Under these circumstances, the accounting procedures to be applied depend on legal regulations as well as the individual actions of the partners.

To illustrate, assume that the partnership of Holland, Dozier, and Ross was terminated at the beginning of the current year. Business activities ceased and all noncash assets were subsequently converted into cash. During the liquidation process, the partnership incurred a number of large losses that have been allocated to the partners' capital accounts on a 4:4:2 basis, respectively. A portion of the resulting cash is then used to pay all partnership liabilities and liquidation expenses.

Following these transactions, assume that only the following four account balances remain open within the partnership's records:

Cash .....	<u>\$20,000</u>	Holland, Capital .....	\$ (6,000)
		Dozier, Capital .....	15,000
		Ross, Capital .....	<u>11,000</u>
		Total .....	<u>\$20,000</u>

Holland has a negative capital balance of \$6,000; the assigned share of partnership losses has exceeded this partner's capital balance at the date the partnership terminated. In such cases, the Uniform Partnership Act (Section 807[b]) stipulates that the partner "shall contribute to the partnership an amount equal to any excess charges over the credits in the partner's account . . ." Therefore, Holland legally is required to convey an additional \$6,000 to the partnership to eliminate the deficit balance. This contribution raises the cash balance to \$26,000, which allows a complete distribution to be made to Dozier (\$15,000) and Ross (\$11,000) based on their capital account balances. The journal entry for this final payment closes out the partnership records:

Cash .....	6,000	
Holland, Capital .....		6,000
To record contribution made by Holland to extinguish negative capital balance.		
Dozier, Capital .....	15,000	
Ross, Capital .....	11,000	
Cash .....		26,000
To record distribution of remaining cash to partners in accordance with their ending capital balances.		

### Deficit Capital Balance—Loss to Remaining Partners

Unfortunately, an alternative scenario could easily arise for the previous partnership liquidation. Although Holland's capital account shows a \$6,000 deficit balance, this partner could resist any attempt to force an additional investment, especially because the business is in the process of being terminated. The possibility of such recalcitrance is enhanced if the individual is having personal financial difficulties. Thus, the remaining partners may eventually have to resort to formal litigation to gain Holland's contribution. Until that legal action is concluded, the partnership records remain open although inactive.

### *Distribution of Safe Payments*

While awaiting the final resolution of this matter, no compelling reason exists for the partnership to continue holding \$20,000 in cash. These funds will eventually be paid to Dozier and Ross regardless of any action that Holland takes. An immediate transfer should be made to these two partners to allow them the use of their money. However, because Dozier has a \$15,000 capital account balance and Ross currently reports \$11,000, a complete distribution is not possible. A method must be devised, therefore, to allow for a fair allocation of the available \$20,000.

To ensure the equitable treatment of all parties, this initial distribution is based on the assumption that the \$6,000 capital deficit will prove to be a total loss to the partnership. Holland may, for example, be completely insolvent so that no additional payment will ever be forthcoming. By making this conservative presumption, the accountant is able to calculate the lowest possible amounts (or *safe balances*) that Dozier and Ross must retain in their capital accounts to be able to absorb all future losses. Based upon these safe capital balances, the accountant can determine the amount of *safe payments* that can be made to Dozier and Ross without running the risk that future losses will cause either of these partners to have a deficit capital balance.

Should Holland's \$6,000 deficit (or any portion of it) prove uncollectible, the loss will be written off against the capital accounts of Dozier and Ross. Allocation of this potential loss is based on the relative profit and loss ratio specified in the articles of partnership. According to the information provided, Dozier and Ross are credited with 40 percent and 20 percent of all partnership income, respectively. This 40:20 ratio equates to a 2:1 relationship (or  $\frac{2}{3}:\frac{1}{3}$ ) between the two. Thus, if no part of the \$6,000 deficit balance is ever recovered from Holland, \$4,000 (two-thirds) of the loss will be assigned to Dozier and \$2,000 (one-third) to Ross:

### Allocation of Potential \$6,000 Loss

Dozier.....	$\frac{2}{3}$ of \$(6,000) = \$(4,000)
Ross.....	$\frac{1}{3}$ of \$(6,000) = \$(2,000)

These amounts represent the maximum potential reductions that the two remaining partners could still incur. Depending on Holland's actions, Dozier could be forced to absorb an additional \$4,000 loss, and Ross's capital account could decrease by as much as \$2,000. These balances must therefore remain in the respective capital accounts until the issue is resolved. Hence, a safe payment of \$11,000 may be made to Dozier at the present time; this distribution reduces that partner's capital account from \$15,000 to the minimum \$4,000 level. Likewise, a \$9,000 payment to Ross decreases the \$11,000 capital balance to the \$2,000 limit. Thus, \$11,000 and \$9,000 are the safe payments that can be distributed to the partners without fear of creating new deficits in the future.

Dozier, Capital.....	11,000
Ross, Capital.....	9,000
Cash.....	20,000
To record distribution of safe payments of cash to Dozier and Ross based on the assumption that Holland will not contribute further to the partnership.	

After this \$20,000 cash distribution, only a few other events can occur during the remaining life of the partnership. Holland, either voluntarily or through legal persuasion, could contribute the entire \$6,000 needed to eradicate the capital deficit. If so, the money should be immediately turned over to Dozier (\$4,000) and Ross (\$2,000) based on their remaining capital balances. This final distribution effectively closes the partnership records.

A second possibility is that Dozier and Ross could be unable to recover any part of the deficit from Holland. These two remaining partners must then absorb the \$6,000 loss themselves. Because adequate safe capital balances have been maintained, recording a complete default by Holland serves to close out the partnership books.

Dozier, Capital ( $\frac{2}{3}$ of loss).....	4,000
Ross, Capital ( $\frac{1}{3}$ of loss).....	2,000
Holland, Capital.....	6,000
To record allocation of deficit capital balance of insolvent partner.	

***Deficit Is Partly Collectible***

One other ending to this partnership liquidation is possible. The partnership could recover a portion of the \$6,000 from Holland, but the remainder could prove to be uncollectible. Holland could become bankrupt, or the other partners could simply give up trying to collect from him. The partners could also negotiate this settlement to avoid protracted legal actions.

To illustrate, assume that Holland manages to contribute \$3,600 to the partnership but subsequently files for relief under the provisions of the bankruptcy laws. In a later legal arrangement, \$1,000 additional cash goes to the partnership, but the final \$1,400 will never be collected. This series of events creates the following effects within the liquidation process:

1. The \$3,600 contribution made by Holland is distributed to Dozier and Ross based on a new computation of their safe capital balances.
2. The \$1,400 default is charged against the two positive capital balances in accordance with the relative profit and loss ratio.
3. The final \$1,000 contribution made by Holland is then paid to Dozier and Ross in amounts equal to their ending capital balances, a transaction that closes the partnership's financial records.

The distribution of the first \$3,600 depends on a recalculation of the minimum capital balances that Dozier and Ross must maintain to absorb all potential losses. Each of these computations is necessary because of a basic fact: Holland's remaining deficit balance (\$2,400 at this time) could prove to be a total loss. This approach guarantees that the other two partners will continue to report sufficient capital until the liquidation is ultimately resolved.

	<b>Current Capital</b>		<b>Allocation of Potential Loss</b>		<b>Safe Payments</b>
Dozier .....	\$4,000	–	$\frac{2}{3}$ of \$(2,400) = \$(1,600)	=	\$2,400
Ross.....	\$2,000	–	$\frac{1}{3}$ of \$(2,400) = \$ (800)	=	\$1,200

Thus, the \$3,600 in cash that is now available is distributed immediately to Dozier and Ross as safe payments:

Cash .....	3,600	
Holland, Capital.....		3,600
Dozier, Capital.....	2,400	
Ross, Capital .....	1,200	
Cash .....		3,600
To record capital contribution by Holland and subsequent distribution of funds to Dozier and Ross as safe payments.		

After recording this \$3,600 contribution from Holland and the subsequent disbursement, the partnership's capital accounts stay open, registering the following balances:

Holland, Capital (deficit) .....	\$ (2,400)
Dozier, Capital .....	1,600
Ross, Capital .....	800

These accounts continue to remain on the partnership books until the final resolution of Holland's obligation.

In this illustration, the \$1,000 legal settlement and the remaining \$1,400 loss ultimately allow the parties to close out the records:

Cash .....	1,000	
Dozier, Capital (2/3 of loss) .....	933	
Ross, Capital (1/3 of loss) .....	467	
Holland, Capital .....		2,400
To record final \$1,000 cash settlement of Holland's interest and resulting \$1,400 loss.		
Dozier, Capital .....	667	
Ross, Capital .....	333	
Cash .....		1,000
To record distribution of final cash balance based upon remaining capital account totals.		

In this example, one partner (Holland) became insolvent during the liquidation process. Personal bankruptcy is not uncommon and raises questions as to the legal right that damaged partners have to proceed against an insolvent partner. We now consider another example in which two partners are insolvent.

### **Two Partners Insolvent**

The following balance sheet is presented for the partnership of Morris, Newton, Olsen, and Prince and indicates the applicable profit and loss percentages. Both Morris and Prince are personally insolvent. Morris's creditors have brought an \$8,000 claim against the partnership's assets, and Prince's creditors are seeking \$15,000. These claims have forced the partnership to terminate operations so that the business property can be liquidated and the insolvent partners can settle their personal obligations. The question as to which partner is entitled to any cash balance that remains is again raised.

Cash .....	\$ 10,000	Liabilities .....	\$ 70,000
Noncash assets .....	140,000	Morris, capital (40%) .....	15,000
		Newton, capital (20%) .....	10,000
		Olsen, capital (20%) .....	23,000
		Prince, capital (20%) .....	32,000
Total assets .....	<u>\$150,000</u>	Total liabilities and capital .....	<u>\$150,000</u>

Assume that the partnership sells the noncash assets for a total of \$80,000, creating a \$60,000 loss, and pays all its liabilities. The partnership records these two events as follows:

Cash .....	80,000	
Morris, Capital (40% of loss) .....	24,000	
Newton, Capital (20% of loss) .....	12,000	
Olsen, Capital (20% of loss) .....	12,000	
Prince, Capital (20% of loss) .....	12,000	
Noncash Assets .....		140,000
To record sale of noncash assets and allocation of resulting \$60,000 loss.		
Liabilities .....	70,000	
Cash .....		70,000
To record extinguishment of partnership obligations.		

Because of these two transactions, the partnership's cash has increased from \$10,000 to \$20,000.

After the allocation of this loss, the capital accounts for Morris and Newton have deficit balances of \$9,000 (\$15,000 – \$24,000) and \$2,000 (\$10,000 – \$12,000), respectively.

Although Newton is personally solvent and would be expected to compensate the partnership, Morris's personal financial condition does not allow for any further contribution. Therefore, Newton, Olsen, and Prince must absorb Morris's \$9,000 deficit. Because these three partners have historically shared profits evenly (20:20:20), they continue to do so in recording this additional capital loss:

Newton, Capital (1/3 of loss) .....	3,000	
Olsen, Capital (1/3 of loss) .....	3,000	
Prince, Capital (1/3 of loss) .....	3,000	
Morris, Capital .....		9,000
To record write-off of deficit capital balance of insolvent partner.		

This allocation increases Newton's deficit to a \$5,000 balance (\$2,000 + \$3,000), an amount that the partner should now contribute in accordance with partnership law:

Cash .....	5,000	
Newton, Capital .....		5,000
To record contribution from solvent partner necessitated by negative capital balance.		

The series of transactions that take place in the liquidation of this partnership are summarized in the following statement of partnership liquidation:

<b>MORRIS, NEWTON, OLSEN, AND PRINCE PARTNERSHIP</b>							
<b>Statement of Partnership Liquidation</b>							
	<b>Cash</b>	<b>Noncash Assets</b>	<b>Liabilities</b>	<b>Morris, Capital (40%)</b>	<b>Newton, Capital (20%)</b>	<b>Olsen, Capital (20%)</b>	<b>Prince, Capital (20%)</b>
Beginning balances .....	\$ 10,000	\$ 140,000	\$(70,000)	\$(15,000)	\$(10,000)	\$(23,000)	\$(32,000)
Sold noncash assets .....	80,000	(140,000)	—0—	24,000	12,000	12,000	12,000
Updated balances .....	90,000	—0—	(70,000)	9,000	2,000	(11,000)	(20,000)
Paid liabilities .....	(70,000)	—0—	70,000	—0—	—0—	—0—	—0—
Updated balances .....	20,000	—0—	—0—	9,000	2,000	(11,000)	(20,000)
Default by Morris .....	—0—	—0—	—0—	(9,000)	3,000	3,000	3,000
Updated balances .....	20,000	—0—	—0—	—0—	5,000	(8,000)	(17,000)
Contribution by Newton .....	5,000	—0—	—0—	—0—	(5,000)	—0—	—0—
Updated balances .....	25,000	—0—	—0—	—0—	—0—	(8,000)	(17,000)
Distribute remaining cash .....	(25,000)	—0—	—0—	—0—	—0—	8,000	17,000
Closing balances .....	<u>\$ —0—</u>	<u>\$ —0—</u>	<u>\$ —0—</u>	<u>\$ —0—</u>	<u>\$ —0—</u>	<u>\$ —0—</u>	<u>\$ —0—</u>

Although \$8,000 of the partnership's remaining cash goes directly to Olsen, the \$17,000 attributed to Prince is first subjected to the claims of the partner's personal creditors. Because of their claims, \$15,000 of this amount must be used to satisfy these obligations, with only the final \$2,000 actually being paid to Prince. Because Morris receives no distribution of cash from the partnership, no assets become available to settle claims of this partner's personal creditors.

### ***Insolvent Partnership***

The two previous illustrations analyzed liquidations in which one or more of the partners is personally insolvent. Another possibility is that the partnership itself is insolvent. In an active partnership, insolvency can occur if losses, partner drawings, or litigation depletes the operation's working capital. A bankruptcy petition could follow if the partnership cannot meet its

debts as they come due. Even a financially sound partnership can become insolvent if it incurs material losses during a voluntary liquidation.

To serve as a basis for examining the accounting and legal ramifications of an insolvent partnership, assume that the law firm of Keller, Lewis, Monroe, and Norris is in the final stages of liquidation. The firm has sold all noncash assets and has used available cash to pay a portion of the business's liabilities. After these transactions, the following account balances remain open within the partnership's records. The four partners share profits and losses equally.

Liabilities . . . . .	\$ 20,000
Keller, capital . . . . .	(30,000)
Lewis, capital. . . . .	(5,000)
Monroe, capital. . . . .	5,000
Norris, capital . . . . .	10,000

Note: Parentheses indicate deficit.

This partnership is insolvent; it has no cash but continues to owe creditors \$20,000, even after liquidation and distribution of all assets. However, additional cash contributions to the partnership should be forthcoming from two of the partners. Because of their deficit capital balances, Keller and Lewis are legally required to contribute an additional \$30,000 and \$5,000, respectively, to the business. With these newly available funds, the partnership will be able to pay all \$20,000 of its remaining liabilities as well as make cash distributions to Monroe (\$5,000) and Norris (\$10,000) in accordance with their capital account balances. This final payment would close the partnership books.

Once again, the possibility exists that one or more of the partners who are reporting a negative capital balance will not step forward to make any further contribution. Assume, for example, that Keller is personally insolvent and cannot contribute, whereas Lewis simply refuses to supply additional funds in hopes of avoiding the obligation. *At this point, the remaining creditors can initiate legal recovery proceedings against any or all of the partners regardless of their capital balances.* Any action, however, against the insolvent partner could prove to be a futile effort.

Predicting the exact outcome of litigation is rarely possible. Thus, we assume here that Norris is forced to contribute \$20,000 cash to settle the remaining liabilities. The following journal entries would then be required for this partnership:

Cash . . . . .	20,000	
Norris, Capital. . . . .		20,000
Liabilities . . . . .	20,000	
Cash. . . . .		20,000
To record capital contribution by Norris and payment to remaining partnership creditors.		

After all liabilities have been extinguished, the partners who still maintain positive capital accounts balances can demand remuneration from any partner with a negative balance. Despite this legal obligation, the chances of a significant recovery from the insolvent Keller is not likely. Thus, the partners could choose to write off this deficit as a step toward closing the partnership's financial records. Legal recovery proceedings can still continue against Keller regardless of the accounting treatment. As equal partners, Lewis, Monroe, and Norris absorb the \$30,000 loss evenly.

Lewis, Capital (1/3 of loss). . . . .	10,000	
Monroe, Capital (1/3 of loss). . . . .	10,000	
Norris, Capital (1/3 of loss) . . . . .	10,000	
Keller, Capital . . . . .		30,000
To record write-off of deficit capital balance of insolvent partner.		



## Discussion Question

### WHAT HAPPENS IF A PARTNER BECOMES INSOLVENT?

In 2010, three dentists—Ben Rogers, Judy Wilkinson, and Henry Walker—formed a partnership to open a practice in Toledo, Ohio. The partnership's primary purpose was to reduce expenses by sharing building and equipment costs, supplies, and the services of a clerical staff. Each contributed \$70,000 in cash and, with the help of a bank loan, constructed a building and acquired furniture, fixtures, and equipment. Because the partners maintained their own separate clients, annual net income has been allocated as follows: Each partner receives the specific amount of revenues that he or she generated during the period less one-third of all expenses. From the beginning, the partners did not anticipate expansion of the practice; consequently, they could withdraw cash each year up to 90 percent of their share of income for the period.

The partnership had been profitable for a number of years. Over the years, Rogers has used much of his income to speculate in real estate in the Toledo area. By 2017 he was spending less time with the dental practice so that he could concentrate on his investments. Unfortunately, a number of these real estate deals proved to be bad decisions and he incurred significant losses. On November 8, 2017, while Rogers was out of town, his personal creditors filed a \$97,000 claim against the partnership's assets. Unbeknownst to Wilkinson and Walker, Rogers had become insolvent.

Wilkinson and Walker hurriedly met to discuss the problem because Rogers could not be located. Rogers's capital account was currently at \$105,000, but the partnership had only \$27,000 in cash and liquid assets. The partners knew that Rogers's dental equipment had been used for many years and could be sold for relatively little. In contrast, the building had appreciated in value, and the creditors' claims could be satisfied by selling the property. However, this action would have a tremendously adverse impact on the dental practice of the remaining two partners.

What alternatives are available to Wilkinson and Walker to deal with this situation, and what are the advantages and disadvantages of each?

The partners' capital accounts now have the following balances:

	Keller, Capital	Lewis, Capital	Monroe, Capital	Norris, Capital
Beginning balances .....	\$(30,000)	\$ (5,000)	\$ 5,000	\$ 10,000
Capital contribution .....	—0—	—0—	—0—	20,000
Write-off of deficit balance .....	30,000	(10,000)	(10,000)	(10,000)
Current balances .....	<u>\$ —0—</u>	<u>\$(15,000)</u>	<u>\$ (5,000)</u>	<u>\$ 20,000</u>

Both Lewis and Monroe now have a legal obligation to reimburse the partnership to offset their deficit capital balances. Upon their payment of \$15,000 and \$5,000, respectively, the entire \$20,000 will be distributed to Norris (the only partner with a positive balance), and the partnership's books will be closed. Should either Lewis or Monroe fail to make the appropriate contribution, the additional loss must be allocated between the two remaining partners.

## LO 15-4

Prepare a proposed schedule of liquidation from safe capital balances to determine an equitable preliminary distribution of available partnership assets.

## Installment Liquidations

In all of the illustrations analyzed thus far, distributions were made to the partners only after all assets were sold and all liabilities paid. As previously mentioned, a liquidation can take an extended time to complete. During this lengthy process, the partnership need not retain any assets that eventually will be disbursed to the partners. If the business is solvent, waiting until all affairs have been settled before transferring cash to the owners is not warranted. The partners should be allowed to receive cash to which they are entitled at the earliest possible time.

### Preliminary Distribution of Partnership Assets

Partnerships often have a sufficient cash balance at the date of termination that some amount of cash can be paid out to individual partners even before noncash assets are sold. The accountant can determine a *preliminary distribution of partnership assets* at the beginning of the liquidation process.

*The objective in making any type of preliminary distribution is to ensure that the partnership maintains enough capital to absorb all future losses. Any capital in excess of this maximum requirement is a safe balance, an amount that can be immediately conveyed to the partner. To determine safe payments that can be made to partners at any time, the accountant assumes that all subsequent events will result in maximum losses: No cash will be received in liquidating remaining noncash assets and each partner is personally insolvent. Any positive capital balance that remains even after the inclusion of all potential losses can be paid to the partner without delay. Although the assumption that no further funds will be generated could be unrealistic, it does ensure that negative capital balances cannot arise as a result of premature payments being made to any of the partners.*

### Preliminary Distribution Illustrated

To demonstrate the computation of safe capital distributions, assume that a liquidating partnership reports the following balance sheet:

Cash .....	\$ 60,000	Liabilities .....	\$ 40,000
Noncash assets .....	140,000	Mason, loan .....	20,000
		Mason, capital (50%) .....	60,000
		Lee, capital (30%) .....	30,000
		Dixon, capital (20%) .....	50,000
Total assets .....	<u>\$200,000</u>	Total liabilities and capital .....	<u>\$200,000</u>

Assume also that the partners estimate that \$6,000 will be the maximum expense incurred in carrying out this liquidation. Consequently, the partnership needs \$46,000 to meet all obligations: \$40,000 to satisfy partnership liabilities and \$6,000 for liquidation expenses. Because the partnership holds \$60,000 in cash, it can transfer the extra \$14,000 to the partners immediately without fear of injuring any participants in the liquidation. However, the appropriate allocation of this money is not readily apparent; safe capital balances must be computed to guide the actual distribution.

Before demonstrating the allocation of this \$14,000, we examine the appropriate handling of a partner's loan balance. According to the balance sheet, Mason has conveyed \$20,000 to the business at some point in the past, an amount that was considered a loan rather than additional capital. Perhaps the partnership was in desperate need of funds and Mason was willing to contribute only if the contribution was structured as a loan. Regardless of the reason, the question as to the status of this account remains: Is the \$20,000 to be viewed as a liability to the partnership or as a part of the partner's capital balance? The answer becomes especially significant during the liquidation process because available funds often are limited. In this regard, the Uniform Partnership Act (UPA) (Section 807[a]) indicates that the assets of the



partnership must be applied to pay obligations to creditors, including partners who are creditors; any surplus is distributed to partners based on their capital balances.

Although the UPA indicates that the debt to Mason should be repaid entirely before any distribution of capital can be made to the other partners, actual accounting practice takes a different view. “In preparing predistribution schedules, accountants typically offset partners’ loans with the partners’ capital accounts and then distribute funds accordingly.”<sup>4</sup> In other words, the loan is merged with the partner’s capital account balance at the beginning of liquidation. Thus, accounting practice and the UPA seem to differ in the handling of a loan from a partner. To follow common practice, this textbook accounts for a loan from a partner in liquidation as if the balance were a component of the partner’s capital. By this offset, the accountant can reduce the amount accumulated as a negative capital balance for any insolvent partner. Any such loan can be transferred into the corresponding capital account at the start of the liquidation process. Similarly, any loans *due from* a partner should be shown as a reduction in the appropriate capital balance.

### Proposed Schedule of Liquidation

Returning to the current illustration, the accountant needs to determine an equitable distribution for the \$14,000 cash presently available. To structure this computation, a proposed schedule of liquidation is developed *based on the underlying assumption that all future events will result in total losses*. Exhibit 15.2 presents this statement for the Mason, Lee, and Dixon partnership. To expedite coverage, the \$20,000 loan has already been transferred into Mason’s capital account. Thus, regardless of whether this partner arrives at a deficit or a safe capital balance, the loan amount already has been included.

The preparation of Exhibit 15.2 forecasts complete losses (\$140,000) in connection with the disposition of all noncash assets and anticipates liquidation expenses at maximum amounts (\$6,000). Following the projected payment of liabilities, any partner reporting a negative capital balance is assumed to be personally insolvent. These potential deficit balances are written off and the losses are assigned to the remaining solvent partners based on their relative profit and loss ratio. Lee, with a negative \$13,800, is eliminated first. This allocation creates a deficit of \$2,857 for Mason, an amount that Dixon alone must absorb. After this series of maximum losses is simulated, any positive capital balance that still remains is considered safe; a safe payment of cash of that amount can be made to the specific partners.

#### EXHIBIT 15.2

<b>MASON, LEE, AND DIXON</b>						
<b>Proposed Schedule of Liquidation—Initial Safe Capital Balances</b>						
	<b>Cash</b>	<b>Noncash Assets</b>	<b>Liabilities</b>	<b>Mason, Capital (50%)</b>	<b>Lee, Capital (30%)</b>	<b>Dixon, Capital (20%)</b>
Beginning balances . . . . .	\$ 60,000	\$ 140,000	\$ 40,000	\$ 80,000	\$ 30,000	\$ 50,000
Maximum loss on noncash assets . . . . .	–0–	(140,000)	–0–	(70,000)	(42,000)	(28,000)
Maximum liquidation expenses . . . . .	(6,000)	–0–	–0–	(3,000)	(1,800)	(1,200)
Payment of liabilities . . . . .	(40,000)	–0–	(40,000)	–0–	–0–	–0–
Potential balances . . . . .	14,000	–0–	–0–	7,000	(13,800)	20,800
Assume Lee to be insolvent . . . . .	–0–	–0–	–0–	(9,857) (%)	13,800	(3,943) (%)
Potential balances . . . . .	14,000	–0–	–0–	(2,857)	–0–	16,857
Assume Mason to be insolvent . . . . .	–0–	–0–	–0–	2,857	–0–	(2,857)
Safe balances . . . . .	<u>\$ 14,000</u>	<u>\$ –0–</u>	<u>\$ –0–</u>	<u>\$ –0–</u>	<u>\$ –0–</u>	<u>\$ 14,000</u>

<sup>4</sup>Robert E. Whitis and Jeffrey R. Pittman, “Inconsistencies between Accounting Practices and Statutory Law in Partnership Liquidations,” *Accounting Educators’ Journal*, Fall 1996, p. 99.

Exhibit 15.2 indicates that only Dixon has a large enough capital balance at the present time to absorb all possible future losses. Thus, the entire \$14,000 can be distributed to this partner with no fear that the capital account will ever result in a deficit balance. Based on current practice, Mason, despite having made a \$20,000 loan to the partnership, is entitled to no part of this initial distribution. The loan is of insufficient size to prevent potential deficits from occurring in Mason's capital account.

One series of computations found in this proposed schedule of liquidation merits additional attention. The simulated losses initially create a \$13,800 negative balance in Lee's capital account while the other two partners continue to report positive balances. Mason and Dixon must then absorb Lee's projected deficit according to their relative profit and loss percentages. Previously, Mason was allocated 50 percent of net income with 20 percent recorded to Dixon. These figures equate to a  $50/70:20/70$  or a  $5/7:2/7$  ratio. Based on this realigned relationship, the \$13,800 potential deficit is allocated between Mason ( $5/7$  or \$9,857) and Dixon ( $2/7$  or \$3,943), reducing Mason's own capital account to a negative balance as shown in Exhibit 15.2.

Continuing with the assumption that maximum losses occur in all cases, Mason's \$2,857 deficit is accounted for as if that partner were also personally insolvent. Therefore, the entire negative balance is assigned to Dixon, the only partner still in a positive capital position. Because all potential losses have been recognized at this point, the remaining \$14,000 capital is a safe balance that should be paid to Dixon. Even after the money is distributed, Dixon's capital account balance will still be large enough to absorb all future losses.

### Liquidation in Installments

In practice, complete losses are not likely to occur in the liquidation of any business. Thus, at various points during this process, additional cash amounts can become available as partnership property is sold. If the assets are disposed of in a piecemeal fashion, cash can actually flow into the company on a regular basis for an extended period of time. As needed, additional proposed schedules of liquidation must be developed to determine the recipients of newly available funds. Because numerous capital distributions could be required, this process is often referred to as a *liquidation made in installments*.

To illustrate, assume that the partnership of Mason, Lee, and Dixon undergoes the following *actual* events in connection with its liquidation:

- As the proposed schedule of liquidation in Exhibit 15.2 indicates, Dixon receives \$14,000 in cash as a preliminary capital distribution.
- Noncash assets with a book value of \$50,000 are sold for \$20,000.
- All \$40,000 in liabilities are settled.
- Liquidation expenses of \$2,000 are paid; the partners now believe that only a maximum of \$3,000 more will be expended in this manner. The original estimation of \$6,000 was apparently too high.

As a result of these transactions, the partnership has an additional \$21,000 in cash now available to safely distribute to the partners: \$20,000 received from the sale of noncash assets and another \$1,000 because of the reduced estimation of liquidation expenses. Once again, the accountant must assume maximum future losses as a means of determining the appropriate distribution of these funds. The accountant produces a second proposed schedule of liquidation (Exhibit 15.3), indicating that \$12,143 of this amount should go to Mason with the remaining \$8,857 to Dixon. To facilitate a better visual understanding, actual transactions are recorded first on this schedule, followed by the assumed losses. *A dotted line separates the real from the potential occurrences.*

### Predistribution Plan

The liquidation of a partnership can require numerous transactions occurring over a lengthy period of time. The continual production of proposed schedules of liquidation could become a burdensome chore. The previous illustration already has required two separate statements, and the partnership still possesses \$90,000 in noncash assets awaiting conversion to cash.

#### LO 15-5

Develop a predistribution plan to guide the distribution of assets in a partnership liquidation.

## EXHIBIT 15.3

<b>MASON, LEE, AND DIXON</b>						
<b>Proposed Schedule of Liquidation—Subsequent Safe Capital Balances</b>						
	Cash	Noncash Assets	Liabilities	Mason, Capital (50%)	Lee, Capital (30%)	Dixon, Capital (20%)
Beginning balances . . . . .	\$ 60,000	\$ 140,000	\$ 40,000	\$ 80,000	\$ 30,000	\$ 50,000
Capital distribution—safe balances . . . . .	(14,000)	—0—	—0—	—0—	—0—	(14,000)
Disposal of noncash assets . . . . .	20,000	(50,000)	—0—	(15,000)	(9,000)	(6,000)
Liabilities paid . . . . .	(40,000)	—0—	(40,000)	—0—	—0—	—0—
Liquidation expenses . . . . .	(2,000)	—0—	—0—	(1,000)	(600)	(400)
Current balances . . . . .	24,000	90,000	—0—	64,000	20,400	29,600
.....						
Maximum loss on remaining noncash assets . . . . .	—0—	(90,000)	—0—	(45,000)	(27,000)	(18,000)
Maximum liquidation expenses . . . . .	(3,000)	—0—	—0—	(1,500)	(900)	(600)
Potential balances . . . . .	21,000	—0—	—0—	17,500	(7,500)	11,000
Assume Lee to be insolvent . . . . .	—0—	—0—	—0—	(5,357) (%)	7,500	(2,143) (%)
Safe balances—current . . . . .	<u>\$ 21,000</u>	<u>\$ —0—</u>	<u>\$ —0—</u>	<u>\$ 12,143</u>	<u>\$ —0—</u>	<u>\$ 8,857</u>

Therefore, at the start of a liquidation, most accountants produce a single predistribution plan to serve as a guide for all future payments. Thereafter, whenever cash becomes available, this plan indicates the appropriate recipient(s) without the necessity of drawing up ever-changing proposed schedules of liquidation.

A predistribution plan is developed by simulating a series of losses, each of which is just large enough to eliminate, one at a time, all of the partners' claims to partnership property. This approach recognizes that the individual capital accounts exhibit differing degrees of sensitivity to losses. Capital accounts possess varying balances and could be charged with losses at different rates. Consequently, a predistribution plan is based on calculating the losses (the "maximum loss allowable") that would eliminate each of these capital balances in a sequential pattern. This series of absorbed losses then forms the basis for the predistribution plan.

To demonstrate the creation of a predistribution plan, assume that the following partnership is to be liquidated:

Cash . . . . .	\$ —0—	Liabilities . . . . .	\$ 100,000
Noncash assets . . . . .	221,000	Rubens, capital (50%) . . . . .	30,000
		Smith, capital (20%) . . . . .	40,000
		Trice, capital (30%) . . . . .	51,000
Total assets . . . . .	<u>\$221,000</u>	Total liabilities and capital . . . . .	<u>\$221,000</u>

The partnership capital reported by this organization totals \$121,000. However, the individual balances for the partners range from \$30,000 to \$51,000, and profits and losses are assigned according to three different percentages (50%, 20%, 30%). Thus, differing losses would reduce each partner's current capital balance to zero. As a prerequisite to developing a predistribution plan, the sensitivity to losses exhibited by each of these capital accounts must be measured:

Partner	Capital Balance/ Loss Allocation	Maximum Loss That Can Be Absorbed
Rubens . . . . .	\$ 30,000/50%	\$ 60,000 ✓
Smith . . . . .	40,000/20%	200,000
Trice . . . . .	51,000/30%	170,000

According to this initial computation, Rubens is the partner in the most vulnerable position at the present time. Based on a 50 percent share of income, a loss of only \$60,000 would reduce this partner's capital account to a zero balance. If the partnership does incur a loss of this amount, Rubens can no longer hope to recover any funds from the liquidation process. Thus, the following schedule simulates the potential effects of this loss (referred to as a *Step 1 loss*):

	Rubens, Capital	Smith, Capital	Trice, Capital
Beginning balances .....	\$ 30,000	\$ 40,000	\$ 51,000
Assumed \$60,000 loss .....	<u>(30,000) (50%)</u>	<u>(12,000) (20%)</u>	<u>(18,000) (30%)</u>
Step 1 balances .....	<u>\$ -0-</u>	<u>\$ 28,000</u>	<u>\$ 33,000</u>

As previously discussed, the predistribution plan is based on describing the series of losses that would eliminate each partner's capital in turn and, thus, all claims to cash. In the previous Step 1 schedule, the \$60,000 loss reduced Rubens's capital account to zero. Assuming, as a precautionary step, that Rubens is personally insolvent, all further losses would have to be allocated between Smith and Trice. Because these two partners have previously shared partnership profits and losses on a 20 percent and 30 percent basis, a  $\frac{20}{50}:\frac{30}{50}$  (or 40%:60%) relationship exists between them. Therefore, these realigned percentages must now be utilized in calculating a *Step 2 loss*, the amount just large enough to exclude another of the remaining partners from sharing in any future cash distributions:

Partner	Capital Balance/ Loss Allocation	Maximum Loss That Can Be Absorbed
Smith .....	\$28,000/40%	\$70,000
Trice .....	33,000/60%	55,000 ✓

Because Rubens's capital balance already has been eliminated, Trice is now in the most vulnerable position: Only a \$55,000 Step 2 loss is required to reduce this partner's capital balance to zero.

	Rubens, Capital	Smith, Capital	Trice, Capital
Beginning balances .....	\$ 30,000	\$ 40,000	\$ 51,000
Assumed \$60,000 loss .....	<u>(30,000) (50%)</u>	<u>(12,000) (20%)</u>	<u>(18,000) (30%)</u>
Step 1 balances .....	\$ -0-	\$ 28,000	\$ 33,000
Assumed \$55,000 loss .....	<u>-0-</u>	<u>(22,000) (40%)</u>	<u>(33,000) (60%)</u>
Step 2 balances .....	<u>\$ -0-</u>	<u>\$ 6,000</u>	<u>\$ -0-</u>

According to this second schedule, a total loss of \$115,000 (\$60,000 from Step 1 plus \$55,000 from Step 2) leaves capital of only \$6,000, a balance attributed entirely to Smith. At this final point in the simulation, an additional loss of this amount also ends Smith's right to receive any funds from the liquidation process. Having the sole positive capital balance remaining, this partner would have to absorb the entire amount of the final loss.

	Rubens, Capital	Smith, Capital	Trice, Capital
Beginning balances .....	\$ 30,000	\$ 40,000	\$ 51,000
Assumed \$60,000 loss .....	<u>(30,000) (50%)</u>	<u>(12,000) (20%)</u>	<u>(18,000) (30%)</u>
Step 1 balances .....	\$ -0-	\$ 28,000	\$ 33,000
Assumed \$55,000 loss .....	<u>-0-</u>	<u>(22,000) (40%)</u>	<u>(33,000) (60%)</u>
Step 2 balances .....	-0-	6,000	-0-
Assumed \$6,000 loss .....	<u>-0-</u>	<u>(6,000) (100%)</u>	<u>-0-</u>
Final balances .....	<u>\$ -0-</u>	<u>\$ -0-</u>	<u>\$ -0-</u>

Once this series of simulated losses has reduced each partner's capital account to a zero balance, a predistribution plan for the liquidation can be devised. *This procedure requires working backward through the preceding final schedule to determine the effects that will result if the assumed losses do not occur.* Without these losses, cash becomes available for the partners; therefore, a direct relationship exists between the volume of losses and the distribution pattern. For example, Smith will entirely absorb the last \$6,000 loss. Should that loss fail to materialize, Smith is left with a positive safe capital balance of this amount. Thus, as cash becomes available, the first \$6,000 received (in excess of partnership obligations and anticipated liquidation expenses) should be distributed solely to Smith.

Similarly, the preceding \$55,000 Step 2 loss was divided between Smith and Trice on a 4:6 basis. Again, if such losses do not occur, these balances need not be retained to protect the partnership against deficit capital balances. Therefore, after Smith has received the initial \$6,000, any additional cash that becomes available (up to \$55,000) will be split between Smith (40 percent) and Trice (60 percent). For example, if the partnership holds exactly \$61,000 in cash in excess of liabilities and possible liquidation expenses, this distribution should be made:

	Rubens	Smith	Trice	Total
First \$6,000.....	\$-0-	\$ 6,000	\$ -0-	\$ 6,000
Next \$55,000.....	-0-	22,000 (40%)	33,000 (60%)	55,000
Cash distribution .....	<u>\$-0-</u>	<u>\$ 28,000</u>	<u>\$ 33,000</u>	<u>\$ 61,000</u>

The predistribution plan can be completed by including the Step 1 loss, an amount that was to be absorbed by the partners on a 5:2:3 basis. Thus, all cash that becomes available to the partners after the initial \$61,000 is to be distributed according to the original profit and loss ratio. At this point in the liquidation, enough cash would have been generated to ensure that each partner has a safe capital balance: No possibility exists that a future deficit can occur. Any additional increases in the projected capital balances will be allocated by the 5:2:3 allocation pattern. *Once all partners begin to receive a portion of the cash disbursements, any remaining funds are divided based on the original profit and loss percentages.*

To inform all parties of the pattern by which available cash will be disbursed, the predistribution plan should be formally prepared in a schedule format prior to beginning liquidation. Following is the predistribution plan for the partnership of Rubens, Smith, and Trice. To complete this illustration, liquidation expenses of \$12,000 have been estimated. Because these expenses have the same effect on the capital accounts as losses, they do not change the sequential pattern by which assets eventually will be distributed.

<b>RUBENS, SMITH, AND TRICE</b>		
<b>Predistribution Plan</b>		
<b>Available Cash</b>		<b>Recipient</b>
First.....	\$112,000	Creditors (\$100,000) and liquidation expenses (estimated at \$12,000)
Next.....	6,000	Smith
Next.....	55,000	Smith (40%) and Trice (60%)
All further cash.....		Rubens (50%), Smith (20%), and Trice (30%)

## Summary

1. Although a partnership can exist indefinitely through the periodic admission of new partners, termination of business activities and liquidation of property can take place for a number of reasons. A partner's death or retirement and the insolvency of a partner or even the partnership itself can trigger this process. Because of the risk that the partnership will incur large losses during liquidation, all parties usually seek frequent and timely information describing ongoing developments. The accountant is expected to furnish these data while also working to ensure the equitable treatment of all parties.

2. The liquidation process entails (a) converting partnership property into cash, (b) paying off liabilities and liquidation expenses, and (c) conveying any remaining cash to the partners based on their final capital balances. As a means of reporting these transactions, a statement of liquidation should be produced at periodic intervals. This statement discloses all recent transactions, the assets and liabilities still being held, and the current capital balances. Distribution of this statement on a regular basis allows the various parties involved in the liquidation to monitor the progress being made.
3. During a liquidation, negative capital balances can arise for one or more of the partners, especially if the partnership incurs material losses in disposing of its property. In such cases, the specific partner or partners should contribute enough additional assets to eliminate their deficits. If payment is slow in coming, the partners who have safe capital balances can immediately divide any cash still held by the partnership. A *safe balance* is the amount of capital that would remain even if maximum future losses occur: Noncash assets are lost in total and all partners with deficits fail to fulfill their legal obligations. In making these computations, the remaining partners absorb negative capital balances based on their relative profit and loss ratio.
4. Completion of the actual liquidation of a partnership can take an extended period of time. Often, cash is generated during the early stages of this process in excess of the amount needed to cover liabilities and liquidation expenses. Cash can be distributed to partners in installments as it becomes available. The accountant should propose a fair and immediate distribution of these available funds. A proposed schedule of liquidation can be created as a guide for such cash distributions. This schedule is based on a *simulated* series of transactions: sale of all noncash assets, payment of liquidation expenses, and so on. At every point, maximum losses are assumed: Noncash assets have no resale value, liquidation expenses are set at the maximum level, and all partners are personally insolvent. Any safe capital balance remaining after incurring such losses represents a safe payment of cash that can be made at the present time. Even after this payment, the partnership's total capital will still be large enough to absorb all potential losses.
5. Because a partnership liquidation can require numerous transactions over a lengthy time period, the accountant could discover that the continual production of proposed schedules of liquidation becomes burdensome. For this reason, at the start of the liquidation process the accountant usually produces a single predistribution plan that serves as a definitive guide for all payments to be made to the partners. To create this plan, the accountant simulates a series of losses with each loss, in turn, exactly eliminating a partner's capital balance. After these assumed losses have reduced all capital balances to zero, the accountant devises the predistribution plan by working backward through the series of simulated losses. In effect, the accountant is measuring the cash that will become available if such losses do not occur.

## Comprehensive Illustration

### Problem

(Estimated Time: 30 to 40 Minutes) For the past several years, the Andrews, Caso, Quinn, and Sheridan partnership has operated a local department store. Based on the provisions of the original articles of partnership, all profits and losses have been allocated on a 4:3:2:1 ratio, respectively. Recently, both Caso and Quinn have undergone personal financial problems and, as a result, are now insolvent. Caso's creditors have filed a \$20,000 claim against the partnership's assets, and \$22,000 is being sought to repay Quinn's personal debts. To satisfy these legal obligations, the partnership must liquidate. The partners estimate that they will incur \$12,000 in expenses to dispose of all noncash assets.

At the time that active operations terminate and the liquidation begins, the following partnership balance sheet is produced.

Cash . . . . .	\$ 20,000	Liabilities . . . . .	\$ 140,000
Noncash assets . . . . .	280,000	Caso, loan . . . . .	10,000
		Andrews, capital (40%) . . . . .	76,000
		Caso, capital (30%) . . . . .	14,000
		Quinn, capital (20%) . . . . .	51,000
		Sheridan, capital (10%) . . . . .	9,000
Total assets . . . . .	<u>\$300,000</u>	Total liabilities and capital . . . . .	<u>\$ 300,000</u>

During the lengthy liquidation process, the following transactions take place:

- Sale of noncash assets with a book value of \$190,000 for \$140,000 cash.
- Payment of \$14,000 liquidation expenses. No further expenses are expected.
- Distribution of safe payments to the partners.

- Payment of all business liabilities.
- Sale of the remaining noncash assets for \$10,000.
- Determination of deficit capital balances for any insolvent partners as uncollectible.
- Receipt of appropriate cash contributions from any solvent partner who is reporting a negative capital balance.
- Distribution of final cash.

### Required

- Using the information available prior to the start of the liquidation process, develop a predistribution plan for this partnership.
- Prepare journal entries to record the actual liquidation transactions.

### Solution

- This partnership begins the liquidation process with capital amounting to \$160,000. This total includes the \$10,000 loan from Caso added to Caso's capital balance for a total of \$24,000. Therefore, the predistribution plan is based on the assumption that \$160,000 in losses will be incurred, entirely eliminating all partnership capital. As discussed in this chapter, these simulated losses are arranged in a series so that each capital balance is sequentially reduced to zero. At the start of the liquidation, Caso's capital position is the most vulnerable.

Partner	Capital Balance/Loss Allocation	Maximum Loss That Can Be Absorbed
Andrews.....	\$76,000/40%	\$190,000
Caso.....	24,000/30%	80,000 ✓
Quinn.....	51,000/20%	255,000
Sheridan.....	9,000/10%	90,000

As this schedule indicates, an \$80,000 loss would eradicate both Caso's \$14,000 capital balance and the \$10,000 loan. Therefore, to start the development of a predistribution plan, this loss is assumed to have occurred.

	Andrews, Capital	Caso, Loan and Capital	Quinn, Capital	Sheridan, Capital
Beginning balances .....	\$ 76,000	\$ 24,000	\$ 51,000	\$ 9,000
Assumed \$80,000 loss .....	(32,000) (40%)	(24,000) (30%)	(16,000) (20%)	(8,000) (10%)
Step 1 balances .....	<u>\$ 44,000</u>	<u>\$ -0-</u>	<u>\$ 35,000</u>	<u>\$ 1,000</u>

With Caso's capital balance eliminated, further losses are to be split among the remaining partners in the ratio of 4:2:1 (or  $\frac{4}{7}:\frac{2}{7}:\frac{1}{7}$ ). Because only an additional \$7,000 loss (the preceding \$1,000 Step 1 capital balance divided by  $\frac{1}{7}$ ) is now needed to reduce Sheridan's balance to zero, this partner is in the second most vulnerable position.

	Andrews	Caso	Quinn	Sheridan
Step 1 balances (above) .....	\$44,000	\$-0-	\$35,000	\$1,000
Assumed \$7,000 loss .....	(4,000) ( $\frac{4}{7}$ )	-0-	(2,000) ( $\frac{2}{7}$ )	(1,000) ( $\frac{1}{7}$ )
Step 2 balances .....	<u>\$40,000</u>	<u>\$-0-</u>	<u>\$33,000</u>	<u>\$ -0-</u>

Following these two simulated losses, only Andrews and Quinn continue to report positive capital balances. Thus, they divide any additional losses on a 4:2 basis, or  $\frac{2}{3}:\frac{1}{3}$ . Based on these realigned percentages, Andrews's position has become the more vulnerable. An additional loss of \$60,000 ( $\$40,000/\frac{2}{3}$ ) reduces this partner's remaining capital balance to zero whereas a \$99,000 loss ( $\$33,000/\frac{1}{3}$ ) is required to eliminate Quinn's capital balance.

	Andrews	Caso	Quinn	Sheridan
Step 2 balances	\$ 40,000	\$-0-	\$ 33,000	\$-0-
Assumed \$60,000 loss	(40,000) <sup>(2/3)</sup>	-0-	(20,000) <sup>(1/3)</sup>	-0-
Step 3 balances	<u>\$ -0-</u>	<u>\$-0-</u>	<u>\$ 13,000</u>	<u>\$-0-</u>

The final \$13,000 capital balance belongs to Quinn; an additional loss of this amount is necessary to remove the last element of partnership capital.

Based on the results of this series of simulated losses, the accountant can create a predistribution plan. However, the \$140,000 in liabilities owed by the partnership still retains first priority to any available cash. Additionally, \$12,000 must be held to cover the anticipated liquidation expenses.

ANDREWS, CASO, QUINN, AND SHERIDAN Predistribution Plan		
Available Cash		Recipient
First	\$152,000	Creditors and anticipated liquidation expenses
Next	13,000	Quinn
Next	60,000	Andrews ( <sup>2</sup> / <sub>3</sub> ) and Quinn ( <sup>1</sup> / <sub>3</sub> )
Next	7,000	Andrews ( <sup>4</sup> / <sub>7</sub> ), Quinn( <sup>2</sup> / <sub>7</sub> ), and Sheridan( <sup>1</sup> / <sub>7</sub> )
All further cash		Andrews (40%), Caso (30%), Quinn (20%), and Sheridan (10%)

*b.* Journal entries for the liquidation:

Caso, Loan	10,000	
Caso, Capital		10,000
To record offset of loan to capital balance in anticipation of liquidation.		
Cash	140,000	
Andrews, Capital (40%)	20,000	
Caso, Capital (30%)	15,000	
Quinn, Capital (20%)	10,000	
Sheridan, Capital (10%)	5,000	
Noncash Assets		190,000
To record sale of noncash assets and allocation of \$50,000 loss.		
Andrews, Capital (40%)	5,600	
Caso, Capital (30%)	4,200	
Quinn, Capital (20%)	2,800	
Sheridan, Capital (10%)	1,400	
Cash		14,000
To record payment of liquidation expenses.		
• The partnership now holds \$146,000 in cash, \$6,000 more than is needed to satisfy all liabilities. According to the predistribution plan drawn up in requirement (a), this entire amount can be safely distributed to Quinn (or to Quinn's creditors).		
Quinn, Capital	6,000	
Cash		6,000
To record distribution of available cash based on safe capital balance.		
Liabilities	140,000	
Cash		140,000
To record extinguishment of all partnership debts.		

(continued)



*(continued)*

Cash .....	10,000	
Andrews, Capital (40% of loss) .....	32,000	
Caso, Capital (30% of loss) .....	24,000	
Quinn, Capital (20% of loss) .....	16,000	
Sheridan, Capital (10% of loss) .....	8,000	
Noncash Assets .....		90,000
To record sale of remaining noncash assets and allocation of \$80,000 loss.		

- At this point in the liquidation, only the cash and the capital accounts remain open on the partnership books.

	Cash	Andrews, Capital	Caso, Capital	Quinn, Capital	Sheridan, Capital
Beginning balances .....	\$ 20,000	\$ 76,000	\$ 14,000	\$ 51,000	\$ 9,000
Loan offset .....	–0–	–0–	10,000	–0–	–0–
Sale of noncash assets ...	140,000	(20,000)	(15,000)	(10,000)	(5,000)
Liquidation expenses .....	(14,000)	(5,600)	(4,200)	(2,800)	(1,400)
Cash distribution .....	(6,000)	–0–	–0–	(6,000)	–0–
Payment of liabilities .....	(140,000)	–0–	–0–	–0–	–0–
Sale of noncash assets ...	<u>10,000</u>	<u>(32,000)</u>	<u>(24,000)</u>	<u>(16,000)</u>	<u>(8,000)</u>
Current balances .....	<u>\$ 10,000</u>	<u>\$ 18,400</u>	<u>\$ (19,200)</u>	<u>\$ 16,200</u>	<u>\$ (5,400)</u>

Because Caso is personally insolvent, the \$19,200 deficit balance will not be repaid, and the remaining three partners must absorb it on a 4:2:1 basis.

Andrews, Capital ( $\frac{4}{7}$ of loss) .....	10,971	
Quinn, Capital ( $\frac{2}{7}$ of loss) .....	5,486	
Sheridan, Capital ( $\frac{1}{7}$ of loss) .....	2,743	
Caso, Capital .....		19,200
To record write-off of deficit capital balance of insolvent partner.		

- This last allocation decreases Sheridan's capital account to an \$8,143 negative total. Because this partner is personally solvent, that amount should be contributed to the partnership in accordance with regulations of the Uniform Partnership Act.

Cash .....	8,143	
Sheridan, Capital .....		8,143
To record contribution made to eliminate deficit capital balance.		

- Sheridan's contribution brings the final cash total for the partnership to \$18,143. This amount is distributed to the two partners who continue to maintain positive capital balances: Andrews and Quinn (or Quinn's creditors).

	Andrews, Capital	Quinn, Capital
Balances above .....	\$ 18,400	\$ 16,200
Caso deficit .....	<u>(10,971)</u>	<u>(5,486)</u>
Final balances .....	<u>\$ 7,429</u>	<u>\$ 10,714</u>

Andrews, Capital .....	7,429	
Quinn, Capital .....	10,714	
Cash .....		18,143
To record distribution of remaining cash according to final capital balances.		

## Questions

1. What is the difference between the dissolution of a partnership and the liquidation of partnership property?
2. Why would the members of a partnership elect to terminate business operations and liquidate all noncash assets?
3. Why are liquidation gains and losses usually recorded as direct adjustments to the partners' capital accounts?
4. After liquidating all property and paying partnership obligations, what is the basis for allocating remaining cash among the partners?
5. What is the purpose of a statement of liquidation? What information does it convey to its readers?
6. According to the Uniform Partnership Act, what events should occur if a partner incurs a negative capital balance during the liquidation process?
7. How are safe capital balances computed when preliminary distributions of cash are to be made in a partnership liquidation?
8. How do loans from partners affect the distribution of assets in a partnership liquidation?
9. What is the purpose of a proposed schedule of liquidation, and how is it developed?
10. How is a predistribution plan created for a partnership liquidation?

## Problems

LO 15-1

1. If a partnership is liquidated, how is the final allocation of business assets made to the partners?
  - a. Equally.
  - b. According to the profit and loss ratio.
  - c. According to the final capital account balances.
  - d. According to the initial investment made by each of the partners.

LO 15-1

2. Which of the following statements is true concerning the accounting for a partnership going through liquidation?
  - a. Gains and losses are reported directly as increases and decreases in the appropriate capital account.
  - b. A separate income statement is created to measure only the profit or loss generated during liquidation.
  - c. Because gains and losses rarely occur during liquidation, no special accounting treatment is warranted.
  - d. Within a liquidation, all gains and losses are divided equally among the partners.

LO 15-3

3. During a liquidation, if a partner's capital account balance drops below zero, what *should* happen?
  - a. The other partners file a legal suit against the partner with the deficit balance.
  - b. The partner with the highest capital balance contributes sufficient assets to eliminate the deficit.
  - c. The deficit balance is removed from the accounting records with only the remaining partners sharing in future gains and losses.
  - d. The partner with a deficit contributes enough assets to offset the deficit balance.

LO 15-3

4. A local partnership is liquidating and is currently reporting the following capital balances:

Barley, capital (50% share of all profits and losses) . . . .	\$ 44,000
Carter, capital (30%) . . . . .	32,000
Desai, capital (20%) . . . . .	(24,000)

Desai has indicated that a forthcoming contribution will cover the \$24,000 deficit. However, the two remaining partners have asked to receive the \$52,000 in cash that is currently available. How much of this money should each of the partners receive?

- a. Barley, \$22,000; Carter, \$30,000.
  - b. Barley, \$32,000; Carter, \$20,000.
  - c. Barley, \$29,000; Carter, \$23,000.
  - d. Barley, \$32,500; Carter, \$19,500.
5. A partnership is considering possible liquidation because one of the partners (Bell) is personally insolvent. Profits and losses are divided on a 4:3:2:1 basis, respectively. Capital balances at the current time are

LO 15-3

Bell, capital . . . . .	\$ 50,000
Hardy, capital . . . . .	56,000
Dennard, capital . . . . .	14,000
Suddath, capital . . . . .	80,000

Bell's creditors have filed a \$21,000 claim against the partnership's assets. The partnership currently holds assets of \$300,000 and liabilities of \$100,000. If the assets can be sold for \$190,000, what is the minimum amount that Bell's creditors would receive?

- 0–
- \$2,000
- \$2,800
- \$6,000

## LO 15-5

6. What is a predistribution plan?

- A list of the procedures to be performed during a liquidation.
- A guide for the cash distributions to partners during a liquidation.
- A determination of the final cash distribution to the partners on the settlement date.
- A detailed list of the transactions that will transpire in the reorganization of a partnership.

## LO 15-1

7. A partnership has the following balance sheet prior to liquidation (partners' profit and loss ratios are in parentheses):

Cash . . . . .	\$ 33,000	Liabilities . . . . .	\$ 50,000
Other assets . . . . .	100,000	Playa, capital (40%) . . . . .	24,000
		Bahia, capital (30%) . . . . .	29,000
		Arco, capital (30%) . . . . .	30,000
Total . . . . .	<u>\$133,000</u>	Total . . . . .	<u>\$133,000</u>

During liquidation, other assets are sold for \$80,000, liabilities are paid in full, and \$15,000 in liquidation expenses are paid. What amount of cash does each partner receive as a result of this liquidation?

- Playa, \$6,000; Bahia, \$4,500; Arco, \$4,500.
- Playa, \$10,000; Bahia, \$18,500; Arco, \$19,500.
- Playa, \$16,000; Bahia, \$23,000; Arco, \$24,000.
- Playa, \$19,200; Bahia, \$14,400; Arco, \$14,400.

## LO 15-1, 15-3, 15-4

8. A partnership has the following capital balances: X (50 percent of profits and losses) = \$150,000; Y (30 percent of profits and losses) = \$120,000; Z (20 percent of profits and losses) = \$80,000. If the partnership is to be liquidated and \$30,000 becomes immediately available, who gets that money?

- \$0 to X, \$18,000 to Y, \$12,000 to Z.
- \$15,000 to X, \$9,000 to Y, \$6,000 to Z.
- \$12,800 to X, \$8,600 to Y, \$8,600 to Z.
- \$24,000 to X, \$6,000 to Y, \$0 to Z.

## LO 15-5

9. A partnership is currently holding \$400,000 in assets and \$234,000 in liabilities. The partnership is to be liquidated, and \$20,000 is the best estimation of the expenses that will be incurred during this process. The four partners share profits and losses as shown. Capital balances at the start of the liquidation follow:

Kevin, capital (40%) . . . . .	\$59,000
Michael, capital (30%) . . . . .	39,000
Brendan, capital (10%) . . . . .	34,000
Jonathan, capital (20%) . . . . .	34,000

The partners realize that Brendan will be the first partner to start receiving cash. How much cash will Brendan receive before any of the other partners collect any cash?

- \$12,250
- \$14,750
- \$17,000
- \$19,500

## LO 15-5

10. Carney, Pierce, Menton, and Hoehn are partners who share profits and losses on a 4:3:2:1 basis, respectively. They are beginning to liquidate the business. At the start of this process, capital balances are

Carney, capital . . . . .	\$60,000
Pierce, capital . . . . .	27,000
Menton, capital . . . . .	43,000
Hoehn, capital . . . . .	20,000

Which of the following statements is true?

- The first available \$2,000 will go to Hoehn.
- Carney will be the last partner to receive any available cash.
- The first available \$3,000 will go to Menton.
- Carney will collect a portion of any available cash before Hoehn receives money.

## LO 15-3, 15-4

11. A partnership has gone through liquidation and now reports the following account balances:

Cash . . . . .	\$ 16,000
Loan from Jones . . . . .	3,000
Wayman, capital . . . . .	(2,000) (deficit)
Jones, capital . . . . .	(5,000) (deficit)
Fuller, capital . . . . .	13,000
Rogers, capital . . . . .	7,000

Profits and losses are allocated on the following basis: Wayman, 30 percent; Jones, 20 percent; Fuller, 30 percent; and Rogers, 20 percent. Which of the following events should occur now?

- Jones should receive \$3,000 cash because of the loan balance.
  - Fuller should receive \$11,800 and Rogers \$4,200.
  - Fuller should receive \$10,600 and Rogers \$5,400.
  - Jones should receive \$3,000, Fuller \$8,800, and Rogers \$4,200.
12. A partnership has the following account balances: Cash, \$70,000; Other Assets, \$540,000; Liabilities, \$260,000; Nixon (50 percent of profits and losses), \$170,000; Cleveland (30 percent), \$110,000; Pierce (20 percent), \$70,000. The company liquidates, and \$8,000 becomes available to the partners. Who gets the \$8,000?
13. A local partnership is liquidating and has only two assets (cash of \$10,000 and land with a cost of \$35,000). All partnership liabilities have been paid. All partners are personally insolvent. The partners have capital balances and share profits and losses as follows.

Brown, capital (40%) . . . . .	\$ 25,000
Fish, capital (30%) . . . . .	15,000
Stone, capital (30%) . . . . .	5,000

- If the land is sold for \$25,000, how much cash does each partner receive in a final settlement?
- If the land is sold for \$15,000, how much cash does each partner receive in a final settlement?
- If the land is sold for \$5,000, how much cash does each partner receive in a final settlement?

## LO 15-3

14. A local dental partnership has been liquidated and the final capital balances are

Atkinson, capital (40% of all profits and losses) . . . . .	\$ 70,000
Kaporale, capital (30%) . . . . .	30,000
Dennsmore, capital (20%) . . . . .	(42,000)
Rasputin, capital (10%) . . . . .	(58,000)

If Rasputin contributes additional cash of \$20,000 to the partnership, what should happen to it?

## LO 15-4

15. A partnership currently holds three assets: cash, \$10,000; land, \$35,000; and a building, \$50,000. The partnership has no liabilities. The partners anticipate that expenses required to liquidate their partnership will amount to \$5,000. Capital balances are

Ace, capital . . . . .	\$ 25,000
Ball, capital . . . . .	28,000
Eaton, capital . . . . .	20,000
Lake, capital . . . . .	22,000

The partners share profits and losses as follows: Ace (30 percent), Ball (30 percent), Eaton (20 percent), and Lake (20 percent). If a preliminary distribution of cash is to be made, what is the amount of safe payment that can be made to each partner?

**LO 15-4**

16. The following condensed balance sheet is for the partnership of Hardwick, Saunders, and Ferris, who share profits and losses in the ratio of 4:3:3, respectively:

Cash .....	\$ 90,000	Accounts payable .....	\$ 210,000
Other assets .....	820,000	Ferris, loan .....	40,000
Hardwick, loan .....	30,000	Hardwick, capital .....	300,000
		Saunders, capital .....	200,000
		Ferris, capital .....	190,000
Total assets .....	<u>\$940,000</u>	Total liabilities and capital ...	<u>\$ 940,000</u>

The partners decide to liquidate the partnership. Forty percent of the other assets are sold for \$200,000. Prepare a proposed schedule of liquidation at this point in time.

**LO 15-5**

17. The following condensed balance sheet is for the partnership of Miller, Tyson, and Watson, who share profits and losses in the ratio of 6:2:2, respectively:

Cash .....	\$ 50,000	Liabilities .....	\$ 42,000
Other assets .....	150,000	Miller, capital .....	69,000
		Tyson, capital .....	69,000
		Watson, capital .....	20,000
Total assets .....	<u>\$200,000</u>	Total liabilities and capital ...	<u>\$200,000</u>

For how much money must the other assets be sold so that each partner receives some amount of cash in a liquidation?

**LO 15-4**

18. The balance sheet for the Delphine, Xavier, and Olivier partnership follows:

Cash .....	\$ 60,000	Liabilities .....	\$ 40,000
Noncash assets .....	100,000	Delphine, capital .....	60,000
		Xavier, capital .....	40,000
		Olivier, capital .....	20,000
Total assets .....	<u>\$160,000</u>	Total liabilities and capital ...	<u>\$160,000</u>

Delphine, Xavier, and Olivier share profits and losses in the ratio of 4:4:2, respectively. The partners have agreed to terminate the business and estimate that \$12,000 in liquidation expenses will be incurred.

- What is the amount of cash that safely can be paid to partners prior to liquidation of noncash assets?
  - How should the safe amount of cash determined in (a) be distributed to the partners?
19. A partnership has liquidated all assets but still reports the following account balances:

The partners split profits and losses as follows: Cisneros, 40 percent; Beck, 20 percent; Sadak, 10 percent; Emerson, 20 percent; and Page 10 percent.

Beck, loan .....	\$ 8,000
Cisneros, capital (40%) .....	5,000
Beck, capital (20%) .....	(12,000) (deficit)
Sadak, capital (10%) .....	(8,000) (deficit)
Emerson, capital (20%) .....	13,000
Page, capital (10%) .....	(6,000) (deficit)

Assuming that all partners are personally insolvent except for Sadak and Emerson, how much cash must Sadak now contribute to this partnership?

**LO 15-4, 15-5**

20. The following balance sheet is for a local partnership in which the partners have become very unhappy with each other.

Cash .....	\$ 40,000	Liabilities.....	\$ 30,000
Land.....	130,000	Adams, capital.....	80,000
Building.....	120,000	Baker, capital.....	30,000
		Carvil, capital.....	60,000
		Dobbs, capital.....	90,000
Total assets .....	<u>\$290,000</u>	Total liabilities and capital...	<u>\$290,000</u>

To avoid more conflict, the partners have decided to cease operations and sell all assets. Using this information, answer the following questions. Each question should be viewed as an *independent* situation related to the partnership's liquidation.

- The \$10,000 cash that exceeds the partnership liabilities is to be disbursed immediately. If profits and losses are allocated to Adams, Baker, Carvil, and Dobbs on a 2:3:3:2 basis, respectively, how will the \$10,000 be divided?
  - The \$10,000 cash that exceeds the partnership liabilities is to be disbursed immediately. If profits and losses are allocated on a 2:2:3:3 basis, respectively, how will the \$10,000 be divided?
  - The building is immediately sold for \$70,000 to give total cash of \$110,000. The liabilities are then paid, leaving a cash balance of \$80,000. This cash is to be distributed to the partners. How much of this money will each partner receive if profits and losses are allocated to Adams, Baker, Carvil, and Dobbs on a 1:3:3:3 basis, respectively?
  - Assume that profits and losses are allocated to Adams, Baker, Carvil, and Dobbs on a 1:3:4:2 basis, respectively. How much money must the firm receive from selling the land and building to ensure that Carvil receives a portion?
21. Alex and Bess have been in partnership for many years. The partners, who share profits and losses on a 60:40 basis, respectively, wish to retire and have agreed to liquidate the business. Liquidation expenses are estimated to be \$5,000. At the date the partnership ceases operations, the balance sheet is as follows:

LO 15-2, 15-4

Cash .....	\$ 50,000	Liabilities.....	\$ 40,000
Noncash assets.....	<u>150,000</u>	Alex, capital.....	90,000
		Bess, capital.....	70,000
Total assets .....	<u>\$200,000</u>	Total liabilities and capital.....	<u>\$200,000</u>

### Part A

Prepare journal entries for the following transactions:

- Distributed safe cash payments to the partners.
- Paid \$30,000 of the partnership's liabilities.
- Sold noncash assets for \$160,000.
- Distributed safe cash payments to the partners.
- Paid remaining partnership liabilities of \$10,000.
- Paid \$4,000 in liquidation expenses; no further expenses will be incurred.
- Distributed remaining cash held by the business to the partners.

### Part B

Prepare a final statement of partnership liquidation.

22. The partnership of Larson, Norris, Spencer, and Harrison has decided to terminate operations and liquidate all business property. During this process, the partners expect to incur \$8,000 in liquidation expenses. All partners are currently solvent.

The balance sheet reported by this partnership at the time that the liquidation commenced follows. The percentages indicate the allocation of profits and losses to each of the four partners.

LO 15-5

Cash .....	\$ 28,250	Liabilities.....	\$ 47,000
Accounts receivable.....	44,000	Larson, capital (20%).....	15,000
Inventory.....	39,000	Norris, capital (30%).....	60,000
Land and buildings.....	23,000	Spencer, capital (20%).....	75,000
Equipment.....	<u>104,000</u>	Harrison, capital (30%).....	41,250
Total assets .....	<u>\$238,250</u>	Total liabilities and capital.....	<u>\$238,250</u>

Based on the information provided, prepare a predistribution plan for liquidating this partnership.

**LO 15-5**

23. The Drysdale, Koufax, and Marichal partnership has the following balance sheet immediately prior to liquidation:

Cash .....	\$ 36,000	Liabilities .....	\$50,000
Noncash assets .....	204,000	Drysdale, loan .....	10,000
		Drysdale, capital (50%) .....	70,000
		Koufax, capital (30%) .....	60,000
		Marichal, capital (20%) .....	50,000

- Liquidation expenses are estimated to be \$15,000. Prepare a predistribution schedule to guide the distribution of cash.
- Assume that assets costing \$74,000 are sold for \$60,000. How is the available cash to be divided?

**LO 15-5**

24. A local partnership is to be liquidated. Commissions and other liquidation expenses are expected to total \$19,000. The business's balance sheet prior to the commencement of liquidation is as follows:

Cash .....	\$ 27,000	Liabilities .....	\$ 40,000
Noncash assets .....	254,000	Simpson, capital (20%) .....	18,000
		Hart, capital (40%) .....	40,000
		Bobb, capital (20%) .....	48,000
		Reidl, capital (20%) .....	135,000
Total assets .....	<u>\$281,000</u>	Total liabilities and capital .....	<u>\$281,000</u>

Prepare a predistribution plan for this partnership.

**LO 15-3**

25. The partnership of Hendrick, Mitchum, and Redding has the following account balances:

Cash .....	\$ 50,000	Liabilities .....	\$ 30,000
Noncash assets .....	135,000	Hendrick, capital .....	100,000
		Mitchum, capital .....	70,000
		Redding, capital .....	(15,000)

This partnership is being liquidated. Hendrick and Mitchum are each entitled to 40 percent of all profits and losses with the remaining 20 percent going to Redding.

- What is the maximum amount that Redding might have to contribute to this partnership because of the deficit capital balance?
  - How should the \$20,000 cash that is presently available in excess of liabilities be distributed?
  - If the noncash assets are sold for a total of \$50,000, what is the minimum amount of cash that Hendrick could receive?
26. The partnership of Anderson, Berry, Hammond, and Winwood is being liquidated. It currently holds cash of \$20,000 but no other assets. Liabilities amount to \$30,000. The capital balances are

Anderson (40% of profits and losses) .....	\$ 20,000
Berry (30%) .....	12,000
Hammond (20%) .....	(17,000) (deficit)
Winwood (10%) .....	(25,000) (deficit)

- If both Hammond and Winwood are personally insolvent, how much money must Berry contribute to this partnership?
  - If only Winwood is personally insolvent, how much money must Hammond contribute to the partnership? How will these funds be disbursed?
  - If only Hammond is personally insolvent, how much money should Anderson receive from the liquidation?
27. March, April, and May have been in partnership for a number of years. The partners allocate all profits and losses on a 2:3:1 basis, respectively. Recently, each partner has become personally insolvent and, thus, the partners have decided to liquidate the business in hopes of remedying their personal financial problems. As of September 1, the partnership's balance sheet is as follows:

**LO 15-2**

Cash .....	\$ 11,000	Liabilities .....	\$ 61,000
Accounts receivable .....	84,000	March, capital .....	25,000
Inventory .....	74,000	April, capital .....	75,000
Land, building, and equipment (net) .....	<u>38,000</u>	May, capital .....	<u>46,000</u>
Total assets .....	<u>\$207,000</u>	Total liabilities and capital .....	<u>\$207,000</u>

Prepare journal entries for the following transactions:

- Sold all inventory for \$56,000 cash.
- Paid \$7,500 in liquidation expenses.
- Paid \$40,000 of the partnership's liabilities.
- Collected \$45,000 of the accounts receivable.
- Distributed safe cash balances; the partners anticipate no further liquidation expenses.
- Sold remaining accounts receivable for 30 percent of face value.
- Sold land, building, and equipment for \$17,000.
- Paid all remaining liabilities of the partnership.
- Distributed cash held by the business to the partners.

## LO 15-5

28. The partnership of Winn, Xie, Yang, and Zed has the following balance sheet:

Cash .....	\$ 40,000	Liabilities .....	\$ 66,000
Other assets .....	300,000	Winn, capital (50% of profits and losses) .....	100,000
		Xie, capital (30%) .....	84,000
		Yang, capital (10%) .....	50,000
		Zed, capital (10%) .....	40,000

Zed is personally insolvent, and one of his creditors is considering suing the partnership for the \$10,000 that is currently owed. The creditor realizes that this litigation could result in partnership liquidation and does not wish to force such an extreme action unless Zed is reasonably sure of obtaining at least \$10,000 from the liquidation.

Determine the amount for which the partnership must sell the other assets to ensure that Zed receives \$10,000 from the liquidation. Liquidation expenses are expected to be \$30,000.

## LO 15-4

29. On January 1, the partners of Van, Bakel, and Cox (who share profits and losses in the ratio of 5:3:2, respectively) decide to liquidate their partnership. The trial balance at this date follows:

	Debit	Credit
Cash .....	\$ 28,000	
Accounts receivable .....	86,000	
Inventory .....	72,000	
Machinery and equipment, net. ....	209,000	
Van, loan .....	50,000	
Accounts payable .....		\$ 93,000
Bakel, loan .....		40,000
Van, capital .....		128,000
Bakel, capital .....		100,000
Cox, capital .....		84,000
Totals .....	<u>\$445,000</u>	<u>\$445,000</u>

The partners plan a program of piecemeal conversion of the partnership's assets to minimize liquidation losses. All available cash, less an amount retained to provide for future expenses, is to be distributed to the partners at the end of each month. A summary of the liquidation transactions follows:

January      Collected \$51,000 of the accounts receivable; the balance is deemed uncollectible.  
                  Received \$48,000 for the entire inventory.  
                  Paid \$4,000 in liquidation expenses.

(continued)



(continued)

	Paid \$88,000 to the outside creditors after offsetting a \$5,000 credit memorandum received by the partnership on January 11.
	Retained \$20,000 cash in the business at the end of January to cover any unrecorded liabilities and anticipated expenses. The remainder is distributed to the partners.
February	Paid \$5,000 in liquidation expenses.
	Retained \$8,000 cash in the business at the end of the month to cover unrecorded liabilities and anticipated expenses.
March	Received \$156,000 on the sale of all machinery and equipment.
	Paid \$7,000 in final liquidation expenses.
	Retained no cash in the business.

Prepare a schedule to compute the safe installment payments made to the partners at the end of each of these three months.

**LO 15-1, 15-3**

30. Following is a series of *independent cases*. In each situation, indicate the cash distribution to be made to partners at the end of the liquidation process. *Unless otherwise stated, assume that all solvent partners will reimburse the partnership for their deficit capital balances.*

**Part A**

The Buarque, Monte, and Vinicius partnership reports the following accounts. Vinicius is personally insolvent and can contribute only an additional \$9,000 to the partnership.

Cash .....	\$ 130,000
Liabilities.....	35,000
Monte, loan .....	20,000
Buarque, capital (50% of profits and losses) .....	50,000
Monte, capital (25%).....	40,000
Vinicius, capital (25%).....	(15,000) (deficit)

**Part B**

Drawdy, Langston, and Pearl operate a local accounting firm as a partnership. After working together for several years, they have decided to liquidate the partnership's property. The partners have prepared the following balance sheet:

Cash .....	\$ 20,000	Liabilities.....	\$ 40,000
Drawdy, loan .....	5,000	Langston, loan.....	8,000
Noncash assets.....	150,000	Drawdy, capital (40%).....	65,000
		Langston, capital (30%).....	50,000
		Pearl, capital (30%).....	12,000
Total assets .....	<u>\$175,000</u>	Total liabilities and capital ..	<u>\$175,000</u>

The firm sells the noncash assets for \$120,000; it will use \$15,000 of this amount to pay liquidation expenses. All three of these partners are personally insolvent.

**Part C**

Use the same information as in Part B, but assume that the profits and losses are split 2:4:4 to Drawdy, Langston, and Pearl, respectively, and that liquidation expenses are only \$6,000.

**Part D**

Following the liquidation of all noncash assets, the partnership of Krups, Lindau, Riedel, and Schnee has the following account balances. Krups is personally insolvent.

Liabilities.....	\$ 9,000
Krups, loan .....	6,000
Krups, capital (30% of profits and losses).....	(20,000) deficit
Lindau, capital (30%).....	(30,000) deficit
Riedel, capital (20%).....	15,000
Schnee, capital (20%).....	20,000

## LO 15-1, 15-2, 15-5

31. The partnership of Frick, Wilson, and Clarke has elected to cease all operations and liquidate its business property. A balance sheet drawn up at this time shows the following account balances:

Cash .....	\$ 60,000	Liabilities.....	\$ 40,000
Noncash assets.....	219,000	Frick, capital (60%) .....	129,000
		Wilson, capital (20%).....	35,000
		Clarke, capital (20%).....	75,000
Total assets .....	<u>\$279,000</u>	Total liabilities and capital.....	<u>\$279,000</u>

**Part A**

Prepare a predistribution plan for this partnership

**Part B**

The following transactions occur in liquidating this business:

1. Distributed cash based on safe capital balances immediately to the partners. Liquidation expenses of \$8,000 are estimated as a basis for this computation.
2. Sold noncash assets with a book value of \$94,000 for \$60,000.
3. Paid all liabilities.
4. Distributed cash based on safe capital balances again.
5. Sold remaining noncash assets for \$51,000.
6. Paid actual liquidation expenses of \$6,000 only.
7. Distributed remaining cash to the partners and closed the financial records of the business permanently.

Produce a final statement of liquidation for this partnership using the predistribution plan to determine payments of cash to partners based on safe capital balances.

**Part C**

Prepare journal entries to record the liquidation transactions reflected in the final statement of liquidation.

## LO 15-2, 15-5

32. **Part A**

The partnership of Wingler, Norris, Rodgers, and Guthrie was formed several years ago as a local architectural firm. Several partners have recently undergone personal financial problems and have decided to terminate operations and liquidate the business. The following balance sheet is drawn up as a guideline for this process:

Cash .....	\$ 15,000	Liabilities.....	\$ 74,000
Accounts receivable.....	82,000	Rodgers, loan.....	35,000
Inventory.....	101,000	Wingler, capital (30%).....	120,000
Land.....	85,000	Norris, capital (10%).....	88,000
Building and equipment (net).....	168,000	Rodgers, capital (20%).....	74,000
		Guthrie, capital (40%).....	60,000
Total assets .....	<u>\$451,000</u>	Total liabilities and capital....	<u>\$451,000</u>

When the liquidation commenced, liquidation expenses of \$16,000 were anticipated as being necessary to dispose of all property.

Prepare a predistribution plan for this partnership.

**Part B**

The following transactions transpire during the liquidation of the Wingler, Norris, Rodgers, and Guthrie partnership:

1. Collected 80 percent of the total accounts receivable with the rest judged to be uncollectible.
2. Sold the land, building, and equipment for \$150,000.
3. Made safe capital distributions.
4. Learned that Guthrie, who has become personally insolvent, will make no further contributions.
5. Paid all liabilities.

6. Sold all inventory for \$71,000.
  7. Made safe capital distributions again.
  8. Paid actual liquidation expenses of \$11,000 only.
  9. Made final cash disbursements to the partners based on the assumption that all partners other than Guthrie are personally solvent.
- Prepare journal entries to record these liquidation transactions.

**LO 15-2, 15-5****33. Part A**

The partnership of Butler, Osman, and Ward was formed several years as a local tax preparation firm. Two partners have reached retirement age and the partners have decided to terminate operations and liquidate the business. Liquidation expenses of \$34,000 are expected. The partnership balance sheet at the start of liquidation is as follows:

Cash . . . . .	\$ 30,000	Liabilities . . . . .	\$170,000
Accounts receivable . . . . .	60,000	Butler, loan . . . . .	30,000
Office equipment (net) . . . . .	50,000	Butler, capital (25%) . . . . .	50,000
Building (net) . . . . .	110,000	Osman, capital (25%) . . . . .	30,000
Land . . . . .	<u>100,000</u>	Ward, capital (50%) . . . . .	<u>70,000</u>
Total assets . . . . .	<u>\$350,000</u>	Total liabilities and capital . . . . .	<u>\$350,000</u>

Prepare a predistribution plan for this partnership.

**Part B**

The following transactions transpire in chronological order during the liquidation of the partnership:

1. Collected 90 percent of the accounts receivable and wrote the remainder off as uncollectible.
2. Sold the office equipment for \$20,000, the building for \$80,000, and the land for \$120,000.
3. Made safe capital distributions.
4. Paid all liabilities in full.
5. Paid actual liquidation expenses of \$30,000 only.
6. Made final cash distributions to the partners.

Prepare journal entries to record these liquidation transactions.

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## Develop Your Skills

### RESEARCH CASE



A client of the CPA firm of Harston and Mendez is a medical practice of seven local doctors. One doctor has been sued for several million dollars as the result of a recent operation. Because of what appears to be this doctor's very poor judgment, a patient died. Although that doctor was solely involved with the patient in question, the lawsuit names the entire practice as a defendant. Originally, four of these doctors formed this business as a general partnership. However, five years ago, the partners converted the business to a limited liability partnership based on the laws of the state in which they operate.

Read the following articles as well as any other published information that is available on partner and partnership liability:

"Partners Forever? Within Andersen, Personal Liability May Bring Ruin," *The Wall Street Journal*, April 2, 2002, p. C1.

"Collapse: Speed of Andersen's Demise Amazing," *Milwaukee Journal Sentinel*, June 16, 2002, p. D1.

**Required**

Based on the facts presented in this case, answer these questions:

1. What liability do the other six partners in this medical practice have in connection with this lawsuit?
2. What factors will be important in determining the exact liability (if any) of these six doctors?

## ANALYSIS CASE



Go to the website [www.napico.com](http://www.napico.com) and click on “Partnership Financial Information—Click Here.” Then click on “2015 Annual Reports” to access the Form 10-K annual report for Real Estate Associates Limited II (Real II).

Read the financial statements contained in the 2015 annual report and the accompanying notes, especially any that discuss the partnership form of organization.

Assume that an investor is considering investing in this partnership and has downloaded this report for study and analysis.

### Required

1. What differences exist between Real II’s financial statements and those of a corporation?
2. Assume that this investor is not aware of the potential implications of investing in a partnership rather than a corporation. What information is available in these statements to advise this individual of the unique characteristics of this legal business form?

## COMMUNICATION CASE



Read the following as well as any other published articles on the bankruptcy of the partnership of Laventhol & Horwath:

“Laventhol Says It Plans to File for Chapter 11,” *The Wall Street Journal*, November 20, 1990, p. A3.

“Laventhol Partners Face Long Process That Could End in Personal Bankruptcy,” *The Wall Street Journal*, November 20, 1990, p. B5.

“Laventhol Bankruptcy Filing Indicates Liabilities May Be as Much as \$2 Billion,” *The Wall Street Journal*, November 23, 1990, p. A4.

### Required

Write a report describing the potential liabilities that the members of a partnership could incur.

## EXCEL CASE



The partnership of Wilson, Cho, and Arrington has the following account information:

Partner	Capital Balance	Share of Profits and Losses
Wilson	\$200,000	40%
Cho	180,000	20
Arrington	110,000	40

This partnership will be liquidated, and the partners are scheduled to receive cash equal to any ending positive capital balance. If a negative capital balance results, the partner is expected to contribute that amount.

Assume that losses of \$50,000 occur during the liquidation followed later by additional and final losses of \$100,000.

### Required

1. Create a spreadsheet to determine the capital balances that remain for each of the three partners after these two losses are incurred.
2. Modify this spreadsheet so that it can be used for different capital balances, different allocation patterns, and different liquidation gains and losses.



# Accounting for State and Local Governments (Part 1)

“Financial statements prepared by state and local governments in conformity with generally accepted accounting principles provide citizens and taxpayers, legislative and oversight bodies, municipal bond analysts, and others with information they need to evaluate the financial health of governments, make decisions, and assess accountability. This information is intended, among other things, to assist these users of financial statements in assessing (1) whether a government’s current-year revenues were sufficient to pay for current-year services (known as interperiod equity), (2) whether a government complied with finance-related legal and contractual obligations, (3) where a government’s financial resources come from and how it uses them, and (4) a government’s financial position and economic condition and how they have changed over time.”<sup>1</sup>

**T**o even a seasoned veteran of accounting, the financial statements produced by a state or local government can appear to be written in a complex foreign language.

- The 2014 financial statements for Bismarck, North Dakota, report several other financing sources and uses for the city’s governmental funds that include \$26.9 million from transfers-in and \$28.7 million for transfers-out.
- The June 30, 2014, balance sheet for the governmental funds of Portland, Maine, reports total fund balances of \$97.2 million.
- The 2015 comprehensive annual financial report (CAFR) for Phoenix, Arizona, contains more than 300 pages of data including the dollar amounts of expenditures made in connection with public safety (\$826.5 million), community enrichment (\$194.4 million), and environmental services (\$16.9 million).
- For 2015, Greensboro, North Carolina, reports two complete and distinct sets of financial statements. The first discloses that the city’s governmental activities owed \$559.8 million in liabilities as of June 30, 2015, whereas the second indicates that, at the same point in time, the city’s governmental funds owed only \$15.9 million in liabilities.
- The June 30, 2015, balance sheet for Nashville and Davidson County, Tennessee, reports total deferred outflows of resources of \$247.9 million along with total deferred inflows of resources of \$1.08 billion.

Even a quick perusal of such information points to fundamental differences between state and local government accounting and the reporting associated with the financial statements created for a for-profit entity. These differences are not accidental. The financial statements produced by state and

## Learning Objectives

**After studying this chapter, you should be able to:**

- LO 16-1** Explain the history of and the reasons for the unique characteristics of the financial statements produced by state and local governments.
- LO 16-2** Differentiate between the two sets of financial statements produced by state and local governments.
- LO 16-3** Understand the reason that fund accounting has traditionally been a prominent factor in the internal recording of state and local governments.
- LO 16-4** Identify the three fund types and the individual fund categories within each.
- LO 16-5** Understand the basic structure of government-wide financial statements and fund financial statements (as produced for the governmental funds).
- LO 16-6** Record the passage of a budget as well as subsequent encumbrances and expenditures.
- LO 16-7** Understand the reporting of capital assets, supplies, and prepaid expenses by a state or local government.
- LO 16-8** Determine the proper timing for the recognition of revenues from various types of nonexchange transactions.
- LO 16-9** Account for the issuance of long-term bonds.
- LO 16-10** Account for special assessment projects.
- LO 16-11** Record the various types of monetary transfers that occur within the funds maintained by a state or local government.

<sup>1</sup>From GASB Statement 77, *Tax Abatement Disclosures*, August 2015.

local governments are unique for many specific reasons. This chapter and the next present the principles and practices that underlie state and local government accounting and explain the logic behind their application.

These chapters are designed to demonstrate a wide variety of reporting procedures. They also explain the evolution that has led state and local governments to produce financial statements that are markedly different from those of for-profit entities.

### LO 16-1

Explain the history of and the reasons for the unique characteristics of the financial statements produced by state and local governments.

## Introduction to the Financial Reporting for State and Local Governments

In the United States, thousands of state and local governments touch the lives of the citizenry on a daily basis. In addition to the federal and 50 state governments, 90,056 local governments existed as of the most recent census of governments in 2012. Of these, 38,910 were general purpose local governments—3,031 county governments and 35,879 subcounty governments (19,519 municipal governments and 16,360 township governments). The remainder, which comprised more than half of the total, were special purpose local governments that performed only one function or a very limited number of functions: 12,880 school districts and school system governments and 38,266 special district governments.<sup>2</sup>

Actions of one or more governments affect virtually every citizen each day. Nearly 14.4 million people are employed by state and local governments. Income and sales taxes are collected, property taxes are assessed, schools provide education, police and fire departments maintain public safety, garbage is collected, and roads are paved.<sup>3</sup>

When seeking to understand the financial reporting for state and local governments, the first question that should be addressed is whether a complete set of specialized accounting principles is necessary. Could the financial information of a state or local government be presented fairly by applying the same rules and procedures as a for-profit entity such as Microsoft or Google? In response to that basic question, several major differences were identified in a study by the Governmental Accounting Standards Board (GASB).

“The primary purpose of governments is to enhance or maintain the well-being of citizens by providing services in accordance with public policy goals. In contrast, business enterprises focus primarily on wealth creation, interacting principally with those segments of society that fulfill their mission of generating a financial return on investment for shareholders.”

“The white paper cites several other crucial differences that generate user demand for unique information:

- Governments serve a broader group of stakeholders, including taxpayers, citizens, elected representatives, oversight groups, bondholders, and others in the financial community.
- Monitoring actual compliance with budgeted public policy priorities is central to government public accountability reporting.
- Governments exist longer than for-profit businesses and are not typically subject to bankruptcy and dissolution.”<sup>4</sup>

Accounting for state and local governments is not merely a matching of expenses with recognized revenues so that net income can be determined. The setting of tax rates and allocation of limited financial resources among such worthy causes as education, police protection, welfare, and the environment create heated debates throughout the nation. Without a profit motive, what should be reported by a government and who are the potential users of that financial information? To keep the public informed, government reporting has focused

<sup>2</sup> Government Organization Summary Report: 2012 by Carma Hogue, released September 26, 2013. [http://www2.census.gov/govs/cog/g12\\_org.pdf](http://www2.census.gov/govs/cog/g12_org.pdf)

<sup>3</sup> <http://www.census.gov/govs/apes/>

<sup>4</sup> “Users of Governmental Financial Reports Require Substantially Different Information than Users of Business Financial Reports,” News Release, March 16, 2006, [http://www.gasb.org/cs/ContentServer?pagename=GASB%2FGASBContent\\_C%2FGASBNewsPage&cid=1176156736250](http://www.gasb.org/cs/ContentServer?pagename=GASB%2FGASBContent_C%2FGASBNewsPage&cid=1176156736250).

historically on identifying the sources of current financial resources and the uses made of those resources.

Indeed, this approach is appropriate for the short-term decisions necessitated by the gathering and utilizing of current financial resources by government officials to carry out public policy. For the longer term, information to reflect the overall financial stability of the government is also needed, especially by creditors who provide funding often through the acquisition of government-issued bonds.

Hence, state and local government officials face a number of unique financial reporting challenges. Those issues are addressed by GASB, which was created in 1984 to serve as the public sector counterpart of the Financial Accounting Standards Board (FASB). GASB holds the primary responsibility in the United States for setting authoritative accounting standards for state and local government units.<sup>5</sup> In the same manner as FASB, GASB is an independent body functioning under the oversight of the Financial Accounting Foundation. Much of this chapter and the next reflect the efforts by GASB to provide relevant information to a wide array of individuals and groups interested in assessing both resource allocation decisions and the financial health of a particular government.<sup>6</sup>

### Governmental Accounting—User Needs

The unique aspects of any accounting system should be a direct result of the needs of the people who use the financial statements. Identifying those informational requirements is a logical first step in the study of state and local government accounting. Financial reporting procedures are, thus, best understood as an outgrowth of user needs.

In *Concepts Statement No. 1*, “Objectives of Financial Reporting,” GASB recognized this challenge by identifying several distinct groups of primary users of external state and local governmental financial reports:

**Citizenry**—Want to evaluate the likelihood of tax or service fee increases, to determine the sources and uses of resources, and to forecast revenues in order to influence spending decisions.

**Legislative and oversight bodies**—Want to assess the overall financial condition when developing budgets and program recommendations, to monitor operating results to assure compliance with mandates, to determine the reasonableness of fees and the need for tax changes, and to ascertain the ability to finance new programs and capital needs.

**Investors and creditors**—Want to know the amount of available and likely future financial resources, to measure the debt position and the ability to service that debt.<sup>7</sup>

Thus, the quest for useful government reporting encounters a significant obstacle: User needs are so broad that no one set of financial statements or accounting principles can satisfy all expectations. How can voters, bondholders, city officials, and all of the other users of the financial statements produced by state and local governments receive the information they need for decision-making purposes? How can statements that are prepared for citizens also be sufficient for the needs of creditors and investors?

#### LO 16-2

Differentiate between the two sets of financial statements produced by state and local governments.

### Two Sets of Financial Statements

Eventually, the desire to provide information that could satisfy such broad demands led GASB to require the production of two separate sets of financial statements by state and local

<sup>5</sup> The National Committee on Municipal Accounting held the authority for state and local government accounting from 1934 until 1941. The National Committee on Governmental Accounting, a quasi-independent agency of the Government Finance Officers Association, established government accounting principles from 1949 through 1954 and again from 1967 until 1983 when GASB was formed. During several time periods, no group held primary responsibility for the development of governmental accounting. For an overview of the work of GASB, see Terry K. Patton and Robert J. Freeman, “The GASB Turns 25: A Retrospective,” *Government Finance Review*, April 2009.

<sup>6</sup> In 1990, the Director of the Office of Management and Budget, the Secretary of the Treasury, and the Comptroller General created the Federal Accounting Standards Advisory Board (FASAB). FASAB recommends accounting principles and standards for the U.S. federal government and its agencies to use. Information about FASAB can be found at *Journal of Government Finance Management*.

<sup>7</sup> Government Accounting Standards Board, *Codification of Governmental Accounting and Financial Reporting Standards as of June 30, 2012* (Norwalk, CT, 2012), Appendix B, *Concepts Statement No. 1*, par. 35–37.



governments, each with its own unique principles and objectives. For a complete understanding of state and local government accounting, nothing is more essential than recognizing the need for reporting two sets of statements:

1. **Fund financial statements** provide a picture of the current activities of the government. They report current period revenues and expenditures in connection with individual government functions. These statements also focus on disclosing restrictions that have been placed on the use of any of the financial resources held by these functions. Citizens interested in the operation of the government are likely to study the fund financial statements.
2. **Government-wide financial statements** have a longer-term focus. They report all revenues and all costs as well as all assets and liabilities. Creditors, especially bondholders, are likely to be most interested in government-wide financial statements as they assess the likelihood of being paid when obligations come due.

### ***Fund Financial Statements***

Fund financial statements have long been reported by state and local governments. They present individual government activities and the amount of financial resources allocated to them as well as the use made of those resources. By analyzing such statements, citizens can assess the government's fiscal accountability in raising and utilizing money. For example, fund financial statements report the amount spent during the current year on such services as public safety, education, health and sanitation, and the construction of new roads. The primary measurement focus, at least for public service activities, is the amount and changes in *current financial resources* such as cash and receivables. Those are assets that can be spent. In most cases, the timing of recognition is based on *modified accrual accounting*. Modified accrual accounting recognizes (1) revenues when the resulting current financial resources are both measurable and available to be used and (2) expenditures when they reduce current financial resources.

In applying modified accrual accounting, identifying when financial resources are available to be used for current-period expenditures is an important decision. The term "available to be used" means that current financial resources will be received soon enough in the future so that they can be used to pay for current period expenditures. The determination of what is meant by "soon enough" is up to the reporting government.

For example, in 2015, the City of Norfolk, Virginia, disclosed that "the City generally considers revenues, except for grant revenues, to be available if they are collected within 45 days of the end of the fiscal year." Therefore, using modified accrual accounting, a 2015 revenue collected by the City of Norfolk within the first 45 days of 2016 is recognized in 2015 because the money was available to pay for 2015 expenditures. In contrast, the City of Richmond, Virginia, applies a policy of two months and the City of Raleigh, North Carolina, uses 90 days. As shown by these cities, the definition of available to be used can vary from one government to the next. The one exception under modified accrual accounting is the recognition of property taxes where a 60-day maximum period is mandated.

### ***Government-Wide Financial Statements***

Government-wide financial statements have only been in existence for a little over 15 years. They were created to present information about a government's financial affairs as a whole. These statements provide a method of assessing operational accountability, the government's ability to meet its operating objectives. This information helps users make evaluations of the financial decisions and long-term stability of the government by allowing them to:

- Determine whether the government's overall financial position improved or deteriorated during the reporting period.
- Understand the cost of providing services to the citizenry.
- See how the government finances its programs.
- Understand the extent to which the government has invested in capital assets, such as roads, bridges, and other infrastructure assets.

This information has become especially relevant in recent years as a number of governments have declared bankruptcy (such as San Bernardino, CA; Stockton, CA; Jefferson County, AL; and Detroit, MI) while others face daunting financial difficulties.<sup>8</sup> The need to assess the risk of financial instability becomes an ever more important aspect of state and local government accounting.

To achieve these reporting goals, the government-wide financial statements' measurement focus is on all *economic resources* (not just current financial resources), and these statements utilize *accrual accounting* for timing purposes much like a for-profit entity. Consequently, these statements report all assets and liabilities (and deferred inflows and outflows of resources) and recognize revenues and expenses in a way that is comparable to business-type accounting.

## The Advantage of Reporting Two Sets of Financial Statements

One aspect of governmental reporting has remained constant over the years: the goal of making the government and its officials accountable to the public. Because of the essential role of democracy within U.S. society, the creators of accounting principles have attempted to provide a vehicle for evaluating governmental actions. Citizens should be aware of the methods officials use to raise money and then the allocation made of those scarce financial resources.

Most citizens are both voters and taxpayers. They are especially interested in the results obtained from their involuntary contributions to the government in the form of taxes and tolls. Because elected and appointed officials hold authority over the public's money, governmental reporting has traditionally stressed this stewardship responsibility.

Accountability is the cornerstone of all financial reporting in government. . . . Accountability requires governments to answer to the citizenry—to justify the raising of public resources and the purposes for which they are used. Governmental accountability is based on the belief that the citizenry has a “right to know,” a right to receive openly declared facts that may lead to public debate by the citizens and their elected representatives.<sup>9</sup>

To promote transparency, governmental reporting has historically been directed toward measuring and identifying the current financial resources generated and expended by the various government functions. Fund financial statements allow readers to focus on individual activities. At least in connection with public services, such as the police department and public library, the fund statements answer three relevant questions:

- How did a particular part of the government generate current financial resources?
- Where did those current financial resources go?
- What amount of those current financial resources is presently held?

The term *current financial resources* normally encompasses the monetary assets available for officials to spend to meet the government's needs during the present budget period. Thus, when reporting current financial resources, a government is primarily monitoring cash, investments, and receivables as well as any current claims to those resources. Historically, virtually no emphasis has been placed on accounts such as Buildings, Equipment, and Long-Term Debts that have no direct impact on current financial resources.

Stressing accountability by monitoring the inflows and outflows of current financial resources is an approach that cannot meet all user needs. Prior to the creation of government-wide financial statements, many conventional reporting objectives were ignored. For example, does the government have too much debt to service? As a result, investors and creditors were frequently sharp critics of governmental accounting. “When cities get into financial trouble, few citizens know about it until the day the interest can't be met or the

<sup>8</sup> A fascinating picture of a government in financial crisis can be found at <http://www.npr.org/blogs/money/2012/03/23/149057880/how-a-city-goes-broke>, which details the difficulties of governing Harrisburg, PA, as it fights through a series of bad financial decisions.

<sup>9</sup> GASB, *Codification*, Appendix B, *Concepts Statement No. 1*, par 56.

teachers paid. . . . Had the books been kept like any decent corporation's that could never have happened."<sup>10</sup>

Consequently, in 1998, GASB created an entirely new dimension for government reporting. A new standard was created to mandate that separate government-wide financial statements be included in the general purpose financial reporting for a state or local government. This second set of statements reports all assets and other resources at the disposal of government officials as well as all liabilities that must eventually be paid. Revenues and expenses are recognized according to accrual accounting to provide a completely different perspective from fund financial statements.

With two sets of financial statements, each user (whether citizen, creditor, or other interested party) can select the information considered to be the most relevant. Of course, not everyone believes that this additional data will always be helpful. "One of the tougher challenges of the current information age is sorting out the information most relevant for decision making from the vast amounts of data generated by today's state-of-the-art information systems. Financial reports cannot simply keep growing in size indefinitely to encompass every new type of information that becomes available."<sup>11</sup>

	<b>Fund Financial Statements*</b>	<b>Government-Wide Financial Statements</b>
Emphasis	Individual activities (during current period).	Government as a whole.
Measurement focus	Current financial resources (cash, investments, and receivables and claims to those assets).	All economic resources (all assets, liabilities, and other resources).
General information	Inflows and outflows of current financial resources.	Overall financial health.
Timing of recognition	Modified accrual accounting.	Accrual accounting.

\*The information provided here for fund financial statements only applies to public service activities such as public safety and education. As will be discussed shortly, other activities in fund financial statements are reported more in keeping with government-wide financial statements.

### LO 16-3

Understand the reason that fund accounting has traditionally been a prominent factor in the internal recording of state and local governments.

## Internal Record-Keeping—Fund Accounting

In gathering financial information, state and local governments have always faced the challenge of reporting a diverse array of activities financed from numerous sources. Accountability and control become special concerns for governments that operate through a multitude of relatively independent departments and functions. Consequently, for internal monitoring purposes, the accounting for many government activities is maintained in a separate quasi-independent bookkeeping system referred to as a *fund* with its own complete set of accounts and balances. In this way, information can be accumulated and organized for every activity (the school system, debt payment, road construction, and the like).

For decades, internal information gathered in this manner has served as the foundation for fund financial statements. An underlying assumption of government reporting has long been that most statement users prefer to see information segregated by function in order to assess each activity individually. How much money did the fire department receive and what was done with that money? The internal accounting records provided that information and the figures were transcribed directly into fund financial statements for external distribution.

Because no common profit motive exists to tie various functions and services together, consolidated activity balances were historically not presented. Combining financial results from the city zoo, fire department, water system, print shop, and a wide variety of other operations would provide figures of questionable utility especially if accountability and control over the usage of current financial resources are primary goals. Financial reporting was designed to provide information about individual activities, not the government as a whole.

<sup>10</sup> Richard Greene, "You Can't Fight City Hall—If You Can't Understand It," *Forbes*, March 3, 1980, p. 92.

<sup>11</sup> Jeffrey L. Esser, "Standard Setting—How Much Is Enough?" *Government Finance Review*, April 2005, p. 3.

The addition of government-wide statements does not affect the use of fund accounting. Consequently, the separate funds monitored by a state or local government still serve as the basic foundation for internal reporting. Although a single list of identifiable functions is not possible, the following are performed by many governments. As will be shown below, most of these are departments or agencies reported within the government's general fund. Some, though, are monitored within separate funds for control purposes or because the nature is different from a typical government activity.

Public safety	Judicial system
Highway maintenance	Debt repayment
Sanitation	Bridge construction
Health	Water and sewer system
Welfare	Municipal swimming pool
Culture and recreation	Data processing center
Education	Endowment funds
Parks	Employee pensions

The number of funds in use depends on the extent of services that the government provides and the grouping of related activities. For example, separate funds might be set up to account for a high school and its athletic programs, or these activities may be combined into a single fund.

Only the minimum number of funds consistent with legal and operating requirements should be established, however, because unnecessary funds result in inflexibility, undue complexity, and inefficient financial administration.<sup>12</sup>

The requirement that government-wide financial statements must be reported along with fund financial statements was a radical advancement designed to communicate the overall financial health of the government to a broader array of decision makers. One significant outcome was that governments had to start reporting information (the total cost of roads, for example) that had never been accumulated previously because fund accounting monitors changes in current financial resources. As will be seen, a considerable amount of additional information is required to create financial statements that report all of the economic resources of the government as a whole.

#### LO 16-4

Identify the three fund types and the individual fund categories within each.

### Fund Accounting Classifications

For internal record-keeping, all funds (whether accounting for the police department, the municipal golf course, or some other activity) are identified within one of three distinct categories. This classification system provides clearer reporting of the government's various activities. Furthermore, dividing funds into separate groups allows for unique accounting principles to be applied to each.

- *Governmental funds*—include all funds that account for activities a government carries out to provide citizens with services that are financed primarily through taxes and other general revenue sources. For that reason, the fire department and the schools systems are reported within the governmental funds.
- *Proprietary funds*—account for a government's ongoing activities that are similar to those conducted by a for-profit entity. This fund type encompasses operations that assess a user charge so that determining profitability or cost recovery is important. For example, both a municipal golf course and a toll road are typically reported within the proprietary funds.
- *Fiduciary funds*—account for monies held by the government in a trustee or agency capacity. Such assets must be maintained for others and cannot be used by officials for government programs. One common example is the monitoring of assets held in a pension plan for government employees such as teachers or sanitation workers.

<sup>12</sup> GASB, *Codification*, Sec. 1100.104.

### **Governmental Funds**

In many state and municipal accounting systems, governmental funds tend to dominate because a service orientation usually prevails. The internal accounting system maintains individual funds for every distinct service function: public safety, libraries, construction of a town hall, and so on.

Each governmental fund accumulates and expends current financial resources to achieve one or more desired public goals. To provide better reported information and control, governmental funds are subdivided into five fund types: the general fund, special revenue funds, capital projects funds, debt service funds, and permanent funds. This classification system forms an overall structure for financial reporting purposes.

**The General Fund** GASB's definition of the general fund appears to be somewhat understated: "to account for and report all financial resources not accounted for and reported in another fund."<sup>13</sup> This description seems to imply that the general fund records only miscellaneous revenues and expenditures when, in actuality, it reports many of a government's most important ongoing functions. For example, the 2013 fund financial statements for the City of Baltimore, Maryland, disclosed 11 major areas of current expenditures within its general fund:

General government	Recreation and culture
Public safety and regulations	Highways and streets
Conservation of health	Sanitation and waste removal
Social services	Public service
Education	Economic development
Public library	

Expenditures reported for these categories were in excess of \$1.49 billion and made up more than 73 percent of the total for all of the city's governmental funds for the year ended June 30, 2013.

**Special Revenue Funds** Special revenue funds account for resources that are restricted or committed for a specific purpose other than debt payments or capital projects. Because of donor stipulations or legislative mandates, these financial resources must be spent in a designated fashion. Saint Paul, Minnesota, for example, reported 16 individual special revenue funds during the 2014 fiscal year. Sources were as diverse as a city sales tax, administration fees for charitable gambling, and money received from solid waste and recycling programs.

The special revenue funds category is used to record these monies because legal or donor restrictions were attached to the revenue to require that expenditure be limited to specific operating purposes. As an example, according to Saint Paul's comprehensive annual financial report, a special revenue fund designated for "Street Lighting Districts" serves "to account for levied assessments used to operate above standard (ornamental) street lighting systems in various areas of the city, installed at the request of adjacent property owners." In this same manner, the City of Charlotte, North Carolina, uses a special revenue fund to account for money from a room occupancy tax that must go to support the NASCAR Hall of Fame.

**Capital Projects Funds** As the title implies, this fund type accounts for financial resources restricted, committed, or assigned for capital outlays such as acquiring or constructing bridges, high schools, roads, or municipal office complexes. Funding for these projects can come from a number of sources such as grants, the sale of bonds, or transfers from general revenue. The actual capital asset being purchased or constructed is not reported here. Only the money to finance the acquisition is monitored in a capital projects fund. For example, the Lexington-Fayette Urban County Government in Kentucky reported, as of June 30, 2014, that it held a total of more than \$20.1 million of current financial resources in 11 different capital projects funds to be used in a variety of projects such as the acquisition or construction of a cultural center, road projects, public library projects, and computer equipment.

**Debt Service Funds** These funds record financial resources accumulated to pay long-term liabilities and interest as they come due. However, this fund type does not monitor

<sup>13</sup> GASB, *Codification*, Sec. 1300.104.

a government's long-term debt. Debt service funds are created to account for any monetary balances that are restricted, committed, or assigned to make the eventual payments needed to satisfy long-term liabilities. For example, on June 30, 2014, the city of Birmingham, Alabama, reported holding approximately \$1.6 million of cash and investments in its debt service funds to pay long-term debt and interest. For the year then ended, more than \$20.2 million in principal payments were made from this fund along with \$10.7 million in interest payments.

**Permanent Funds** The permanent funds category accounts for financial resources restricted by external donor, contract, or legislation with the stipulation that the principal can never be spent but any resulting income can be used by the government, often for a specified public program. The City of Dallas, Texas, reported holding \$9.7 million as of September 30, 2014, from private donations whose income was designated to maintain four different local parks and to help finance other municipal projects. Such gifts are frequently referred to as *endowments*.

### **Proprietary Funds**

The proprietary funds category accounts for government activities, such as a bus system, toll road, or subway line, that assess a user charge. Such services resemble those found in the business world. Because the user charge helps the government make a profit or, at least, recover part of its cost, proprietary funds are reported in much the same way on both the fund financial statements and the government-wide financial statements. The accounting resembles that of a for-profit activity in that accrual accounting is used to recognize all assets and liabilities.

To facilitate financial reporting, proprietary funds are broken down into two fund types: enterprise funds and internal service funds.

**Enterprise Funds** Any government operation that is open to the public and financed, at least in part, by user charges is likely to be classified as an enterprise fund. A municipality, for example, might generate revenues from the use of a public swimming pool, golf course, airport, water and sewage service, and the like. The City of Houston generated \$1.4 billion in revenue during the year ending June 30, 2015, from three enterprise funds: the city's aviation system, combined utility system, and the convention and entertainment facilities.

The number of enterprise funds has increased rather dramatically over recent years as government officials attempt to expand services without raising taxes. Thus, citizens utilizing a particular service might have to shoulder a higher percentage of its costs. "Enterprise funds have become an attractive alternative revenue source for local governments to recover all or part of the cost of goods or services from those directly benefiting from them."<sup>14</sup>

Enterprise fund activities that collect direct fees from customers resemble business activities. Not surprisingly, even in fund financial statements, the accounting parallels that found in for-profit reporting. Accrual basis accounting is used with a focus on all economic resources and not just on current financial resources.

A question arises, though, as to how much revenue an activity must generate before it is viewed as an enterprise fund. For example, if a city wants to promote mass transit and charges only a nickel to ride on its bus line, should that service be viewed as part of an enterprise fund (a business-type activity) or within the general fund (a governmental activity)?

Any activity that charges the public a user fee may be classified as an enterprise fund. However, this designation is *required* if the activity meets any one of the following criteria. At that point, the amount of revenue is viewed as significant to the operation:

- The activity generates revenues that provide the sole security for the debts of the activity.
- Laws or regulations require recovering the activity's costs (including depreciation and debt service) through fees or charges.
- Fees and charges are set at prices intended to recover costs including depreciation and debt service.

<sup>14</sup> Jeffrey Molinari and Charlie Tyer, "Local Government Enterprise Fund Activity: Trends and Implications," *Public Administration Quarterly*, Fall 2003, p. 369.

**Internal Service Funds** This second proprietary fund type accounts for any operation that provides services to another department or agency within the government for a fee. As with enterprise funds, internal service funds charge for their services. Here the work is for the primary benefit of parties within the government rather than for outside users. As with enterprise funds, internal service funds are accounted for much like for-profit operations found in the private sector.

The City of Lincoln, Nebraska, lists eight operations in its 2014 financial statements that are accounted for as individual internal service funds:

*Information services fund*—to account for the cost of operating a central data processing facility.

*Engineering revolving fund*—to account for the cost of operating a central engineering pool.

*Insurance revolving fund*—to account for the cost of providing several types of self-insurance programs.

*Fleet services fund*—to account for the operations of a centralized maintenance facility for city equipment.

*Police garage fund*—to account for the operation of a maintenance facility for police and other government vehicles.

*Communication services fund*—to account for the costs of providing graphic arts and telecommunications services.

*Copy services fund*—to account for the cost of providing copy services.

*Municipal services center fund*—to account for the purchase and operation of a facility to provide a location for various government functions.

### **Fiduciary Funds**

The final classification, fiduciary funds, accounts for assets held in a trustee or agency capacity for external parties so that the money cannot be used to support the reporting government's programs. Like proprietary funds, fiduciary funds use the economic resources measurement focus and accrual accounting for the timing of revenues and expenses. Because these assets are not available for the benefit of the reporting government, fiduciary funds are omitted entirely from government-wide financial statements although separate statements are included within the fund financial statements.

Four different fund types are identified within the fiduciary funds category.

**Investment Trust Funds** The first fiduciary fund type accounts for the outside portion of investment pools when the reporting government has accumulated financial resources from other governments in order to have more money to invest so that a higher rate of return can be earned. For example, the Commonwealth of Virginia held almost \$2.7 billion at June 30, 2015, in a local government investment pool that “helps local governmental entities maximize their rate of return by commingling their resources for investment purposes.”

**Private-Purpose Trust Funds** The second fiduciary fund type accounts for monies held in a trustee capacity for the benefit of specifically designated external parties such as individuals, private organizations, or other governments. The Commonwealth of Virginia has seven private-purpose trust funds including unclaimed property and Virginia529 inVEST (the Virginia College Savings Plan). Notes to the government's 2015 financial statements describe this latter fund as “a defined contribution college savings program in which participants can save for qualified higher education expenses by making contributions and investments into portfolios of their choice.” At the end of the 2015 fiscal year, the Commonwealth of Virginia reported \$506 million in unclaimed property and \$3.1 billion in Virginia529 inVEST.

**Pension Trust Funds** The third fiduciary fund type accounts for assets held to pay employee retirement benefits. Because of the need to provide adequate money for retired government workers (for a period of time that might last for many years), this fund type can become quite large. The City of Philadelphia, for example, reported assets of more than \$6.2 billion in its pension trust fund as of June 30, 2014. This fund reports all assets being held but only the liability amounts that are currently owed. Thus, concern has often been expressed that

long-term pension responsibilities are not properly reported in a state or local government's financial statements. Consequently, GASB has now mandated that the size of any unfunded pension obligation must be reported.

**Agency Funds** The fourth type of fiduciary fund records any resources a government holds as an agent for individuals, private organizations, or other government units. For example, one government could collect taxes and tolls on behalf of another. Money often passes through the agency fund very quickly. To ensure safety and control, the agency fund maintains this money separately until physically transferred to the proper authority.

#### LO 16-5

Understand the basic structure of government-wide financial statements and fund financial statements (as produced for the governmental funds).

## Overview of State and Local Government Financial Statements

Although a complete analysis of the financial statements of a state or local government is presented in the subsequent chapter, an overview of four basic financial statements will be presented at this point to help illustrate the reporting of certain events. These examples are not complete but can be used to demonstrate the presentation of various transactions and accounts.

### Government-Wide Financial Statements

Only two financial statements make up the government-wide financial statements: *the statement of net position* and *the statement of activities*. The reporting is separated into governmental activities (all governmental funds and most internal service funds) and business-type activities (all enterprise funds and any remaining internal service funds).<sup>15</sup> As mentioned earlier, government-wide financial statements do not include the transactions and balances of fiduciary funds because those resources are not available for the benefit of the reporting government. Fiduciary funds are only shown in separate fund financial statements.

Exhibit 16.1 outlines the basic structure of a statement of net position. Because the economic resources measurement focus is used in the government-wide financial statements, all assets and liabilities are reported. In addition, as will be discussed later, GASB has identified several balances that relate to future periods of time but do not qualify as either assets or liabilities. As can be seen in this example, these amounts are shown as deferred outflows or deferred inflows of resources.

The final section of this statement, the net position category, indicates (1) the amount of capital assets being reported less related debt, (2) legal or external restrictions on the use of any of the reported assets or resources, and (3) the total unrestricted amount available for use by government officials. For example, in Exhibit 16.1, the Governmental Activities holds \$80 that is unrestricted, whereas the Business-Type Activities has only \$30.

The statement of activities in Exhibit 16.2 provides details about revenues and expenses, once again separated into governmental activities and business-type activities. This statement is usually read horizontally first and then vertically. Direct expenses and program revenues are shown for each government function. Program revenues include fines, fees, grants, and the like that the specific activity generates. Thus, a single net revenue or net expense figure is determined for each function as a way of indicating the financial burden or financial benefit to the government and its citizens.

For example, at Point A, a reader can see that maintaining public safety (probably through a police department, a fire department, and, maybe, an ambulance service) has a net cost to the government of \$8,820. Direct expenses of \$9,700 are partially offset by program revenues of \$880 (possibly generated by fines, fees, or other charges). A taxpayer can judge the wisdom of incurring that cost to help ensure public safety, a figure that is more than the \$8,100 cost of education as shown two lines below.

<sup>15</sup> Government-wide financial statements report internal service funds as governmental activities if their primary purpose is to serve the governmental funds. Conversely, internal service funds are included with business-type activities if they mainly exist to help one or more enterprise funds. For example, a print shop (an internal service fund) should be reported within the governmental activities if its work is primarily for the benefit of a governmental fund such as the public library. However, if its work is to service a bus line (or some other enterprise fund), the print shop is classified within the business-type activities.



**EXHIBIT 16.1**  
**Statement of Net Position**  
**Government-Wide**  
**Financial Statements**

	Governmental Activities	Business-Type Activities	Total
<b>Assets</b>			
Cash .....	\$ 100	\$ 130	\$ 230
Investments .....	900	40	940
Receivables .....	600	400	1,000
Internal amounts due .....	50	(50)	–0–
Supplies and materials .....	30	40	70
Capital assets (net of depreciation) .....	2,950	2,750	5,700
Total assets .....	<u>\$4,630</u>	<u>\$3,310</u>	<u>\$7,940</u>
<b>Deferred Outflows of Resources</b>			
Unamortized cost of debt refunding .....	\$ 200	\$ 40	\$ 240
<b>Liabilities</b>			
Accounts payable .....	\$ 750	\$ 230	\$ 980
Noncurrent liabilities .....	2,300	920	3,220
Total liabilities .....	<u>\$3,050</u>	<u>\$1,150</u>	<u>\$4,200</u>
<b>Deferred Inflows of Resources</b>			
Unavailable property tax collections .....	\$ 100	\$ –0–	\$ 100
<b>Net Position</b>			
Net investment in capital assets .....	\$1,410	\$2,110	\$3,520
Restricted for:			
Capital projects .....	50	–0–	50
Debt service .....	140	60	200
Unrestricted .....	80	30	110
Total net position .....	<u>\$1,680</u>	<u>\$2,200</u>	<u>\$3,880</u>

**EXHIBIT 16.2** Statement of Activities—Government-Wide Financial Statements

Function	Expenses	Program Revenues	Net (Expense) Revenue		Total
			Governmental Activities	Business-Type Activities	
Governmental activities					
General government .....	\$ 3,200	\$ 1,400	\$ (1,800)	n/a	\$ (1,800)
Public safety .....	9,700	880	(8,820) <sup>Ⓐ</sup>	n/a	(8,820)
Public works .....	2,600	600	(2,000)	n/a	(2,000)
Education .....	8,400	300	(8,100)	n/a	(8,100)
Total governmental activities .....	<u>\$23,900</u>	<u>\$ 3,180</u>	<u>\$(20,720)</u>	<u>n/a</u>	<u>\$(20,720)</u>
Business-type activities					
Water .....	\$ 3,600	\$ 4,030	n/a	\$ 430	\$ 430
Sewer .....	4,920	5,610	n/a	690	690
Airport .....	2,300	3,120	n/a	820	820
Total business-type activities .....	<u>\$10,820</u>	<u>\$12,760</u>	<u>n/a</u>	<u>\$1,940</u>	<u>\$ 1,940</u>
Total government .....	<u>\$34,720</u>	<u>\$15,940</u>	<u>\$(20,720) <sup>Ⓑ</sup></u>	<u>\$1,940 <sup>Ⓒ</sup></u>	<u>\$(18,780)</u>
General revenues:					
Property taxes .....			\$ 20,400 <sup>Ⓓ</sup>	\$ –0–	\$ 20,400
Investment earnings .....			420	70	490
Transfers .....			600	(600)	–0–
Total general revenues and transfers .....			<u>\$ 21,420</u>	<u>\$ (530)</u>	<u>\$ 20,890</u>
Change in net position .....			\$ 700 <sup>Ⓔ</sup>	\$1,410 <sup>Ⓕ</sup>	\$ 2,110
Beginning net position .....			980	790	1,770
Ending net position .....			<u>\$ 1,680</u>	<u>\$2,200</u>	<u>\$ 3,880</u>

The net expense and net revenue for all governmental activities are then summed vertically to arrive at the total cost of operating the government, an amount that is offset by general revenues such as property taxes and sales taxes. As can be seen, governmental activities had a net cost of \$20,720 (Point B), whereas the business-type activities generated a net financial benefit of \$1,940 (Point C). At Point D, the statement shows that the government generated property tax revenues of \$20,400 to cover virtually all of the cost of providing governmental activities. Investment earnings and transfers more than made up the difference so that the net position of the governmental activities increased by \$700 this year (Point E). The net position of the business-type activities increased by \$1,410 (Point F).

### Fund Financial Statements

Most state or local governments produce quite a number of fund financial statements because of all the diverse functions. However, at this introductory stage, only the two fundamental statements that most parallel the two government-wide statements will be examined. Exhibit 16.3 shows a *balance sheet* for the governmental funds, and Exhibit 16.4 presents a *statement of revenues, expenditures, and changes in fund balances* for those same governmental funds. The balance sheet reports the current financial resources (assets) held by the various funds and the claims to those resources (liabilities).

As can be seen in Exhibit 16.4, three separate categories are present in this fund financial statement. They will each be discussed in detail throughout the remainder of this chapter and the next:

- Revenues
- Expenditures
- Other Financing Sources (Uses)

Note that the figures found in these fund financial statements will not be the same as those presented for the governmental activities in the government-wide statement of net position (Exhibit 16.1) and statement of activities (Exhibit 16.2). For example, the asset total reported

**EXHIBIT 16.3** Balance Sheet—Governmental Funds—Fund Financial Statements

	General Fund	Library Program	Other Governmental Funds	Total Governmental Funds
<b>Assets</b>				
Cash .....	\$ 40	\$ 10	\$ 50	\$ 100
Investments .....	580	120	200	900
Receivables .....	120	200	210	530
Supplies and materials .....	10	10	10	30
Total assets .....	<u>\$750</u>	<u>\$340</u>	<u>\$470</u>	<u>\$1,560</u>
<b>Liabilities</b>				
Accounts payable .....	\$230	\$170	\$110	\$ 510
Notes payable—current .....	200	—0—	100	300
Total liabilities .....	<u>\$430</u>	<u>\$170</u>	<u>\$210</u>	<u>\$ 810</u>
<b>Deferred Inflows of Resources</b>				
Unavailable property tax collections .....	\$100	\$—0—	\$—0—	\$ 100
<b>Fund Balances</b>				
Nonspendable .....	\$ 10	\$ 10	\$ 10	\$ 30
Restricted .....	100	90	60	250
Committed .....	30	50	100	180
Assigned .....	20	20	90	130
Unassigned .....	60	—0—	—0—	60
Total fund balances .....	<u>\$220</u>	<u>\$170</u>	<u>\$260</u>	<u>\$ 650</u>
Total liabilities, deferred inflows, and fund balances .....	<u>\$750</u>	<u>\$340</u>	<u>\$470</u>	<u>\$1,560</u>

**EXHIBIT 16.4 Statement of Revenues, Expenditures, and Other Changes in Fund Balances—Governmental Funds—Fund Financial Statements**

	General Fund	Library Program	Other Governmental Funds	Total Governmental Funds
<b>Revenues</b>				
Property taxes . . . . .	\$17,200	\$ 900	\$ 2,300	\$20,400
Investment earnings . . . . .	100	200	180	480
Program revenues . . . . .	500	100	2,500	3,100
Total revenues . . . . .	<u>\$17,800</u>	<u>\$1,200</u>	<u>\$ 4,980</u>	<u>\$23,980</u>
<b>Expenditures</b>				
Current:				
General government . . . . .	\$ 3,400	\$ —0—	\$ 100	\$ 3,500
Public safety . . . . .	5,100	—0—	400	5,500
Education . . . . .	6,700	800	—0—	7,500
Debt service:				
Principal . . . . .	—0—	—0—	1,000	1,000
Interest . . . . .	—0—	—0—	600	600
Capital outlay . . . . .	1,100	300	3,300	4,700
Total expenditures . . . . .	<u>\$16,300</u>	<u>\$1,100</u>	<u>\$ 5,400</u>	<u>\$22,800</u>
Excess (deficiency) of revenues over expenditures . . . . .	<u>\$ 1,500</u>	<u>\$ 100</u>	<u>\$ (420)</u>	<u>\$ 1,180</u>
<b>Other Financing Sources (Uses)</b>				
Bond proceeds . . . . .	\$ —0—	\$ —0—	\$ 1,000	\$ 1,000
Transfers in . . . . .	—0—	20	580	600
Transfers out . . . . .	(1,300)	—0—	(1,000)	(2,300)
Total other financing sources and uses . . . . .	<u>\$ (1,300)</u>	<u>\$ 20</u>	<u>\$ 580</u>	<u>\$ (700)</u>
Change in fund balances . . . . .	\$ 200	\$ 120	\$ 160	\$ 480
Fund balances—beginning . . . . .	20	50	100	170
Fund balances—ending . . . . .	<u>\$ 220</u>	<u>\$ 170</u>	<u>\$ 260</u>	<u>\$ 650</u>

for the governmental activities in Exhibit 16.1 is \$4,630, whereas the asset total for all governmental funds in Exhibit 16.3 is only \$1,560. These differences result primarily for three reasons:

1. In government-wide statements, internal service funds are grouped with the funds that they primarily benefit. Thus, they are reported with the governmental activities if they assist governmental funds and with business-type activities if they assist enterprise funds. However, fund financial statements show all internal service funds as proprietary funds, not as governmental funds. *Totals will vary between the statements because both governmental funds and some proprietary funds are classified as governmental activities.*
2. Governmental activities apply the economic resources measurement focus. The governmental funds, in the fund statements, use the current financial resources measurement focus. *Different assets and liabilities are being reported by the two sets of statements.*
3. Governmental activities use accrual accounting in government-wide statements, while modified accrual accounting is used in creating fund financial statements for the governmental funds. *The timing of recognition is different.*

Because of these differences, reconciliations are reported between totals presented in Exhibits 16.1 and 16.3 and between Exhibits 16.2 and 16.4. Those reconciliations are discussed in detail in the following chapter.

### **Major Funds**

In both of the fund financial statements presented in Exhibits 16.3 and 16.4, the general fund and every other individual fund that qualifies as major is shown in a separate column. The assumption here is that the Library Program (probably one of this government's special revenue funds if it is financed by a designated tax levy) is the only individual fund outside the general fund that is considered major. Information for all other governmental funds is then grouped into a single column. Consequently, identification of a major fund is quite important for disclosure purposes. A major fund is identified as follows:

The reporting government's main operating fund (the general fund or its equivalent) should always be reported as a major fund. Other individual governmental and enterprise funds should be reported in separate columns as major funds based on these criteria:

- a. Total assets, liabilities, revenues, or expenditures/expenses of that individual governmental or enterprise fund are at least 10 percent of the corresponding total (assets, liabilities, and so forth) for all funds of that category or type (that is, total governmental or total enterprise funds), *and*
- b. The same element that met the 10 percent criterion in (a) is at least 5 percent of the corresponding total for all governmental and enterprise funds combined.

In addition to funds that meet the major fund criteria, any other governmental or enterprise fund that the government's officials believe is particularly important to financial statement users (for example, because of public interest or consistency) may be reported as a major fund.<sup>16</sup>

### **Fund Balances**

One other unique aspect of the structure of fund financial statements created for the governmental funds should be noted. A stockholders' equity section is not needed in order to report contributed capital, retained earnings, and the like. There are no stockholders for a state or local government. Instead, "fund balance" accounts, as shown in Exhibit 16.3, are used to indicate the amount of net current financial resources reported by each separate fund.

Fund balance accounts have long been used in governmental accounting in a rather generic fashion. Rules have now been established to standardize the reporting within five categories. These designations should help financial statement readers understand the use that can be made of each fund's net current financial resources. Often, because of legal or external restrictions, some amount of the current financial resources cannot be used by government officials as they please. "The fund balance classifications are GASB's response to credit market participants who sought general information about the availability of reported fund balances."<sup>17</sup>

For example, in Exhibit 16.3, the general fund reports assets of \$750, and liabilities and deferred inflows of \$430 and \$100, indicating a net position of \$220. From a reporting perspective, the most significant question to be addressed is: What use can be made of this \$220? The purpose of the fund balance classifications, therefore, is to indicate restrictions that limit the ability of government officials to use these resources.

**Fund Balance—Nonspendable** As implied by the name, this amount of a fund's current financial resources cannot be spent. This restricted classification is normally necessary for one of two reasons. First, some assets such as supplies and prepaid expenses are simply not in a spendable form. Second, financial resources are occasionally received that cannot be spent because of externally imposed limitations. A cash gift, for example, might be donated by a citizen with the stipulation that only the future income generated from this balance can be used by the government. The fund balance designation indicates that assets are held but not available for government spending. As of June 30, 2015, the City of Asheville, North Carolina, reported that the fund balance—nonspendable for its governmental funds totaled \$12.0 million.

<sup>16</sup> GASB, *Codification*, Sec. 2200.159.

<sup>17</sup> Paul A. Copley, *Essentials of Accounting for Governmental and Not-for-Profit Organizations*, 12th edition, published by McGraw-Hill Education, 2015, p. 58.

**Fund Balance—Restricted** This figure indicates the amount of assets held by the government that must be spent in a manner that has been designated by an external party. For example, a grant from another government for a specified purpose such as classroom teachers or playground equipment creates an increase in this category as does a bond covenant that requires the proceeds to be used in a particular manner. The City of Asheville reported a \$13.3 million fund balance—restricted as of June 30, 2015.

**Fund Balance—Committed** Here, assets have been designated for a particular purpose, not by an outside party but rather by the highest level of decision-making authority within the government. A state legislature might vote to set aside \$400 million for road construction. On the government’s balance sheet, that decision is disclosed by an increase in the reported amount of the “fund balance—committed.” Of course, the legislature holds the power to reverse its decision so the commitment is not necessarily binding. The City of Asheville reports its fund balance—committed as \$842,052 at June 30, 2015. The amount has been committed for community and economic development. This reporting is explained in a note to the city’s financial statements as representing “amounts that can only be spent for specific purposes imposed by majority vote by quorum of City of Asheville’s governing body, the City Council (highest level of decision-making authority).”

**Fund Balance—Assigned** Frequently, in the regular operations of a government, money is designated for a specific purpose without formal action by the highest level of decision-making authority. Usually, these are larger amounts held for a particular purpose. The head of the government’s finance committee might designate cash of \$1 million to be used in a few months to pay the current installment of a bond. However, if necessary, that money could be switched to some other purpose in the interim. At June 30, 2015, the City of Asheville reports a “fund balance—assigned” of \$8.7 million. Of that total, \$6.2 million is for capital improvements and \$2.5 million for various projects.

**Fund Balance—Unassigned** This category is normally found in the general fund and reflects any amount of financial resources where no use has yet been designated either externally or internally. This amount is available to government officials for any purpose viewed as appropriate. On the June 30, 2015, balance sheet for the City of Asheville, the “fund balance—unassigned” was listed as \$13,111,129.

To illustrate the reporting, note how each of the following transactions affects a city government’s balance sheet when it is created as part of the fund financial statements for the governmental funds.

- Supplies costing \$30,000 that will be used in the future to beautify the local parks are bought on the last day of the fiscal year. The supplies are shown as an asset with an equal amount reported within the “fund balance—nonspendable” balance.
- A citizen dies and leaves cash and investments valued at a total of \$3 million to the city with the requirement that this money must be used for park beautification. At the date of the conveyance, a “fund balance—restricted” balance is established for this amount.
- The highest level of decision makers for this city votes to set aside \$110,000 in cash to be used to beautify the local parks. No asset account is affected. The “fund balance—unassigned” drops by \$110,000, and the “fund balance—committed” increases to reflect this decision.
- The director of finance for the city sets aside \$12,000 in previously unassigned cash to be used to buy new benches for the city’s parks. Because the decision was not made at the highest level of decision making, the “fund balance—unassigned” goes down while the “fund balance—assigned” rises. The decision, as well as the authority level of the decision, is being shown in this way.
- The city government receives property tax revenues of \$1.4 million. City officials might eventually decide to use some of this money to complete the beautification of the local parks, but no decision has yet been made. In the general fund, assets increase by this amount as does the “fund balance—unassigned.” The money is available for use by government officials.

## LO 6-6

Record the passage of a budget as well as subsequent encumbrances and expenditures.

## Accounting for Governmental Funds

The remainder of this chapter examines many of the important accounting procedures used within the governmental funds: the general fund, special revenue funds, capital projects funds, debt service funds, and permanent funds. The distinct approach of governmental accounting can be seen best in these five funds. Because of the dual nature of the reporting process, most of accounting procedures will be demonstrated twice, once for governmental fund financial statements and a second time for the government-wide financial statements. The reporting applied to the proprietary funds and the fiduciary funds (as well as the government-wide financial statements as a whole) is more likely to resemble the accounting used by for-profit businesses. It is less unique. Thus, the emphasis here is on the accounting of the individual governmental funds.

One preliminary question to address is whether governments should establish two separate sets of financial records (one for fund statements and another for government-wide statements)? Or, should governments maintain only one set for fund accounting that then must be adjusted rather significantly at the end of each year to create government-wide financial statements?

“Most governments have not changed their day-to-day accounting at all from basic fund accounting. They continue to record their routine transactions, like tax collections and grant reimbursements, on a cash basis. Then at year end when government-wide statements are to be produced, the government records the full accrual amounts as required by GASB. Given the nature of control environments in most governments, they find it easier to record full accrual only at year end.”<sup>18</sup>

From an educational perspective, this textbook could follow the lead established in practice of reporting each event initially based on the fund financial statement model. Then, a one-time conversion is made at the end of the year to move from fund financial statements to government-wide statements. Or, the textbook could examine each event and transaction from both a fund financial statement and a government-wide perspective.

The second approach has been adopted here. Therefore, this textbook analyzes individual transactions from both a fund and a government-wide perspective. Comparing the two ways of reporting side-by-side seems a more understandable process than learning fund financial reporting and later converting the resulting balances into a completely different set of figures based on the government-wide approach. However, students need to understand that most state and local governments make fund financial statement journal entries that are only adjusted to government-wide figures at a later time when financial statements are to be prepared.

### The Importance of Budgets and the Recording of Budgetary Entries

Budgeting is an essential element of the financial planning, control, and performance evaluation processes of many governments. In contrast to commercial organizations’ planning-oriented budgetary practices, governments usually adopt budgets that have the force of law, are subject to sanctions for overspending budgetary authorizations, and have extensive controls to ensure budgetary compliance.<sup>19</sup>

A budget is a legally approved plan for operations. In a chronological sense, the first significant accounting procedure carried out by a state or locality is the recording of budgetary entries. To enhance accountability, government officials are usually required to adopt an annual budget for each separate activity to anticipate the inflow of financial resources and establish approved expenditure levels.

The budget serves several important purposes:

1. *Expresses public policy.* If, for example, more money is budgeted for child care and less for the environment, both positive and negative consequences are likely to occur. Through the budget, citizens are made aware of decisions made by government officials as to the allocation of limited financial resources.

<sup>18</sup> From Jack Reagan, Partner with Grant Thornton. February 27, 2016.

<sup>19</sup> American Institute of Certified Public Accountants, *Audit & Accounting Guide, State and Local Governments*, with conforming changes as of March 1, 2015, para. 11.01.

2. *Serves as an expression of financial intent for the upcoming fiscal year.* The budget presents the financial plan for the government for the current period.
3. *Provides control because it establishes spending limitations for each activity.* Officials typically cannot spend more for a particular activity than has been budgeted unless a special authorization has been passed allowing them to do so.
4. *Offers a means of evaluating performance.* The budget allows a comparison to be made between the actual financial results for the period and the authorized level that has been set and approved.
5. *Indicates whether the government anticipates having sufficient revenues to pay for all of the expenditures that have been approved.* In the current economic climate when many governments face declining revenue totals, the amount and handling of proposed deficits should be of interest to every citizen.

GASB even states that “many believe the budget is the most significant financial document produced by a governmental entity.”<sup>20</sup>

After a budget has been enacted into law, formal accounting recognition is frequently required as a means of enhancing the informational benefits. The public has the opportunity to review the amounts of current financial resources expected to be received and expended. By entering budget figures into the accounting records at the start of each fiscal year, comparisons can be made between actual and budgeted figures at any point in time. Then, at the end of the year, the budget entries have served their purpose and are reversed to remove the balances from the accounting records.

In the formal reporting process, budget information must be disclosed for the general fund and each major fund that exists within the special revenue funds. For these funds, governments must report comparisons between (a) the original budget, (b) the final budget, and (c) the actual figures for the period. This information appears as required supplementary information located after the notes to the financial statements. As an allowed alternative, a separate statement can be included within the fund financial statements to show the budget and actual figures.

To illustrate, assume that city officials enact a motel excise tax with the revenue to be used to promote tourism and conventions. Because these receipts are legally restricted for a specified purpose, the city must utilize a special revenue fund. Assume that for the 2017 fiscal year, the tax is expected to generate \$490,000 in revenues. Based on this projection, the city council authorizes expenditure of \$420,000 (referred to as an *appropriation*) for promotional programs during the current year. Of this amount, \$200,000 is designated for salaries, \$30,000 for utilities, \$80,000 for advertising, and \$110,000 for supplies. The \$70,000 difference between the anticipated revenue and the appropriation total is a budget surplus to be accumulated by the government for future use or in case actual revenue proves to be too small to support budget plans.

To acknowledge the council’s action, the accounting records of this fund include the following journal entry. No similar entry is made within the government-wide financial statements.

***Fund Financial Statements—Budgetary Entry***

<b>Special Revenue Fund—Tourism and Convention Promotions</b>	
Estimated Revenues—Tax Levy . . . . .	490,000
Appropriations—Salaries . . . . .	200,000
Appropriations—Utilities . . . . .	30,000
Appropriations—Advertising . . . . .	80,000
Appropriations—Supplies . . . . .	110,000
Budgetary Fund Balance . . . . .	70,000
To record annual budget for tourism and convention promotions to be funded by motel excise tax.	

This entry reveals both the expected level of funding (the tax levy) and the approved amount of expenditures. Each of these figures remains in the records of the special revenue

<sup>20</sup> GASB, *Codification*, Appendix B, *Concepts Statement No. 1*, para. 19.

fund for the entire year to allow for planning, disclosure, and control. The Budgetary Fund Balance account indicates an anticipated surplus (or, in some cases, a shortfall) projected for the period. Here, the current financial resources held by this fund are expected to increase by \$70,000 during the year.

In this way, budgetary entries reflect a government’s *interperiod equity*. This term refers to the alignment of revenues and spending during a period and the possible shift of payments to future generations. If a government projects revenues as \$10 million but approves expenditures of \$11 million, the extra million must be financed in some manner, often by the issuance of debt to be repaid in the future. The benefits of the additional expenditures are enjoyed today, but citizens of a later time must bear the cost.

The original budget is not always identical to the final appropriations figure because of later amendments formally made during the year. Government officials can vote to change appropriation levels if more or less money than anticipated becomes available or needs to be changed. For the year ending June 30, 2015, the City of Greensboro, North Carolina, reported that \$27,191,555 had originally been appropriated for culture and recreation. That amount was increased during the year to a final budget of \$27,831,146, but only \$26,197,997 was actually spent.

To continue with this illustration, assume that city officials in charge of tourism appeal to the council for an additional \$50,000 to create a special advertising campaign. If approved, the original budgetary entry is adjusted:

**Fund Financial Statements—Budget Amendment**

Special Revenue Fund—Tourism and Convention Promotions	
Budgetary Fund Balance . . . . .	50,000
Appropriations—Advertising . . . . .	50,000
To record an additional appropriation for advertising . . . . .	

Now assume that the city actually receives \$488,000 in tax revenues during the year and spends \$457,000 as follows:

Salaries . . . . .	\$196,000
Utilities . . . . .	29,000
Advertising . . . . .	125,000
Supplies . . . . .	107,000

This information should be disclosed as follows. The Variance column is recommended but not required:

<b>TOURISM AND CONVENTION PROMOTIONS</b>				
<b>Year Ended December 31, 2017</b>				
<b>Budget Comparison Schedule</b>				
	<b>Budgeted Amounts</b>		<b>Actual Amounts</b>	<b>Variance from Final Budget to Actual Amounts—Positive Impact on Fund Balance (negative)</b>
	<b>Original</b>	<b>Final</b>		
Resources (inflows):				
Tax levy . . . . .	\$490,000	\$490,000	\$488,000	\$ (2,000)
Charges to appropriations (outflows):				
Salaries . . . . .	\$200,000	\$200,000	\$196,000	\$ 4,000
Utilities . . . . .	30,000	30,000	29,000	1,000
Advertising . . . . .	80,000	130,000	125,000	5,000
Supplies . . . . .	110,000	110,000	107,000	3,000
Total charges . . . . .	<u>\$420,000</u>	<u>\$470,000</u>	<u>\$457,000</u>	<u>\$13,000</u>
Change in fund balance . . . . .	<u>\$ 70,000</u>	<u>\$ 20,000</u>	<u>\$ 31,000</u>	<u>\$11,000</u>



## Encumbrances

One additional budgetary procedure that has historically played a central role in government accounting is the recording of financial commitments referred to as *encumbrances*. In contrast to for-profit accounting, purchase commitments and contracts are often recorded within governmental funds prior to any recognition of an actual liability. This recording of encumbrances provides an efficient method for monitoring financial commitments so that officials do not accidentally overspend a fund's approved appropriations. GASB states that "encumbrances should be recorded for budgetary control purposes, especially in general and special revenue funds." Information on both expended and committed amounts is then available to aid officials as they manage the government's financial resources.

To illustrate, assume that a city's police department orders \$18,000 in equipment from an approved vendor. As an ongoing service activity, the police department is accounted for within the general fund.

### ***Fund Financial Statements—Commitment Created by Governmental Fund Activity***

<b>General Fund—Police Department</b>		
Encumbrances—Equipment . . . . .	18,000	
Encumbrances Outstanding . . . . .		18,000
To record a purchase order for equipment.		

When the equipment is eventually received, a legal liability for payment replaces the commitment. The encumbrance is removed from the accounting records and an Expenditures account is recognized to reflect the reduction in current financial resources. Often, because of transportation, discounts, or other price adjustments, the actual cost will differ from the original estimate. The recorded expenditure will not necessarily agree with the corresponding encumbrance.

Because of the current financial resource focus found in the fund financial statements (for the governmental funds), no equipment account entry is recorded for this long-lived asset. Instead, the Expenditures account balance identifies the reason for the reduction in current financial resources.

Assume that the equipment has a total cost of \$18,160 once it has been received.

### ***Fund Financial Statements—Equipment Order Received by Governmental Fund Activity***

<b>General Fund</b>		
Encumbrances Outstanding . . . . .	18,000	
Encumbrances—Equipment . . . . .		18,000
To remove encumbrance for equipment that has now been received.		
Expenditures—Equipment . . . . .	18,160	
Vouchers (or Accounts) Payable . . . . .		18,160
To record the receipt of equipment and the accompanying liability for its cost.		

In producing government-wide financial statements, the only entry created by this ordering and receiving of equipment is an increase in the asset and related liability when the order is filled. As in for-profit accounting, the commitment is not recorded.

At the end of the fiscal period, any commitments that remain outstanding are removed from the accounting records by reversing the original entry because no transaction has yet occurred. The recording of encumbrances is to help prevent spending more money than the amount authorized for the period.

Assuming that the commitment will still be honored in the subsequent year, is additional reporting needed on the current balance sheet? If the fund balance has already been reclassified as restricted, committed, or assigned in recognition of this eventual expenditure, then no further change is needed. The labeling of the fund balance reflects the decision to use that part of the fund's financial resources to meet this commitment. However, if no fund balance has yet been reported as restricted, committed, or assigned, then a portion of the fund balance should be reclassified as either committed (designated by the highest level of decision-making authority) or assigned (designated by a party other than the highest level of decision-making authority) for the purchase order amount to denote the anticipated use of the fund's assets.<sup>21</sup>

To illustrate, assume that the general fund of the city that ordered the \$18,000 in equipment reports assets and deferred outflows of \$600,000 and liabilities and deferred inflows of \$500,000. On the balance sheet, the fund balance accounts are shown as \$40,000 assigned and \$60,000 unassigned. At the end of the fiscal year, the \$18,000 encumbrance is unfulfilled and removed from the records for that period. However, the decision has been made that the government will pay for the equipment when it arrives in the following year. The reporting of the fund balance figures on the balance sheet can be affected in one of two ways.

1. If the \$40,000 fund balance—assigned already includes an \$18,000 amount reflecting the commitment for this equipment, no change is necessary. The appropriate amount of the fund's resources is shown as assigned.
2. If the \$40,000 fund balance—assigned does not include \$18,000 to be spent on this equipment, then the fund balance—unassigned is reduced by that amount, and fund balance—assigned (or possibly committed depending on the level of the decision-making to acquire the equipment) is increased. The reported assets and liabilities are not affected since the equipment has not been received, but the fund balance is shown as assigned (or committed) to indicate that \$18,000 of the fund's resources are not freely available to government officials. "Encumbered amounts for specific purposes for which amounts have not been previously restricted, committed, or assigned should not be classified as unassigned but, rather, should be included within committed or assigned fund balance, as appropriate."<sup>22</sup>

### LO 16-6

Record the passage of a budget as well as subsequent encumbrances and expenditures.

## Recognition of Expenditures and Revenues

Although budgetary and encumbrance entries are unique, their impact on the accounting process is somewhat limited because they do not directly affect a fund's financial results for the period. Conversely, the method by which states and localities record the receipt and disbursement of assets can alter reported data significantly. Because a primary emphasis is on measuring changes in current financial resources, *neither expenses nor capital assets are recorded in the fund financial statements of the governmental funds*. Probably no more significant distinction exists between the fund statements and the government-wide statements.

As shown in the previous purchase of equipment, governmental funds report an Expenditures account in the fund statements. This balance reflects decreases in current financial resources caused by the acquisition of a good or service. The reduction of resources is recorded as an expenditure whether it is for rent, a fire truck, salaries, a computer, or the like. In each case, a good or service is acquired. The statement of revenues, expenditures, and other changes in fund balances (Exhibit 16.4) allows the reader to see the use that has been made of an activity's current financial resources. Spending \$1,000 for electricity for the past three months is an expenditure of a governmental fund's current financial resources in exactly the same way that buying a \$70,000 ambulance is.

<sup>21</sup>If not already reported as restricted, a fund balance cannot be internally restricted. The restricted designation is used to indicate that external parties or applicable laws created the restriction.

<sup>22</sup>GASB, *Codification*, Sec. 1800.184.

### ***Fund Financial Statements—Expenditures for Expense and Capital Asset by Governmental Fund Activity***

Expenditures—Electricity . . . . .	1,000	
Vouchers (or Accounts) Payable . . . . .		1,000
To record charges covering the past three months.		
Expenditures—Ambulance . . . . .	70,000	
Vouchers (or Accounts) Payable . . . . .		70,000
To record acquisition of ambulance.		

Within the fund financial statements for the governmental funds, the timing of the recognition of expenditures and revenues follows the *modified accrual basis of accounting*. Under modified accrual accounting, expenditures are recognized at the time that the government incurs a current liability, creating a claim against current financial resources. If the claim is established in one period to be settled in the subsequent period using year-end financial resources, the expenditure and liability are recorded in the initial year. However, as discussed earlier, the maximum length of time for the change in current financial resources to occur—often 60 days into the subsequent period—should be disclosed. Thus, if equipment is received on the last day of one year but payment will not be made until 120 days later, no recording of the expenditure is likely to be made in the first year, depending on the recognition period utilized by the government.

In fund statements, a governmental fund records both operating costs such as salaries and rent and the entire cost of all buildings, machines, and other capital assets as expenditures. No net income figure is calculated for these funds. Thus, computing and recording subsequent depreciation is not relevant to the reporting process and is omitted entirely. Depreciation has no effect on current financial resources.

For the government-wide financial statements, all economic resources are measured. Consequently, the previous two transactions are recorded in this second set of statements when the liability is created, with depreciation subsequently recorded for the ambulance as time passes.

### ***Government-Wide Financial Statements—Recording Expense and Acquisition of Capital Asset***

Utilities Expense . . . . .	1,000	
Vouchers (or Accounts) Payable . . . . .		1,000
To record electricity charges for the past three months.		
Ambulance . . . . .	70,000	
Vouchers (or Accounts) Payable . . . . .		70,000
To record acquisition of new ambulance.		

#### **LO 16-7**

Understand the reporting of capital assets, supplies, and pre-paid expenses by a state or local government.

### ***Reporting Capital Assets and Infrastructure***

One result of recording only expenditures within the fund statements for the governmental funds is that virtually no assets are reported other than current financial resources such as cash, receivables, and investments. All capital assets are recorded as expenditures at the time of acquisition with that balance closed out at the end of each fiscal period. Note that the balance sheet in Exhibit 16.3 shows no buildings, school facilities, computers, trucks, or other equipment as assets.

Prior to the development of government-wide financial statements, only a minimum amount of information was available about capital assets. A listing was included in the financial statements for informational purposes. Even then, the inclusion of infrastructure items was optional. Infrastructure includes roads, sidewalks, bridges, and the like that are normally stationary and can be preserved for a significant period of time. A bridge, for example, with proper care might last for more than 100 years. To save time and energy, many governments simply did not maintain records of such infrastructure items after the original expenditure.



## Discussion Question

### IS IT AN ASSET OR A LIABILITY?

During the long evolution of government accounting, many scholars have discussed its unique features. In the August 1989 issue of the *Journal of Accountancy*, R. K. Mautz described the reporting needs of governments and not-for-profit organizations (such as charities) in “Not-For-Profit Financial Reporting: Another View.”

To illustrate the governmental accounting challenges, Mautz examined the method by which a city should record a newly constructed high school building. Conventional business wisdom would say that such a property is an asset owned by the government. Thus, the cost should be capitalized and then depreciated over an estimated useful life. However, in paragraph 26 of FASB *Concepts Statement No. 6*, an essential characteristic of an asset is “a probable future benefit . . . to contribute directly or indirectly to future net cash inflows.”

Mautz reasoned that the school building cannot be considered an asset because it provides no net contribution to cash inflows. In truth, a high school requires the government to make significant cash outflows for maintenance, repairs, utilities, salaries, and the like. Public educational facilities (as well as many of the other properties of a government such as a fire station or municipal building) are acquired with the understanding that net cash outflows will result for years to come.

Consequently, Mautz then considered whether the construction of a high school is not actually the establishment of a liability because the government is taking on an obligation that will necessitate future cash payments. He also rejects this idea, once again based on the guidance of *Concepts Statement No. 6* (para. 36), because a probable future transfer or use of assets is not required at a “specified or determinable date, on occurrence of a specified event, or on demand.”

Is a high school building an asset or is it a liability? If it is neither, how should the cost be recorded? How is the high school reported in fund financial statements? How is the high school reported in government-wide financial statements? Which of these two approaches best portrays the decision to acquire or construct this building? Can a government possibly be accounted for in the same manner as a for-profit enterprise?

The eventual requirement that government-wide financial statements include all economic resources meant that capital assets (including infrastructure items) had to be recorded and, where applicable, depreciation had to be included. As will be discussed in the following chapter, depreciation of infrastructure can still be avoided under certain circumstances.

Thus, today, the fund financial statements report the amount expended each period by the governmental funds for capital assets, while the government-wide financial statements report those capital assets as well as all infrastructure items.

### *Supplies and Prepaid Items*

In gathering information for government-wide financial statements, the acquisition of supplies and prepaid costs such as rent or insurance is not particularly complicated. An asset is recorded at the time of acquisition and subsequently reclassified to expense as the asset’s utility is consumed by use or time. The City and County of Denver, Colorado, reported \$2.7 million for prepaid items and other assets in its government-wide statements as of December 31, 2014.

However, reporting prepaid costs and supplies by the governmental funds within the fund financial statements is not so straightforward. These assets have a relatively short life but they are not current financial resources that can be spent. Should the cost incurred be reported as an asset until consumed or recorded directly as an expenditure at the time of acquisition?

Traditionally, governmental funds have used the *purchases method*, which simply records such costs as expenditures at the point that a claim to current financial resources is created. No asset is recorded. Thus, in 2014, the City of Philadelphia discloses that the “supplies of governmental funds are recorded as expenditures when purchased rather than capitalized as inventory.” For disclosure purposes, though, any remaining supplies or prepaid items (such as insurance or rent) are entered into the accounting records as assets just prior to production of financial statements. At that time, the asset is recorded along with an offsetting amount in fund balance—nonspendable to inform the reader that assets are included that are not current financial resources available for spending.

The *purchases method* reflects modified accrual accounting because the entire cost is recognized as an expenditure when current financial resources are reduced. However, some governments have chosen to have their governmental funds report supplies and prepaid items using an accepted alternative known as the *consumption method*.

The consumption method parallels the process utilized in creating government-wide financial statements. Supplies or prepayments are recorded as assets when acquired. As the utility is consumed by usage or time, the cost is reclassified into an expenditures account. As explained in 2014 by the City of Birmingham, Alabama, “Inventory consists of expendable supplies held in the General Fund for consumption. The cost is recorded as an expenditure at the time individual inventory items are used (consumption method).” Under this approach, the expenditure is recognized in the period of specific usage. Because these assets cannot be spent for government programs or other needs, an equal portion of the Fund Balance account should be reclassified as nonspendable as shown in the balance sheet in Exhibit 16.3.

To illustrate, assume that a municipality purchases \$20,000 in supplies for various general fund activities. During the remainder of the fiscal period, \$18,000 of these items are consumed so that only supplies costing \$2,000 remain at year-end. These events could be recorded through either of the following sets of entries. Notice that, depending on the approach, the expenditures will increase by either \$20,000 or \$18,000 in the year of purchase. Because of budgeting limitations, that can be an important difference.

***Fund Financial Statements—Supplies and Prepaid Expenses—Governmental Funds***

<b>Purchases Method</b>		
Expenditures—Supplies . . . . .	20,000	
Vouchers (or Accounts) Payable . . . . .		20,000
To record purchase of supplies for various ongoing activities.		
Inventory of Supplies . . . . .	2,000	
Fund Balance—Nonspendable . . . . .		2,000
To establish balance for supplies remaining at year’s end.		

<b>Consumption Method</b>		
Inventory of Supplies . . . . .	20,000	
Vouchers (or Accounts) Payable . . . . .		20,000
To record purchase of supplies for various ongoing activities.		
Expenditures—Control . . . . .	18,000	
Inventory of Supplies . . . . .		18,000
To record consumption of supplies during period. Because an asset that cannot be spent remains on the balance sheet, a \$2,000 portion of the Fund Balance is also reclassified from unassigned to nonspendable. This reclassification is normally done in creating the statements and not through a journal entry.		

## LO 16-8

Determine the proper timing for the recognition of revenues from various types of nonexchange transactions.

## Recognition of Revenues—Overview

The reporting of certain revenues has always posed theoretical issues in governmental accounting. Revenues such as property taxes, income taxes, and many grants do not have the same type of exchange process as is found in for-profit entities. Taxes, fines, and the like are imposed on the citizens to support the government's operations rather than providing a specific good or service in return for payments. Consequently, these revenues are referred to as nonexchange transactions.

To assist in the timing of such revenue recognition, GASB has provided a comprehensive set of guidelines. These rules do not apply to revenues such as interest or rents for which a true exchange process does exist. Instead, they focus on nonexchange transactions, including most taxes, fines, grants, gifts, and the like for which the government does not provide a direct and equal benefit for the amount received.

In a nonexchange transaction, a government (including the federal government, as a provider) either gives value (benefit) to another party without directly receiving equal value in exchange or receives value (benefit) from another party without directly giving equal value in exchange.<sup>23</sup>

For organizational purposes, nonexchange transactions are separated into four distinct classifications, each with its own rules as to proper recognition:

1. *Derived tax revenues.* Some tax assessments occur when an underlying exchange takes place. Income taxes and sales taxes are common examples of derived tax revenues. A sale occurs, for example, and an additional sales tax is charged, or income is earned and an income tax is assessed. The tax is tied to an event.
2. *Imposed nonexchange revenues.* Property taxes, fines, and penalties are viewed as imposed nonexchange revenues. The government makes an assessment, but no underlying exchange occurs. With a property tax, for example, the government is taxing ownership and not a specific event or transaction.
3. *Government-mandated nonexchange transactions.* This category includes monies, such as grants conveyed from one government to another, to help cover the cost of a required program. For example, assume a state specifies that a city must create a homeless shelter and then provides a grant of \$900,000 to help defray that cost. The city records this inflow of money as a government-mandated nonexchange transaction. City officials did not make the decision. The state government required the shelter to be constructed and provided a portion of the funding.
4. *Voluntary nonexchange transactions.* In this classification, money has been conveyed willingly to the state or local government by an individual, another government, or an organization, usually for a particular purpose. For example, a state might grant a city \$1.3 million to help improve reading programs in local schools. Unless the state had mandated an enhancement in these reading programs, this grant is accounted for as a voluntary nonexchange transaction. The money will provide an important benefit, but no separate government requirement led the state to make the conveyance.

## Derived Tax Revenues Such As Income Taxes and Sales Taxes

Accounting for derived tax revenues is relatively straightforward. These revenues are normally recognized in government-wide financial statements when the underlying transaction occurs. When an individual taxpayer earns income, the government should record the resulting income tax revenue. Likewise, when a business makes a sale, the government should recognize the related sales tax revenue.

Assume, for example, that sales by businesses operating within a locality amount to \$100 million for the current year and a sales tax of 4 percent is assessed. In the period in which the sales are made, the following entry is required for the \$4 million to be collected. The amount should be reported net of any estimated refunds or balances that cannot be collected.

<sup>23</sup> GASB, *Codification*, Sec., N50,104.

**Government-Wide Financial Statements—Derived Tax Revenues**

Receivable—Sales Taxes .....	4,000,000	
Revenue—Sales Taxes .....		4,000,000
To recognize sales tax that will be collected in connection with sales for the current period. Same entry is appropriate for the fund financial statements of the governmental fund if the money qualifies as available to be used.		

For fund financial statements, the preceding rules also apply except for one additional requirement. In connection with governmental funds, as mentioned previously, the financial resources must be “available” before the revenue can be recognized. That is, the amounts must be received during the present year or soon enough thereafter so that the money can be used to satisfy current claims. In that way, the essence of modified accrual accounting is utilized at the fund level of reporting.

**Imposed Nonexchange Revenues Such As Property Taxes and Fines**

Accounting for imposed nonexchange revenues is more complicated because no underlying transaction exists to guide the timing of the revenue recognition. Interestingly, GASB set up separate rules for recognizing the asset and the related revenue. The receivable is recorded as soon as the government has an enforceable legal claim as defined in that particular jurisdiction. Cash is recorded rather than a receivable if a prepayment is made. For the revenue side of the transaction, recognition is made in the time period when the resulting resources are required to be used or in the first period in which use is permitted.

To illustrate, assume that on October 1, Year 1, property tax assessments totaling \$530,000 are mailed by the City of Alban to its citizens to finance the government during Year 2. Assume that according to applicable state law, the city has no enforceable claim until January 1, Year 2 (often referred to as the *lien date*). To encourage early payment, the city allows a 5 percent discount on any amount received by December 31, Year 1.

No entry is recorded on October 1, Year 1. Although the assessments have been delivered, no enforceable legal claim yet exists, and the proceeds from the tax cannot be used until Year 2. However, assume that \$30,000 of these assessments are collected from citizens during the final three months of Year 1. After reduction for the 5 percent discount, the collection is \$28,500.

**Government-Wide Financial Statements and Fund Financial Statements—Property Taxes Prepaid in Year 1 for Year 2**

<b>Year 1</b>		
Cash .....	28,500	
Unavailable Property Tax Collections .....		28,500
To record collection of property tax prior to the start of the levy year after reduction for 5 percent discount.		

The collection of prepaid taxes does not create a liability; no type of payment or service is required. Because the money cannot be spent until Year 2, it is not yet a revenue. As shown in Exhibit 16.1, this balance represents a deferred inflow of resources on the statement of net position.

Assume that city officials expect to collect 96 percent of the remaining \$500,000 in assessments, or \$480,000. At the beginning of Year 2, both this receivable and the related revenue are recognized.

- The receivable is reported at that time because an enforceable claim comes into existence.
- For government-wide statements, the revenue is reported in Year 2 because that is the period in which the money can first be used.

Note here in the journal entry that the revenue is reduced directly by the estimate of taxes that are expected to be uncollectible. In addition, the previously collected \$28,500 is now recognized in Year 2 as revenue because, once again, this is the period for which use is allowed.

### ***Government-Wide Financial Statement—Property Taxes for Year 2***

<b>January 1, Year 2</b>		
Property Tax Receivable .....	500,000	
Allowance for Uncollectible Taxes .....		20,000
Revenues—Property Taxes .....		480,000
To recognize property tax assessment for Year 2.		
Unavailable Property Tax Collections .....	28,500	
Revenues—Property Taxes .....		28,500
To recognize property tax proceeds for Year 2 collected during Year 1.		

The above recording is the same for the fund financial statements unless some portion of the future cash collection is viewed as not being available to be used this period. Because property taxes are such a significant source of revenue for many governments, a specific 60-day maximum period for recognition has been standardized rather than allowing a government to choose a longer period as a way of increasing the amount of revenue recognized.

To illustrate, assume that records for the past several years indicate that \$400,000 of this anticipated \$480,000 will be collected during Year 2, another \$50,000 in the first 60 days of Year 3, and the final \$30,000 beyond 60 days into Year 3. This last \$30,000 is not viewed as available to pay for Year 2 expenditures. For that amount, recognition is not appropriate until Year 3. Only \$450,000 of the financial resources are expected to be available for Year 2 expenditures. Once again, the unavailable property tax collections amount (\$30,000 in this case) is shown as a deferred inflow of resources for the governmental fund. The receivable is recognized but no amount of this \$30,000 will be available until Year 3.

### ***Fund Financial Statements—Property Taxes for Year 2—Governmental Funds***

<b>January 1, Year 2</b>		
Property Tax Receivable .....	500,000	
Allowance for Uncollectible Taxes .....		20,000
Revenues—Property Taxes .....		450,000
Unavailable Property Tax Collections .....		30,000
To record amount of property taxes measurable and available to be used for Year 2 expenditures. Final \$30,000 is not expected until after 60 days into Year 3.		
Unavailable Property Tax Collections .....	28,500	
Revenues—Property Taxes .....		28,500
To recognize property tax proceeds for Year 2 collected during Year 1.		

## **Government-Mandated Nonexchange Transactions and Voluntary Nonexchange Transactions**

Although these two sources of revenues are identified separately by GASB, the timing of accounting recognition is the same so they are logically discussed here together. Governments recognize these types of revenue (often coming in the form of a grant) when all eligibility requirements have been met. Until eligibility is established, the existence of some degree of uncertainty precludes recognition. Thus, revenue is reported at the time of eligibility even if the money was actually received earlier.



Eligibility requirements are divided into four general classifications. Applicable requirements must all be met before revenues can be recorded for either government-mandated non-exchange transactions or voluntary nonexchange transactions.

1. *Required characteristics of the recipients.* Governments are often given standards that must be met in advance of receiving funding. To illustrate, assume that a not-for-profit foundation awards a grant to a city to finance improved reading education for all kindergarten children in the school system. Assume also that state law has been changed to mandate that all kindergarten teachers must hold proper certification. Consequently, the not-for-profit foundation has stated that it will only convey the grant to the city when all kindergarten teachers have met the state standard. The city must conform to this law first. Because of this eligibility requirement, recognition of the revenue from this grant is delayed until all teachers have become certified.
2. *Time requirements.* The parties providing the funding can specify when the money is to be used. The time becomes an eligibility requirement. To illustrate, assume that in April, a state government provides a grant to a city to buy milk for each child during the subsequent school year starting in September. The grant should be recognized as revenue in the period of use or in the period when the use of the funds is first permitted. Here, the money cannot be used in April so it is not yet revenue.
3. *Reimbursement.* Many grants and other forms of similar support are designed to reimburse a government for amounts spent according to specified guidelines. These arrangements are often called *expenditure-driven programs*. Assume that a state informs a locality that it will reimburse the city government for money paid to provide books to schoolchildren who could not otherwise afford them. In such cases, proper spending is the eligibility requirement. The city recognizes no revenue until its own money has been spent for these books.
4. *Contingencies.* In voluntary nonexchange transactions (but not in government-mandated nonexchange transactions), funding may be withheld until a specified procurement action has been taken. A grant might be given to buy park equipment, for example, but is only available after an appropriate piece of land has been acquired on which to build the park. Until land is obtained (or other required action is taken) a contingency exists, and the revenue should not be recognized.

For most of these events, a liability is recognized in the government-wide statements if money is received before the eligibility requirements are met. The liability is necessary because the government is obligated to act in some manner. However, if only a time restriction exists, then a deferred inflow of resources is reported (rather than a revenue) because no further action is required. In fund financial statements, if the cash is received but the eligibility requirements have not yet been met, a deferred inflow of resources is reported.

### LO 16-9

Account for the issuance of long-term bonds.

## Issuance of Bonds

The issuance of bonds serves as a major source of financing for many, if not most, state and local governments. At the end of the fourth quarter of 2014, the total long-term debt outstanding for all state and local governments amounted to the almost unbelievable balance of \$2.9 trillion.<sup>24</sup> Money received from the issuance of these debts is used for many purposes, including general financing and a wide variety of construction projects such as roads, bridges, and airports. As of June 30, 2014, the City and County of San Francisco, California, had approximately \$12.5 billion of noncurrent bonds, loans, and similar liabilities outstanding. Of that amount, \$2.7 billion had been incurred by governmental activities and nearly \$9.8 billion by business-type activities.

Because the proceeds of a long-term bond must be repaid, the government recognizes no revenues under either method of financial reporting. The reporting process for the government-wide financial statements is straightforward. Both the cash and the debt are increased to reflect

<sup>24</sup>U.S. Federal Reserve, *Federal Reserve Statistical Release*, "Financial Accounts of the United States - Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts," Third Quarter 2015 (Washington, D.C.: Federal Reserve, December 10, 2015), Table D.3, p. 5.

the issuance. Conversely, in the fund financial statements, recording is more complicated. Cash is received, but the debt is not a claim on current financial resources. Thus, from that perspective, the inflow of current financial resources creates neither a revenue nor a liability.

Assume, for example, that the Town of Ruark issues \$15 million in general obligation bonds at face value to finance the construction of a new school building. Because of the intended use of the proceeds, the town establishes a capital projects fund to monitor the receipt and spending of this cash. To emphasize that the money is not derived from a revenue, Ruark utilizes a special designation, *Other Financing Sources*. Note in Exhibit 16.4 the placement of Other Financing Sources (Uses) at the bottom of the statement of revenues, expenditures, and other changes in fund balance to identify changes in the amount of current financial resources created by transactions other than revenues and expenditures.

The following journal entry reflects the issuance of these bonds as recorded in the fund financial statements.

### ***Fund Financial Statements—Issuance of Bonds—Governmental Funds***

<b>Capital Projects Fund—School Building</b>	
Cash .....	15,000,000
Other Financing Sources—Bond Proceeds .....	15,000,000
To record issuance of bonds to finance school construction project.	

The reporting of the governmental funds stresses accountability for the inflows and outflows of current financial resources. Although an inflow of cash has taken place, no revenue was generated. The money came from a loan. This increase in current financial resources is reflected by the Other Financing Sources balance, a measurement account that is closed out at each year-end. The \$15 million bond liability is not reported by the capital projects fund because it is not yet a claim to current financial resources. Recognition of long-term debts has traditionally been ignored in the reporting of governmental funds. For example, the balance sheet in Exhibit 16.3 shows no noncurrent liabilities for the governmental funds, only claims to current financial resources. A reader of the financial statements who wants to see the complete record of the government's debts must examine the statement of net position in the government-wide financial statements (see Exhibit 16.1).

Because state and local governments often issue significant amounts of debts, related costs can be quite large. To standardize reporting, GASB has ruled that any debt issuance cost should be recognized as an expense/expenditure when incurred rather than being capitalized.

In addition, if available interest rates are subsequently reduced, bonds are sometimes reacquired by a government so that new financing can be arranged at a lower cost. The difference between the amount paid to retire the original debt and its net carrying amount at that time is not recorded immediately as an expense. Instead, the difference is reported on the statement of net position as a deferred outflow of resources (if more than the net carrying amount is paid) or a deferred inflow of resources (if less than the net carrying amount is paid). This deferred amount is amortized over time against interest expense. The refunding arrangement was set up in hopes of reducing the cost of interest. That justification is reflected in the subsequent handling of the difference.

Thus, the State of Florida reported at June 30, 2014, an “amount deferred on refunding of debt” as a deferred outflow of resources of \$120.2 million while showing the same account title as a deferred inflow of resources of \$4.0 million. Apparently, several debts had been refunded in recent years.

### ***Payment of Noncurrent Liabilities***

The payment of noncurrent liabilities by one of the governmental funds again demonstrates the fundamental differences between the two sets of financial statements.

- For the government-wide statements, the payment of principal and interest is recorded in the same manner as that used by a for-profit organization.

- On fund financial statements, an expenditure is recognized for settlement of the debt and also for the related interest. Both payments reduce current financial resources and are often made from a debt service fund.

Assume as an illustration that a government has a \$500,000 bond payment to be made along with three months of interest amounting to \$10,000. Government officials have previously set aside sufficient cash in a debt service fund to satisfy this obligation.

### ***Government-Wide Financial Statements—Bond and Interest Payments***

Bond Payable . . . . .	500,000	
Interest Expense . . . . .	10,000	
Cash . . . . .		510,000
To record payment of bond and related interest.		

### ***Fund Financial Statements—Bond and Interest Payments—Governmental Funds***

<b>Debt Service Funds</b>		
Expenditure—Bond Principal . . . . .	500,000	
Expenditure—Interest . . . . .	10,000	
Cash . . . . .		510,000
To record payment of bond and related interest.		

### ***Tax Anticipation Notes***

One type of debt is recorded in the same manner for government-wide and fund financial statements. State and local governments often issue short-term debts to provide financing until revenue sources such as property taxes have been collected. For example, if tax receipts are expected at a particular point in time, the government might need to borrow money to finance operations until that date. These short-term liabilities are often referred to as *tax anticipation notes* because they are outstanding only until a sufficient amount of taxes is collected.

As short-term liabilities, these debts are a claim on current financial resources. For fund financial statements, the issuance is not recorded as an other financing source but as a liability in the same manner as in the government-wide financial statements. Amounts paid for interest, though, are still recorded as an expenditure in producing fund statements but as an expense on the government-wide financial statements.

Assume a city borrows \$300,000 on a 60-day note on January 1 and agrees to pay back \$305,000 on March 1. The city expects to repay the debt with receipts from property tax assessments. In creating both sets of financial statements, cash and the related liability are both increased at the time of issuance.

At repayment, however, different entries are required.

### ***Fund Financial Statements—Payment of Tax Anticipation Notes by Governmental Funds***

<b>General Fund</b>		
Tax Anticipation Note Payable . . . . .	300,000	
Expenditure—Interest . . . . .	5,000	
Cash . . . . .		305,000
To record payment of short-term debt and interest for two months.		

**Government-Wide Financial Statements—Payment of Tax Anticipation Notes**

Tax Anticipation Note Payable . . . . .	300,000	
Interest Expense . . . . .	5,000	
Cash . . . . .		305,000
To record payment of short-term debt and interest for two months.		

**LO 16-10**

Account for special assessment projects.

**Special Assessments**

Governments can provide improvements or services that directly benefit a particular property and then assess the costs (in whole or in part) to the owner. In some cases, owners actually petition the government to initiate such projects to enhance property values. Paving streets, installing water and sewage lines, and constructing curbs and sidewalks are typical examples. To finance the work, the government usually issues debt and places a lien on the property being improved to ensure reimbursement. These are not necessarily small amounts. The City of Fargo, North Dakota, reported special assessment receivables of over \$280 million as of December 31, 2014. That balance represents the second biggest asset reported by Fargo with only its infrastructure assets being a larger amount.

Government-wide financial statements handle the debt and subsequent construction project in the same manner as for-profit enterprises. The asset is recorded at cost, and assessments are made and collected. Receipts are then used to settle the debt. To illustrate, assume that a sidewalk is to be added to a neighborhood at a cost of \$600,000. The city will issue bonds to finance construction with repayment to be made using funds collected from the owners of the property benefited. Total interest to be paid is \$30,000. The assessment to the owners is set at \$630,000 to cover all costs.

**Government-Wide Financial Statements—Special Assessment Project**

Cash . . . . .	600,000	
Bond Payable—Special Assessment . . . . .		600,000
To record debt issued to finance sidewalk construction.		
Infrastructure Asset—Sidewalk . . . . .	600,000	
Cash . . . . .		600,000
To record payment to contractor for the cost of building new sidewalk.		
Taxes Receivable—Special Assessment . . . . .	630,000	
Revenue—Special Assessment . . . . .		630,000
To record citizens' charges for special assessment project.		
Cash . . . . .	630,000	
Taxes Receivable—Special Assessment . . . . .		630,000
To record collection of money from assessment of citizens for sidewalk construction.		
Bond Payable—Special Assessment . . . . .	600,000	
Interest Expense . . . . .	30,000	
Cash . . . . .		630,000
To record payment of debt on special assessment bonds.		

In the fund financial statements, this same series of transactions has a completely different appearance. Neither the infrastructure asset nor the long-term debt is recorded because the current financial resources measurement basis is used.

**Fund Financial Statements—Special Assessment Project—Governmental Funds**

<b>Capital Projects Fund—Special Assessment Project</b>		
Cash .....	600,000	
Other Financing Sources—Bond Proceeds .....		600,000
To record issuance of bonds to finance sidewalk construction with payment to be made from a special assessment levy.		
Expenditures—Sidewalk .....	600,000	
Cash .....		600,000
To record payment to contractor for the cost of constructing sidewalk.		

<b>Debt Service Fund—Special Assessment Project</b>		
Taxes Receivable—Special Assessment .....	630,000	
Revenue—Special Assessment .....		630,000
To record assessment that will be used to pay bond principal and related interest incurred after construction.		
Cash .....	630,000	
Taxes Receivable—Special Assessment .....		630,000
To record collection of assessment paid by citizens to extinguish bond and interest incurred in construction of sidewalk.		
Expenditure—Special Assessment Bond .....	600,000	
Expenditure—Interest .....	30,000	
Cash .....		630,000
To record payment of bonds payable and interest incurred in construction of sidewalk.		

One alternative for the reporting of special assessment projects should be mentioned. In some cases, the government may facilitate a project but accept no legal obligation. The government assumes no liability (either primary or secondary) for the debt. The money goes from the citizens to the government and then directly to the contractors. The government serves merely as a conduit.

If the government has no liability for defaults, overruns, or other related problems, the recording of special assessment assets, liabilities, revenues, expenses, other financing sources, and expenditures is not really relevant to the government and its resources. In that situation, all transactions are recorded in an agency fund as increases and decreases in cash, amounts due from citizens, and amounts due to contractors. No other balances are needed. As a fiduciary fund, no impact appears within the government-wide statements.

**LO 16-11**

Record the various types of monetary transfers that occur within the funds maintained by a state or local government.

**Interfund Transactions**

Interfund transactions are commonly used within government units as a way to direct sufficient resources to all activities and functions. Monetary transfers made from the general fund are especially prevalent because general tax revenues are initially accumulated in this fund. For example, in fund financial statements for the year ended June 30, 2014, the City of Houston, Texas, indicated that \$335.1 million was transferred out of its general fund to other funds while \$72.6 million was transferred in from other funds. Transfers into a fund and out of that same fund are not offset in reporting fund financial statements. There is no netting to arrive at reported amounts.

In contrast, the government-wide financial statements do not report most transfers because they frequently occur solely within the governmental activities. For example, a transfer from the general fund to a debt service fund is reported in both funds on fund financial statements. However, it creates no net impact in the government-wide financial statements because both funds are classified within the governmental activities.

Thus, for government-wide financial reporting, the following distinctions are drawn for transfers:

- *Intra-activity transactions* occur between two governmental funds (so that the net totals reported for governmental activities are not affected) or between two enterprise funds (so that the net totals reported for business-type activities are not affected). Transfers between governmental funds and many of the internal service funds are also included here because, as discussed previously, internal service funds are usually reported as governmental activities. Intra-activity transactions are not reported in government-wide financial statements because no overall change is created in either the governmental activities or the business-type activities.
- *Interactivity transactions* occur between governmental funds and enterprise funds. They impact the total amount of resources reported for both governmental activities and business-type activities; one increases as the other decreases. Thus, interactivity transactions are reported in government-wide financial statements. For example, in Exhibit 16.1, internal amounts due (\$50) at year-end are reported as both a positive and a negative within the asset section of the statement of net position and then offset to arrive at overall totals. Likewise, in Exhibit 16.2, transfers (\$600) occurring between the two classifications during the year appear at the bottom of the general revenues section. These individual totals are shown and then eliminated so that no amount is reported for the government as a whole. Although most transfers are intra-activity, interactivity transactions are not uncommon. In its June 30, 2014, government-wide financial statements, the City of St. Louis reported (and then eliminated) internal balances of \$12.6 million within the asset section of its statement of net position and transfers of \$9.4 million in its statement of activities.

Consequently, in discussing interfund transactions, the reporting for government-wide statements is impacted only when an interactivity transaction is involved.

### ***Monetary Transfers***

The most common interfund transactions are transfers within the governmental funds to ensure adequate financing of budgeted expenditures. For example, a city council could vote to transfer \$800,000 from the general fund to a capital projects fund to cover a portion of the cost of a new school building.

### ***Fund Financial Statements—Intra-Activity Transaction***

<b>General Fund</b>	
Other Financing Uses—Transfers Out—Capital Projects Fund . . . . .	800,000
Due to Capital Projects Fund (a payable) . . . . .	800,000
To record authorization of transfer for school construction.	
<b>Capital Projects Fund—School Building</b>	
Due from General Fund (a receivable) . . . . .	800,000
Other Financing Sources—Transfers In—General Fund . . . . .	800,000
To record authorization of transfer for school construction.	

The *Other Financing Uses/Sources* designations are appropriate here for the fund financial statements. Financial resources are being moved into and out of these funds although neither a revenue nor an expenditure has been recognized. As Exhibit 16.4 shows, these balances are reported by each fund in the statement of revenues, expenditures, and other changes in fund balances. The figures are shown but not offset in any way. Both accounts are then closed out at the end of the current year. In contrast, the *Due to/Due from* accounts in the above entries are the equivalent of interfund payable and receivable balances. Again, no elimination is made in arriving at total figures for the governmental funds.

Because this transfer is an intra-activity transaction, no reporting is made in the government-wide financial statements. Financial resources are simply being shifted within the governmental activities as a whole.

Not all monetary transfers are for normal operating purposes. Nonrecurring or nonroutine transfers can also take place. For example, money might be transferred from the general fund to create or expand an enterprise fund such as a bus or subway system. To illustrate, assume that a city sets aside \$20 million of unassigned money to help permanently finance a new subway system that will be open to the public. For convenience, this transaction is recorded as if cash is transferred immediately so that no receivable or payable is necessary:

***Fund Financial Statements—Interactivity Transaction***

<b>General Fund</b>	
Other Financing Uses—Transfers Out—Subway System . . . . .	20,000,000
Cash . . . . .	20,000,000
To record transfer to help finance subway system.	
<b>Enterprise Fund—Subway System</b>	
Cash . . . . .	20,000,000
Capital Contributions . . . . .	20,000,000
To record receipt of transfer from unrestricted funds.	

Because this transfer is an interactivity transaction (between governmental activities and business-type activities), entries must also be made for the government-wide financial statements. The transfer reduces the assets of the governmental activities but increases the assets in the business-type activities. These two transfer balances will be offset in arriving at totals for the government as a whole.

***Government-Wide Financial Statements—Interactivity Transaction***

<b>Governmental Activities</b>	
Transfers Out—Subway System . . . . .	20,000,000
Cash . . . . .	20,000,000
To record transfer to help finance subway system.	
<b>Business-Type Activities</b>	
Cash . . . . .	20,000,000
Transfers In—General Fund . . . . .	20,000,000
To record receipt of transfer from unrestricted funds.	

***Internal Exchange Transactions***

Some payments made within a government are actually the same as transactions with an outside party. For example, a city will likely compensate its own print shop (or any other internal service fund or enterprise fund) for services or materials acquired just as if the work had been performed by an outside vendor. To avoid confusion in reporting, such transfers are recorded as revenues and as expenditures or expenses. These transactions are not really viewed as transfers. The payments are made for work done or materials acquired and are not designed to shift financial resources from one fund to another.

Fund financial statements record all such internal exchange transactions. However, as previously discussed, most internal service funds are reported within governmental activities on the government-wide statements. Exchanges between a governmental fund and one of these

internal service funds will have no net impact on the government-wide figures being reported. The increases and decreases offset. Therefore, those balances are omitted.

To illustrate, assume that a city government pays its print shop (an internal service fund) \$15,000 for work done for the police department. In addition, the government pays another \$6,000 to a toll road operated as an enterprise fund to allow fire department vehicles to ride on the highway without having to make individual payments.

### ***Fund Financial Statements—Internal Exchange Transaction***

<b>General Fund</b>		
Expenditures—Printing . . . . .	15,000	
Expenditures—Toll Road Privileges . . . . .	6,000	
Cash . . . . .		21,000
To record payment for printing supplies for use by police department and for use of a toll road by fire department.		
<b>Internal Service Fund—Print Shop</b>		
Cash . . . . .	15,000	
Revenues . . . . .		15,000
To record collection of money paid by the police department for printed materials.		
<b>Enterprise Fund—Toll Road</b>		
Cash . . . . .	6,000	
Revenues . . . . .		6,000
To record collection of money from government for fire department vehicular use of toll roads.		

The \$15,000 transaction with the print shop is not reflected in the government-wide financial statements if this internal service fund is classified within the governmental activities. In that case, the transfer is the equivalent of an intra-activity transaction. However, the \$6,000 payment made by the police department (a governmental activity) to the enterprise fund (a business-type activity) is the same as an interactivity transfer and is reported through the following entries.

### ***Government-Wide Financial Statements—Internal Exchange Transaction***

<b>Governmental Activities</b>		
Expenses—Toll Road Privileges . . . . .	6,000	
Cash . . . . .		6,000
To record payment for use of toll road by fire department's vehicles.		
<b>Business-Type Activities</b>		
Cash . . . . .	6,000	
Revenues . . . . .		6,000
To record collection of money from government for fire department vehicular use of toll roads.		



## Summary

1. Readers of state and local government financial statements have a wide variety of informational needs. No single set of financial statements is capable of meeting all user needs, a factor that has led to the requirement that two sets of statements be reported. Accountability of government officials and control over public spending have always been essential elements of traditional government accounting. GASB has attempted to keep those priorities in place while also broadening the scope of the financial statements being produced.
2. A state or local government unit prepares fund financial statements utilizing fund accounting. In this system, activities are classified into three broad categories (governmental, proprietary, and fiduciary). Governmental funds account for service activities. Proprietary funds account for activities for which a user charge is assessed. Fiduciary funds account for resources that the government holds as a trustee or agent for an external party.
3. Governmental funds have five fund types: the general fund, special revenue funds, capital projects funds, debt service funds, and permanent funds. Proprietary funds comprise enterprise funds and internal service funds whereas fiduciary funds comprise pension trust funds, investment trust funds, private-purpose trust funds, and agency funds.
4. Government-wide financial statements are made up of a statement of net position and a statement of activities that report both governmental activities (the governmental funds and most of the internal service funds) and business-type activities (enterprise funds and occasionally an internal service fund). These statements measure all economic resources. The timing of recognition is guided by accrual accounting.
5. Fund financial statements include a number of financial statements. This chapter focuses on the balance sheet and the statement of revenues, expenditures, and other changes in fund balances for the governmental funds. These statements must show separately the general fund and any other individual fund that qualifies as major. For the governmental funds, these statements report current financial resources (mostly cash, receivables, and investments and claims on those current financial resources). The timing of recognition is guided by modified accrual accounting.
6. "Fund balance" figures reflect the size of the net amount of resources held by a particular fund within the governmental funds. To indicate the government's level of control over these resources, the fund financial statements classify the fund balance as nonspendable (the resource cannot be spent), restricted (use has been designated by a party outside the government), committed (use has been approved by the highest level of authority within the government), assigned (use has been set within the government but not by the highest level of authority), and unassigned (use has not been designated) so that the resources can be freely used by government officials.
7. To aid in control over financial resources and disclose allocation decisions, the approved budgets for many of the governmental funds are recorded each year. The initial budget, a final amended budget, and actual figures for the period are then reported as required supplementary information along with the financial statements (or as a separate statement within the fund financial statements).
8. Monetary commitments for purchase orders and contracts are recorded in the individual governmental funds by recognizing encumbrances. These balances are recorded when the commitment is made and removed when an actual claim to current financial resources first comes into existence. This recording helps government officials avoid spending more than the amounts properly appropriated.
9. The fund financial statements recognize expenditures for capital outlay, long-term debt payment, and expense-type costs when a claim to current financial resources is created. In contrast, government-wide financial statements capitalize capital outlay, reduce liabilities for debt payments, and record expenses.
10. Revenue recognition for nonexchange transactions such as sales taxes and property taxes is based on a classification system. The timing and method of recognition depend on whether the revenue is a derived tax revenue, imposed nonexchange revenue, government-mandated nonexchange transaction, or voluntary nonexchange transaction.
11. The issuance of long-term bonds is recorded as an "other financing source" by the governmental funds because the financial resource inflow is not a revenue. However, the same event is reported as an increase in a long-term liability both in the proprietary funds and in the government-wide financial statements as a whole.
12. Transfers between funds are normally reported as an "other financing source" and "other financing use" within the fund financial statements. To show the impact on each fund type, these balances are not eliminated or offset. The government-wide statements do not report such transactions unless they have an effect on overall governmental activities and business-type activities. If reported, the amounts are offset in arriving at figures for the government as a whole. For internal exchange transactions in which payment is made for a good or service, the fund statements recognize a revenue and an expenditure or expense. The government-wide financial statements normally do not reflect internal exchange transfers unless they occur between an enterprise fund and a governmental fund.

## Comprehensive Illustration

### Problem

(Estimated Time: 50 Minutes). The Town of Drexel has the following financial transactions.

1. The town council adopts an annual budget for the general fund estimating general revenues of \$1.7 million, approved expenditures of \$1.5 million, and approved transfers out of \$120,000.
2. The town levies property taxes of \$1.3 million. It expects to collect all but 3 percent of these taxes during the year. Of the levied amount, \$40,000 will be collected next year but after more than 60 days.
3. The town orders two new police cars at an approximate cost of \$110,000.
4. A transfer of \$50,000 is made from the general fund to the debt service fund.
5. The town makes a payment on a bond payable of \$40,000 along with \$10,000 of interest using the money previously set aside.
6. The Town of Drexel issues a \$2 million bond at face value in hopes of acquiring a building to convert into a high school.
7. The two police cars are received with an invoice price of \$112,000. The voucher has been approved but will not be paid for three weeks.
8. The town purchases the building for the high school for \$2 million in cash and immediately begins renovating it.
9. Depreciation on the new police cars is computed as \$30,000 for the period.
10. The town borrows \$100,000 on a 30-day tax anticipation note.
11. The Town of Drexel begins a special assessment curbing project. The government issues \$800,000 in notes at face value to finance this project. The town has guaranteed the debt if the assessments collected do not cover the entire balance.
12. A contractor completes the curbing project and is paid \$800,000 as agreed.
13. The town assesses citizens \$850,000 for the completed curbing project.
14. The town collects the special assessments of \$850,000 in full and repays the debt plus \$50,000 in interest.
15. The town receives a \$10,000 cash grant from a regional charity to beautify a local park. The grant must be used to cover the specific costs that the town incurs.
16. The town spends the first \$4,000 to beautify the park.

### Required

- a. Prepare journal entries for the town based on the production of fund financial statements.
- b. Prepare journal entries in anticipation of preparing government-wide financial statements.

### Solution

#### a. Fund Financial Statements

1.	<b>General Fund</b>	
	Estimated Revenues .....	1,700,000
	Appropriations .....	1,500,000
	Estimated Other Financing Uses .....	120,000
	Budgetary Fund Balance .....	80,000
2.	<b>General Fund</b>	
	Property Tax Receivable .....	1,300,000
	Allowance for Uncollectible Taxes .....	39,000
	Unavailable Property Tax Revenues .....	40,000
	Revenues—Property Taxes .....	1,221,000
3.	<b>General Fund</b>	
	Encumbrances—Police Cars .....	110,000
	Encumbrances Outstanding .....	110,000

4.	<b>General Fund</b>		
	Other Financing Uses—Transfers Out .....	50,000	
	Cash .....		50,000
	<b>Debt Service Funds</b>		
	Cash .....	50,000	
	Other Financing Sources—Transfers In .....		50,000
5.	<b>Debt Service Funds</b>		
	Expenditures—Principal .....	40,000	
	Expenditures—Interest .....	10,000	
	Cash .....		50,000
6.	<b>Capital Projects Funds</b>		
	Cash .....	2,000,000	
	Other Financing Sources—Bond Proceeds .....		2,000,000
7.	<b>General Fund</b>		
	Encumbrances Outstanding .....	110,000	
	Encumbrances—Police Cars .....		110,000
	Expenditures—Police Cars .....	112,000	
	Vouchers Payable .....		112,000
8.	<b>Capital Projects Funds</b>		
	Expenditures—Building .....	2,000,000	
	Cash .....		2,000,000
9.	No entry is recorded. Expenditures rather than expenses are recorded by the governmental funds.		
10.	<b>General Fund</b>		
	Cash .....	100,000	
	Tax Anticipation Note Payable .....		100,000
11.	<b>Capital Projects Funds</b>		
	Cash .....	800,000	
	Other Financing Sources—Special Assessments Note .....		800,000
12.	<b>Capital Projects Funds</b>		
	Expenditures—Curbing .....	800,000	
	Cash .....		800,000
13.	<b>Debt Service Funds</b>		
	Taxes Receivable—Special Assessment .....	850,000	
	Revenues—Special Assessment .....		850,000
14.	<b>Debt Service Funds</b>		
	Cash .....	850,000	
	Taxes Receivable—Special Assessment .....		850,000
	Expenditures—Principal .....	800,000	
	Expenditures—Interest .....	50,000	
	Cash .....		850,000

15.	<b>Special Revenue Funds</b>		
	Cash .....	10,000	
	Grant Collected in Advance .....		10,000

16.	<b>Special Revenue Funds</b>		
	Expenditures—Park Beautification .....	4,000	
	Cash .....		4,000
	Grant Collected in Advance .....	4,000	
	Revenues—Grants .....		4,000

**b. Government-Wide Financial Statements**

1. Budgetary entries are not reported within the government-wide financial statements. Budgets are recorded in the individual funds and are then shown as required supplementary information or in a separate fund financial statement.

2.	<b>Governmental Activities</b>		
	Property Tax Receivable .....	1,300,000	
	Allowance for Uncollectible Taxes .....		39,000
	Revenues—Property Taxes .....		1,261,000

3. Commitments are not reported in government-wide financial statements.

4. This transfer was entirely within the governmental funds and, therefore, had no net effect on the governmental activities. It is an intra-activity transaction. No journal entry is needed.

5.	<b>Governmental Activities</b>		
	Bonds Payable .....	40,000	
	Interest Expense .....	10,000	
	Cash .....		50,000

6.	<b>Governmental Activities</b>		
	Cash .....	2,000,000	
	Bonds Payable .....		2,000,000

7.	<b>Governmental Activities</b>		
	Police Cars (or Vehicles) .....	112,000	
	Vouchers (or Accounts) Payable .....		112,000

8.	<b>Governmental Activities</b>		
	Building .....	2,000,000	
	Cash .....		2,000,000

9.	<b>Governmental Activities</b>		
	Depreciation Expense .....	30,000	
	Accumulated Depreciation .....		30,000

10.	<b>Governmental Activities</b>		
	Cash .....	100,000	
	Tax Anticipation Note Payable .....		100,000

11.	<b>Governmental Activities</b>		
	Cash .....	800,000	
	Special Assessment Notes Payable .....		800,000

12.	<b>Governmental Activities</b>		
	Infrastructure Assets—Curbing . . . . .	800,000	
	Cash . . . . .		800,000
13.	<b>Governmental Activities</b>		
	Taxes Receivable—Special Assessment . . . . .	850,000	
	Revenues—Special Assessment . . . . .		850,000
14.	<b>Governmental Activities</b>		
	Cash . . . . .	850,000	
	Taxes Receivable—Special Assessment . . . . .		850,000
	Special Assessment Notes Payable . . . . .	800,000	
	Interest Expense . . . . .	50,000	
	Cash . . . . .		850,000
15.	<b>Governmental Activities</b>		
	Cash . . . . .	10,000	
	Grant Collected in Advance . . . . .		10,000
16.	<b>Governmental Activities</b>		
	Expenses—Park Beautification . . . . .	4,000	
	Cash . . . . .		4,000
	Grant Collected in Advance . . . . .	4,000	
	Revenues—Grants . . . . .		4,000

## Questions

- How have users' needs impacted the development of accounting principles for state and local government units?
- Why have accountability and control been so important in the traditional accounting for state and local government units?
- How has the dual system of financial statements impacted the financial reporting of state and local governments?
- What are the basic financial statements that a state or local government now produces?
- What measurement focus is used in fund financial statements for governmental funds, and what system is applied to determine the timing of revenue and expenditure recognition?
- What measurement focus is used in government-wide financial statements, and what system is applied to determine the timing of revenue and expense recognition?
- What assets are viewed as current financial resources?
- In applying the current financial resources measurement focus, when are liabilities recognized in fund financial statements?
- What are the three categories of funds? What funds are included in each of these three?
- What are the five fund types within the governmental funds? What types of events does each of these report?
- What are the two fund types within the proprietary funds? What types of events does each report?
- What are the four fund types within the fiduciary funds? What types of events does each report?
- What are the two major divisions reported in government-wide financial statements? What funds are *not* reported in these financial statements?
- Fund financial statements have separate columns for each activity. Which activities are reported in this manner?
- The general fund of a city reports assets of \$300,000 and liabilities of \$200,000 in the fund financial statements. Explain what is meant by each of the following balances: fund balance—nonspendable of \$40,000, fund balance—restricted of \$28,000, fund balance—committed of \$17,000, fund balance—assigned of \$4,000, and fund balance—unassigned of \$11,000.
- Why are budgetary entries recorded in the individual funds of a state or local government?

17. How are budget results shown in the financial reporting of a state or local government?
18. When is an encumbrance recorded? What happens to this balance? How are encumbrances reported in government-wide financial statements?
19. What costs necessitate the reporting of an expenditure by a governmental fund?
20. At what point in time does a governmental fund report an expenditure?
21. How do governmental funds report capital outlay in fund financial statements? How do government-wide financial statements report capital expenditures?
22. What are the two different ways that supplies and prepaid items can be recorded on fund financial statements?
23. What are the four classifications of nonexchange revenues that a state or local government can recognize? In each case, when are revenues normally recognized?
24. When is a receivable recognized for property tax assessments? When is the revenue recognized?
25. How is the issuance of a long-term bond reported on fund financial statements? How is the issuance of a long-term bond reported on government-wide financial statements?
26. What is a special assessment project? How are special assessment projects reported?
27. How are interfund transfers reported in fund financial statements?
28. In government-wide financial statements, how do intra-activity and interactivity transactions differ? How is each type of transaction reported?
29. What is an internal exchange transaction, and how is it reported?

## Problems

LO 16-4

1. Which of the following is *not* a governmental fund?
  - a. Special revenue fund
  - b. Internal service fund
  - c. Capital projects fund
  - d. Debt service fund

LO 16-4

2. What is the purpose of a special revenue fund?
  - a. To account for revenues legally or externally restricted as an operating expenditure.
  - b. To account for ongoing activities.
  - c. To account for gifts when only subsequently earned income can be expended.
  - d. To account for the cost of long-lived assets bought with designated funds.

LO 16-4

3. What is the purpose of enterprise funds?
  - a. To account for operations that provide services to other departments within a government.
  - b. To account for asset transfers.
  - c. To account for ongoing activities such as the police and fire departments.
  - d. To account for operations financed in whole or in part by outside user charges.

LO 16-4

4. Which of the following statements is true?
  - a. There are three different types of proprietary funds.
  - b. There are three different types of fiduciary funds.
  - c. There are five different types of fiduciary funds.
  - d. There are five different types of governmental funds.

LO 16-1, 16-6

5. A government expects to receive revenues of \$400,000 but has approved expenditures of \$430,000. The anticipated shortage will have an impact on which of the following terms?
  - a. Interperiod equity
  - b. Modified accrual accounting
  - c. Consumption accounting
  - d. Account groups

LO 16-4

6. A citizen of the City of Townsend makes a donation of \$22,000 in investments. The citizen has stipulated that the investments be held. Any resulting income must be used to help maintain the city's cemetery. In which fund should this asset be reported?
  - a. Special revenue funds
  - b. Capital projects funds
  - c. Permanent funds
  - d. General fund

## LO 16-2

7. Which of the following statements is correct about the reporting of governmental funds?
- Fund financial statements measure economic resources.
  - Government-wide financial statements measure only current financial resources.
  - Fund financial statements measure both economic resources and current financial resources.
  - Government-wide financial statements measure economic resources.

## LO 16-2

8. Which of the following statements is correct about the reporting of governmental funds?
- Fund financial statements measure revenues and expenditures based on modified accrual accounting.
  - Government-wide financial statements measure revenues and expenses based on modified accrual accounting.
  - Fund financial statements measure revenues and expenses based on accrual accounting.
  - Government-wide financial statements measure revenues and expenditures based on accrual accounting.

## LO 16-2, 16-7

9. During the current year, a government buys land for \$80,000. Which of the following is *not* true?
- The land could be reported as an asset by the business-type activities in the government-wide financial statements.
  - The land could be reported as an asset by the governmental activities in the government-wide financial statements.
  - The land could be reported as an asset by the proprietary funds in the fund financial statements.
  - The land could be reported as an asset by the governmental funds in the fund financial statements.

## LO 16-5

10. The City of Bagranoff holds \$90,000 in cash that will be used to make a bond payment when the debt comes due early next year. The assistant treasurer had made that decision. However, just before the end of the current year, the city council formally approved using this money in this way. The city council has been designated as the highest level of decision-making authority for this government. What impact does the council's action have on the reporting of fund financial statements?
- Fund balance—unassigned goes down and fund balance—restricted goes up.
  - Fund balance—assigned goes down and fund balance—committed goes up.
  - Fund balance—unassigned goes down and fund balance—assigned goes up.
  - Fund balance—assigned goes down and fund balance—restricted goes up.

## LO 16-6

11. Which of the following statements is true concerning the recording of a budget?
- At the beginning of the year, debit Appropriations.
  - A debit to the Budgetary Fund Balance account indicates an expected surplus.
  - At the beginning of the year, debit Estimated Revenues.
  - At the end of the year, credit Appropriations.

## LO 16-1, 16-2, 16-7

12. The general fund pays rent for two months. Which of the following is *not* correct?
- Rent expense should be reported in the government-wide financial statements.
  - Rent expense should be reported in the general fund.
  - An expenditure should be reported in the fund financial statements.
  - If one month of rent is in the first year with the other month in the next year, either the purchases method or the consumption method can be used in fund statements.

## LO 16-6, 16-7

13. A purchase order for \$3,000 is recorded in the general fund for the purchase of a new computer. The computer is received at an actual cost of \$3,020. Which of the following statements is correct?
- Machinery is increased in the general fund by \$3,020.
  - An encumbrance account is reduced by \$3,020.
  - An expenditure is increased by \$3,020.
  - An expenditure is recorded for the additional \$20.

## LO 16-5

14. At the end of the current year, a government reports a fund balance—assigned balance of \$9,000 in connection with an encumbrance. What information is being conveyed?
- A donor has given the government \$9,000 that must be used in a specified fashion.
  - The government has made \$9,000 in commitments in one year that will be honored in the subsequent year.

LO 16-2, 16-3, 16-7

- c. Encumbrances exceeded expenditures by \$9,000 during the current year.
- d. The government spent \$9,000 less than was appropriated.

15. A government buys equipment for its police department at a cost of \$54,000. Which of the following is *not* true?
- a. Equipment will increase by \$54,000 in the government-wide financial statements.
  - b. Depreciation in connection with this equipment will be reported in the fund financial statements.
  - c. The equipment will not appear within the reported assets in the fund financial statements.
  - d. An expenditure for \$54,000 will be reported in the fund financial statements.

LO 16-3, 16-7

16. A city acquires supplies for its fire department and uses the consumption method of accounting. Which of the following statements is true for the fund statements?
- a. An expenditures account was debited at the time of receipt.
  - b. An expense is recorded as the supplies are consumed.
  - c. An inventory account is debited at the time of the acquisition.
  - d. The supplies are recorded within the General Fixed Assets Account Group.

LO 16-8

17. An income tax is an example of which of the following?
- a. Derived tax revenue.
  - b. Imposed nonexchange revenue.
  - c. Government-mandated nonexchange revenue.
  - d. Voluntary nonexchange transaction.

LO 16-8

18. The state government passes a law requiring localities to upgrade their water treatment facilities. The state then awards a grant of \$500,000 to the Town of Midlothian to help pay for this cost. What type of revenue is this grant?
- a. Derived tax revenue.
  - b. Imposed nonexchange revenue.
  - c. Government-mandated nonexchange revenue.
  - d. Voluntary nonexchange transaction.

LO 16-8

19. The state awards a grant of \$50,000 to the Town of Glenville. The state will pay the grant money to the town as a reimbursement for money spent on road repair. At the time of the grant, the state pays \$8,000 in advance. During the first year of this program, the town spent \$14,000 and applied for reimbursement. What amount of revenue should be recognized?
- a. \$-0-
  - b. \$8,000
  - c. \$14,000
  - d. \$50,000

LO 16-5, 16-9

20. A city issues a 60-day tax anticipation note to fund operations until taxes have been collected. What recording should it make?
- a. The liability should be reported in the government-wide financial statements; an other financing source should be shown in the fund financial statements.
  - b. A liability should be reported in the government-wide financial statements and in the fund financial statements.
  - c. An other financing source should be shown in the government-wide financial statements and in the fund financial statements.
  - d. An other financing source should be shown in the government-wide financial statements; a liability is reported in the fund financial statements.

LO 16-5, 16-9

21. A city issues five-year bonds payable to finance construction of a new school. What recording should be made?
- a. Report the liability in the government-wide financial statements; show an other financing source in the fund financial statements.
  - b. Report a liability in the government-wide financial statements and in the fund financial statements.
  - c. Show an other financing source in the government-wide financial statements and in the fund financial statements.
  - d. Show an other financing source in the government-wide financial statements; report a liability in the fund financial statements.



## LO 16-9

22. The City of Dylan issues a 10-year bond payable of \$1 million at face value on the first day of Year 1. Debt issuance costs of \$10,000 are paid on that day. For government-wide financial statements, how is this debt issuance cost reported?
- \$1,000 is recorded as an expense and \$9,000 is recorded as an asset.
  - \$1,000 is recorded as an expense and \$9,000 is recorded as a deferred outflow of resources.
  - \$10,000 is recorded as an expense.
  - \$10,000 is recorded as an asset.

## LO 16-9

23. The City of Frost has a 20-year debt outstanding. On the last day of the current year, this debt has an outstanding balance of \$4.8 million and five years remaining until it is due. On that date, the debt is paid off early for \$5 million. A new debt is issued (with a lower interest rate) for \$5.4 million. How is the \$200,000 between the amount paid and the outstanding balance of \$4.8 million recognized on government-wide financial statements?
- As an expense.
  - As a reduction in liabilities.
  - As a deferred outflow of resources on the statement of net position.
  - As an asset on the statement of net position.

## LO 16-2, 16-9

24. A \$110,000 payment is made on a long-term liability. Of this amount, \$10,000 represents interest. Which of the following is *not* true for the recording of this transaction?
- Reduce liabilities by \$100,000 in the government-wide financial statements.
  - Record a \$110,000 expenditure in the fund financial statements.
  - Reduce liabilities by \$100,000 in the fund financial statements.
  - Recognize \$10,000 interest expense in the government-wide financial statements.

## LO 16-1, 16-10

25. A city constructs a special assessment project (a sidewalk) for which it is secondarily liable. The city issues bonds of \$90,000. It authorizes another \$10,000 that is transferred out of the general fund. The sidewalk is built for \$100,000. The citizens are billed for \$90,000. They pay this amount and the debt is paid off. Where is the \$100,000 expenditure for construction recorded?
- It is not recorded by the city.
  - It is recorded in the agency fund.
  - It is recorded in the general fund.
  - It is recorded in the capital projects fund.

## LO 16-4, 16-10

26. A city constructs curbing in a new neighborhood and finances it as a special assessment. Under what condition should these transactions be recorded in an agency fund?
- Never; the work is reported in the capital projects funds.
  - Only if the city is secondarily liable for any debt incurred to finance construction costs.
  - Only if the city is in no way liable for the costs of the construction.
  - In all cases.

## LO 16-11

27. Which of the following is an example of an interactivity transaction?
- Money is transferred from the general fund to the debt service fund.
  - Money is transferred from the capital projects fund to the general fund.
  - Money is transferred from the special revenue fund to the debt service fund.
  - Money is transferred from the general fund to the enterprise fund.

## LO 16-5, 16-11

28. Cash of \$60,000 is transferred from the general fund to the debt service fund. What is reported on the government-wide financial statements?
- No reporting is made.
  - Other Financing Sources increase by \$60,000; Other Financing Uses increase by \$60,000.
  - Revenues increase by \$60,000; Expenditures increase by \$60,000.
  - Revenues increase by \$60,000; Expenses increase by \$60,000.

## LO 16-5, 16-11

29. Cash of \$60,000 is transferred from the general fund to the debt service fund. What is reported on the fund financial statements?
- No reporting is made.
  - Other Financing Sources increase by \$60,000; Other Financing Uses increase by \$60,000.
  - Revenues increase by \$60,000; Expenditures increase by \$60,000.
  - Revenues increase by \$60,000; Expenses increase by \$60,000.

LO 16-5, 16-11

30. Cash of \$20,000 is transferred from the general fund to the enterprise fund to pay for work that was done. What is reported on the government-wide financial statements?
- No reporting is made.
  - Other Financing Sources increase by \$20,000; Other Financing Uses increase by \$20,000.
  - Revenues increase by \$20,000; Expenditures increase by \$20,000.
  - Revenues increase by \$20,000; Expenses increase by \$20,000.

LO 16-5, 16-11

31. Cash of \$20,000 is transferred from the general fund to the enterprise fund to pay for work that was done. What is reported on the fund financial statements?
- No reporting is made.
  - Other Financing Sources increase by \$20,000; Other Financing Uses increase by \$20,000.
  - Revenues increase by \$20,000; Expenditures increase by \$20,000.
  - Revenues increase by \$20,000; Expenses increase by \$20,000.

LO 16-3, 16-6

32. The board of commissioners of the City of Hartmoore adopted a general fund budget for the year ending June 30, 2017, that included revenues of \$1,000,000, bond proceeds of \$400,000, appropriations of \$900,000, and operating transfers out of \$300,000. If this budget is formally integrated into the accounting records, what journal entry is required at the beginning of the year? What later entry is required?

LO 16-2, 16-6, 16-7

33. A city orders a new computer for its general fund at an anticipated cost of \$88,000. Its actual cost when received is \$89,400. Payment is subsequently made. Prepare all required journal entries for both fund and government-wide financial statements. What information do the government-wide financial statements present? What information do the fund financial statements present?

LO 16-1, 16-2, 16-7

34. Cash of \$90,000 is transferred from a city's general fund to start construction on a police station. The city issues a bond at its \$1.8 million face value. The police station is built for \$1.89 million. Prepare all necessary journal entries for these transactions for both fund and government-wide financial statements. Assume that the city does not record the commitment. What information do the government-wide financial statements present? What information do the fund financial statements present?

LO 16-5

35. The governmental funds of the City of Westchester report \$445,000 in assets and \$140,000 in liabilities. The following are some of the assets reported by this government.
- Prepaid items—\$7,000.
  - Cash from a bond issuance that must be spent within the school system according to the bond indenture—\$80,000.
  - Supplies—\$5,000.
  - Investments given by a citizen that will be sold with the proceeds used to beautify a public park—\$33,000.
  - Cash that the assistant director of finance has designated for use in upgrading the local roads—\$40,000.
  - Cash from a state grant that must be spent to supplement the pay of local kindergarten teachers—\$53,000.
  - Cash that the city council (the highest level of authority in the government) has voted to use to renovate a school gymnasium—\$62,000.

On a balance sheet for the governmental funds, what fund balance amounts will be reported by the City of Westchester?

LO 16-5

36. Government officials of Hampstead County ordered a computer near the end of the current fiscal year for \$6,400 for the police department. It did not arrive prior to the end of the year. At its final meeting of the year, the city council (the highest decision-making authority for the government) agreed to pay for the computer when it arrived in the subsequent year. In producing a set of government-wide financial statements and a set of fund financial statements for the current year, how will this purchase order be reported?

LO 16-2, 16-5, 16-11

37. A local government has the following transactions during the current fiscal period. Prepare journal entries without dollar amounts, first for fund financial statements and then for government-wide financial statements.

- The budget for the police department, ambulance service, and other ongoing activities is passed. Funding is from property taxes, transfers, and bond proceeds. All monetary outflows will be for expenses and fixed assets. A deficit is projected.
- A bond is issued at face value to fund the construction of a new municipal building.

- c. A computer is ordered for the tax department.  
 d. The computer is received.  
 e. The invoice for the computer is paid.  
 f. The city council agrees to transfer money from the general fund as partial payment for a special assessments project but has not yet done so. The city will be secondarily liable for any money borrowed for this work.  
 g. The city council creates a motor pool to service all government vehicles. Money is transferred from the general fund to permanently finance this facility.  
 h. Property taxes are levied. Although officials believe that most of these taxes should be collected during the current period, a small percentage is estimated to be uncollectible.  
 i. The city collects grant money from the state that must be spent as a supplement to the salaries of the police force. No entry has been recorded. Appropriate payment of the supplement is viewed as an eligibility requirement.  
 j. A portion of the grant money in (i) is properly spent.
38. Prepare journal entries for the City of Pudding's governmental funds to record the following transactions, first for fund financial statements and then for government-wide financial statements.
- a. A new truck for the sanitation department was ordered at a cost of \$94,000.  
 b. The city print shop did \$1,200 worth of work for the school system (but has not yet been paid).  
 c. An \$11 million bond was issued to build a new road.  
 d. Cash of \$140,000 is transferred from the general fund to provide permanent financing for a municipal swimming pool that will be viewed as an enterprise fund.  
 e. The truck ordered in (a) is received at an actual cost of \$96,000. Payment is not made at this time.  
 f. Cash of \$32,000 is transferred from the general fund to the capital projects fund.  
 g. A state grant of \$30,000 is received that must be spent to promote recycling.  
 h. The first \$5,000 of the state grant received in (g) is appropriately expended.
39. Prepare journal entries for a local government to record the following transactions, first for fund financial statements and then for government-wide financial statements.
- a. The government sells \$900,000 in bonds at face value to finance construction of a warehouse.  
 b. A \$1.1 million contract is signed for construction of the warehouse. The commitment is required, if allowed.  
 c. A \$130,000 transfer of unrestricted funds was made for the eventual payment of the debt in (a).  
 d. Equipment for the fire department is received with a cost of \$12,000. When it was ordered, an anticipated cost of \$11,800 had been recorded.  
 e. Supplies to be used in the schools are bought for \$2,000 cash. The consumption method is used.  
 f. A state grant of \$90,000 is awarded to supplement police salaries. The money will be paid to reimburse the government after the supplement payments have been made to the police officers.  
 g. Property tax assessments are mailed to citizens of the government. The total assessment is \$600,000, although officials anticipate that 4 percent will never be collected. There is an enforceable legal claim for this money and the government can use it immediately.
40. The following unadjusted trial balances are for the governmental funds of the City of Copeland prepared from the current accounting records:

LO 16-2, 16-4, 16-7,  
16-8, 16-11

**eXcel**

LO 16-2, 16-5, 16-7, 16-8,  
16-9, 16-11

**eXcel**

LO 16-4, 16-5, 16-6, 16-7,  
16-8, 16-9, 16-10, 16-11

**General Fund**

	Debit	Credit
Cash .....	\$ 19,000	
Taxes Receivable .....	202,000	
Allowance for Uncollectible Taxes .....		\$ 2,000
Vouchers Payable .....		24,000
Due to Debt Service Fund .....		10,000
Unavailable Revenues .....		16,000
Encumbrances Outstanding .....		9,000
Fund Balance—Unassigned .....		103,000
Revenues .....		176,000

(continued)

(continued)

<b>General Fund</b>		
	<b>Debit</b>	<b>Credit</b>
Expenditures .....	110,000	
Encumbrances .....	9,000	
Estimated Revenues .....	190,000	
Appropriations .....		171,000
Budgetary Fund Balance .....		19,000
Totals .....	<u>\$530,000</u>	<u>\$530,000</u>
<b>Debt Service Fund</b>		
	<b>Debit</b>	<b>Credit</b>
Cash .....	\$ 8,000	
Investments .....	51,000	
Taxes Receivable .....	11,000	
Due from General Fund .....	10,000	
Fund Balance—Committed .....		\$ 45,000
Revenues .....		20,000
Other Financing Sources—Operating Transfers In .....		90,000
Expenditures .....	75,000	
Totals .....	<u>\$155,000</u>	<u>\$155,000</u>
<b>Capital Projects Fund</b>		
	<b>Debit</b>	<b>Credit</b>
Cash .....	\$ 70,000	
Special Assessments Receivable .....	90,000	
Contracts Payable .....		\$ 50,000
Unavailable Revenues .....		90,000
Encumbrances Outstanding .....		16,000
Fund Balance—Unassigned .....		—0—
Other Financing Sources .....		150,000
Expenditures .....	130,000	
Encumbrances .....	16,000	
Estimated Other Financing Sources .....	150,000	
Appropriations .....		150,000
Totals .....	<u>\$456,000</u>	<u>\$456,000</u>
<b>Special Revenue Fund</b>		
	<b>Debit</b>	<b>Credit</b>
Cash .....	\$ 14,000	
Taxes Receivable .....	41,000	
Inventory of Supplies .....	4,000	
Vouchers Payable .....		\$ 25,000
Grant Revenues Collected in Advance .....		3,000
Fund Balance—Nonspendable .....		4,000
Encumbrances Outstanding .....		3,000
Fund Balance—Unassigned .....		19,000
Revenues .....		56,000
Expenditures .....	48,000	
Encumbrances .....	3,000	
Estimated Revenues .....	75,000	
Appropriations .....		60,000
Budgetary Fund Balance .....		15,000
Totals .....	<u>\$185,000</u>	<u>\$185,000</u>

Based on the information presented for each of these governmental funds, answer the following questions:

- How much more money can city officials expend or commit from the general fund during the remainder of the current year without amending the budget?
- Why does the capital projects fund have no construction or capital asset accounts?
- What does the \$150,000 Appropriations balance found in the capital projects fund represent?
- Several funds have balances for Encumbrances and Encumbrances Outstanding. How will these amounts be accounted for at the end of the fiscal year?
- Why does the Fund Balance—Unassigned account in the capital projects fund have a zero balance?
- What are possible explanations for the \$150,000 Other Financing Sources balance found in the capital projects fund?
- What does the \$75,000 balance in the Expenditures account of the debt service fund represent?
- What is the purpose of the Special Assessments Receivable found in the capital projects fund?
- In the special revenue fund, what is the purpose of the Fund Balance—Nonspendable account?
- Why does the debt service fund not have budgetary account balances?

LO 16-2, 16-3, 16-4, 16-5,  
16-6, 16-7, 16-8, 16-9,  
16-11

41. Following are descriptions of transactions and other financial events for the City of Tetris for the year ending December 2017. Not all transactions have been included here. Only the general fund formally records a budget. No encumbrances were carried over from 2016.

Paid salary for police officers . . . . .	\$ 21,000
Received government grant to pay ambulance drivers. . . . .	40,000
Estimated revenues . . . . .	232,000
Received invoices for rent on equipment used by fire department during last four months of the year . . . . .	3,000
Paid for newly constructed city hall . . . . .	1,044,000
Made commitment to acquire ambulance . . . . .	111,000
Received cash from bonds sold for construction purposes . . . . .	300,000
Placed order for new sanitation truck . . . . .	154,000
Paid salary to ambulance drivers—money derived from state government grant given for that purpose . . . . .	24,000
Paid for supplies for school system. . . . .	16,000
Made transfer from General Fund to eventually pay off a long-term debt. . . . .	33,000
Received but did not pay for new ambulance. . . . .	120,000
Levied property tax receivables for 2017. City anticipates that 95% (\$190,000) will be collected during the year and 5% will be uncollectible. . . . .	200,000
Acquired and paid for new school bus . . . . .	40,000
Received cash from business licenses and parking meters (not previously accrued) . . . . .	14,000
Approved appropriations. . . . .	225,000

The following questions are *independent* although each is based on the preceding information. Assume that the government is preparing information for its fund financial statements.

- What is the balance in the Budgetary Fund Balance account for the budget for the year? Is it a debit or credit?
- Assume that 60 percent of the school supplies are used during the year so that 40 percent remain. If the consumption method is being applied, how is this recorded?
- The sanitation truck that was ordered was not received before the end of the year. The commitment will be honored in the subsequent year when the truck arrives. What reporting is made at the end of 2015?
- Assume that new ambulance was received on December 31, 2017. Provide all necessary journal entries on that date.
- Prepare all journal entries that should have been made when the \$33,000 transfer was made for the eventual payment of a long-term debt.
- What amount of revenue would be recognized for the period? Explain the composition of this total.
- What are the total expenditures? Explain the makeup of this total. Include response to (b) here.
- What journal entry or entries were prepared when the bonds were issued?

LO 16-2, 16-3, 16-4, 16-5,  
16-6, 16-7, 16-8, 16-9,  
16-11

**excel**

42. Chesterfield County had the following transactions. Prepare the entries first for fund financial statements and then for government-wide financial statements.
- A budget is passed for all ongoing activities. Revenue is anticipated to be \$834,000 with approved spending of \$540,000 and operating transfers out of \$242,000.
  - A contract is signed with a construction company to build a new central office building for the government at a cost of \$8 million. A budget for this project has previously been recorded.
  - Bonds are sold for \$8 million (face value) to finance construction of the new office building.
  - The new building is completed. An invoice for \$8 million is received and paid.
  - Previously unrestricted cash of \$1 million is set aside to begin paying the bonds issued in (c).
  - A portion of the bonds comes due and \$1 million is paid. Of this total, \$100,000 represents interest. The interest had not been previously accrued.
  - Citizens' property tax levies are assessed. Total billing for this tax is \$800,000. On this date, the assessment is a legally enforceable claim according to the laws of this state. The money to be received is designated for the current period, and 90 percent is assumed to be collectible in this period with receipt of an additional 6 percent during subsequent periods but in time to be available to pay current period claims. The remainder is expected to be uncollectible.
  - Cash of \$120,000 is received from a toll road. This money is restricted for highway maintenance.
  - The county received investments valued at \$300,000 as a donation from a grateful citizen. Income from these investments must be used to beautify local parks.
43. The following trial balance is taken from the General Fund of the City of Jennings for the year ending December 31, 2017. Prepare a condensed statement of revenues, expenditures, and other changes in fund balance and also prepare a condensed balance sheet.

	Debit	Credit
Accounts Payable . . . . .		\$ 90,000
Cash . . . . .	\$ 30,000	
Contracts Payable . . . . .		90,000
Unavailable Revenues . . . . .		40,000
Due from Capital Projects Funds . . . . .	60,000	
Due to Debt Service Funds . . . . .		40,000
Expenditures . . . . .	530,000	
Fund Balance—Unassigned . . . . .		170,000
Investments . . . . .	410,000	
Revenues . . . . .		760,000
Other Financing Sources—Bond Proceeds . . . . .		300,000
Other Financing Sources—Transfers In . . . . .		50,000
Other Financing Uses—Transfers Out . . . . .	470,000	
Taxes Receivable . . . . .	220,000	
Vouchers Payable . . . . .		180,000
Totals . . . . .	<u>\$1,720,000</u>	<u>\$1,720,000</u>

LO 16-2, 16-5, 16-6, 16-7,  
16-8, 16-9

44. A city has only one activity, its school system. The school system is accounted for within the general fund. For convenience, assume that, at the start of 2017, the school system and the city have no assets. During the year, the city assessed \$400,000 in property taxes. Of this amount, it collected \$320,000 during the year, received \$50,000 within a few weeks after the end of the year, and expected the remainder to be collected about six months later. The city makes the following payments during 2017: salary expense, \$100,000; rent expense, \$70,000; equipment (received on January 1 with a five-year life and no salvage value), \$50,000; land, \$30,000; and maintenance expense, \$20,000.
- In addition, on the last day of the year, the city purchased a \$200,000 building by signing a long-term liability. The building has a 20-year life and no salvage value, and the liability accrues interest at a 10 percent annual rate. The city also buys two computers on the last day of the year for \$4,000 each. One will be paid for in 30 days and the other in 90 days. The computers should last for four years and have no salvage value. During the year, the school system charged students \$3,000 for school fees and collected the entire amount. Any depreciation is recorded using the straight-line method.
- Produce a statement of net position and a statement of activities for this city's government-wide financial statements.

LO 16-2, 16-4, 16-6, 16-7,  
16-8, 16-10

- b. Produce a balance sheet and a statement of revenues, expenditures, and changes in fund balance for the fund financial statements. Assume that *available* is defined by the city as anything to be received within 60 days.
45. The City of Havisham has a fiscal year ending December 31, Year 5. If the city were to produce financial statements right now, the following figures would be included:
- Governmental activities: Assets = \$800,000, Liabilities = \$300,000, and Change in Net Position for the period = increase of \$100,000
  - Business-type activities: Assets = \$500,000, Liabilities = \$200,000, and Change in Net Position for the period = increase of \$60,000
  - Governmental funds: Assets = \$300,000, Liabilities = \$100,000, and Change in Fund Balances = increase of \$40,000
  - Proprietary funds: Assets = \$700,000, Liabilities = \$300,000, and Change in Net Assets for the period = increase of \$70,000

Other information: The city council is considered the highest level of decision-making authority for the government. Where applicable, current financial resources are viewed by the government as available if collected within 75 days of the end of a fiscal year.

For each of the following, indicate whether the overall statement is true or false. Assume that each situation is independent of all others.

- a. In the information provided about the city, an error has apparently been made because the amount of proprietary fund assets (\$700,000) cannot be greater than the amount of business-type activity assets (\$500,000).
- b. A separate governmental fund (such as money designated for the construction of Highway 61) is reporting assets totaling \$32,000. Based on that information alone, this fund must be reported separately as a major fund.
- c. The city starts a bus system to help eliminate traffic congestion. Passengers are charged a nickel for each trip although that fee will not come close to covering the cost of the bus system or pay for its debts. The bus system must be reported as a part of the general fund rather than as a separate enterprise fund.
- d. The city council passes an annual budget for all general fund activities. Revenues are expected to be \$1 million and approved expenditures are \$900,000. These budgetary amounts are recorded through a journal entry at the beginning of the year (an entry that is removed at the end of the year). In recording this budget, an estimated revenue account is debited for \$1 million.
- e. The city council passes an annual budget for all general fund activities. Revenues are expected to be \$1 million and approved expenditures are \$900,000. These budgetary amounts are recorded through a journal entry at the beginning of the year (that entry is removed at the end of the year). In recording this budget, an expenditures account is debited for \$900,000.
- f. The government paid for a 3-year insurance policy on January 1, Year 5, for its school system. If the purchases method had been used, the amount of expenditures reported by the city would be larger for that year than if the consumption method had been used.
- g. Money received from an income tax is classified as derived tax revenue.
- h. After the provided figures were determined, officials learned that the city was entitled to an additional \$100,000 in taxes on income earned during Year 5. Starting on January 1, Year 6, the city will collect \$1,000 per day of this amount for the next 98 days (the final \$2,000 is expected to be uncollectible). As a result of this discovery, the reported change in net position for the governmental activities in government-wide statements for Year 5 will go up by \$98,000.
- i. The police department ordered equipment on October 17, Year 5, for \$43,000. The equipment was received on December 29, Year 5, but at a cost of \$44,000. In the general fund, the encumbrance account was credited for \$44,000 and the expenditure account was debited for \$44,000 to indicate the switch from monetary commitment to liability.
- j. The police department ordered equipment on October 17, Year 5, for \$43,000. The equipment was not received prior to the end of Year 5. The police chief authorized the department to accept and pay for the equipment when it arrived in Year 6. In reporting fund financial statements at the end of Year 5, a fund balance—committed of \$43,000 should be reported on the balance sheet for the governmental funds.
- k. A cash amount of \$32,000 is transferred from the general fund to a capital projects fund. On the statement of activities, for the government-wide financial statements, this transaction is shown as both a transfer in and a transfer out.

## LO 16-5, 16-8, 16-10, 16-11

46. The City of Gargery has a fiscal year ending December 31, Year 5. If the city were to produce financial statements right now, the following figures would be included:
- Governmental activities: Assets = \$800,000, Liabilities = \$300,000, and Change in Net Position for the period = increase of \$100,000.
  - Business-type activities: Assets = \$500,000, Liabilities = \$200,000, and Change in Net Position for the period = increase of \$60,000.
  - Governmental funds: Assets = \$300,000, Liabilities = \$100,000, and Change in Fund Balances = increase of \$40,000.
  - Proprietary funds: Assets = \$700,000, Liabilities = \$300,000, and Change in Net Assets for the period = increase of \$70,000.

Other information: The city council is viewed as the highest level of decision-making authority for the government. Where applicable, current financial resources are viewed by the government as available if collected within 75 days of the end of a fiscal year.

For each of the following, indicate whether the overall statement is true or false. Assume that each situation is independent of all others.

- a. A cash amount of \$19,000 is transferred from the general fund to an internal service fund to pay for work that was done by the print shop for the school system. On the statement of revenues, expenditures, and other changes in fund balances for the Governmental Funds (in the fund financial statements), this resource outflow is reported as an other financing use.
- b. Assume that after the provided figures were determined, city officials learned that \$100,000 in property taxes had been assessed but not recorded on December 29, Year 5. Per legal requirements, these taxes were solely to finance government operations in Year 6. Starting on January 1, Year 6, the city will collect \$1,000 per day for the next 98 days (the final \$2,000 is expected to be uncollectible). The change in net position for the governmental activities in the government-wide statements reported for Year 5 should be increased by \$98,000.
- c. Assume that after the provided figures were determined, city officials learned that \$100,000 in property taxes had been assessed but not recorded on December 29, Year 5. Per legal requirements, these taxes were solely to finance government operations in Year 6. Starting on January 1, Year 6, the city will collect \$1,000 per day for the next 98 days (the final \$2,000 is expected to be uncollectible). The change in fund balances for the Governmental Funds reported for Year 5 should be increased by \$60,000.
- d. Assume that after the provided figures were determined, city officials learned that \$100,000 in property taxes had been assessed but not recorded on December 29, Year 5. As per legal requirements, these taxes were solely to finance government operations in Year 6. The government collected \$5,000 on December 30, Year 5, but the rest will not be collected until June of Year 6. On fund financial statements for the Governmental Funds as of December 31, Year 5, the total liability balance will be increased by \$5,000.
- e. Investments with a value of \$5 million are given to the city by a donor. All income earned from these investments must be used to construct a small library in one of the local neighborhoods but the investments must be held forever. In Year 5, income of \$480,000 was received from these investments. However, none of this money has yet been spent. On fund financial statements, the year-end balance sheet for the Governmental Funds must show a “fund balance—restricted” of \$5 million and a “fund balance—committed” of \$480,000.
- f. The State of Virginia requires the City of Gargery to buy equipment to monitor local air quality. The state awards the city \$100,000 to help pay for the equipment. This grant is known as a voluntary nonexchange transaction so that this revenue is not recognized until all eligibility requirements are met.
- g. The city constructs curbing for a neighborhood in a special assessment project in which the individuals whose property is benefiting from the curbs will pay for the work. The city has no legal responsibility for this work so it is recorded in an agency fund. The money collected should be reported as program revenues on the statement of activities in the government-wide financial statements.
- h. On January 1, Year 5, the city is awarded a grant for \$130,000 with this money to be used to supplement the salaries of the police and fire department workers. No money will be received by the city until after the salaries have been paid. On December 30, Year 5, all \$130,000 is distributed to the appropriate workers and the city applies for reimbursement to receive the grant money. The money will be received within the next month. The \$130,000 revenue is recognized in the government-wide financial statements in Year 5 but not in the fund financial statements for Year 5.



LO 16-5, 16-7, 16-8, 16-9, 16-11

47. The following transactions relate to the General Fund of the city of Lost Angels for the year ending December 31, 2017. Prepare a statement of revenues, expenditures, and other changes in fund balance for the general fund for the period to be included in the fund financial statements. Assume that the fund balance at the beginning of the year was \$180,000. Assume also that the purchases method is applied to the supplies and that receipt within 60 days is used as the definition of available resources.
- Collected property tax revenue of \$700,000. A remaining assessment of \$100,000 will be collected in the subsequent period. Half of that amount should be collected within 30 days, and the remainder will be received in about five months after the end of the year.
  - Spent \$200,000 on four new police cars with 10-year lives. A price of \$207,000 had been anticipated when the cars were ordered. The city calculates all depreciation using the straight-line method with no salvage value. The half-year convention is used.
  - Transferred \$90,000 to a debt service fund.
  - Issued a long-term bond for \$200,000 on July 1. Interest at a 10 percent annual rate will be paid each year starting on June 30, 2018.
  - Ordered a new computer with a five-year life for \$40,000.
  - Paid salaries of \$30,000. Another \$10,000 is owed at the end of the year but will not be paid for 30 days.
  - Received the new computer but at a cost of \$41,000; payment is to be made in 45 days.
  - Bought supplies for \$10,000 in cash.
  - Used \$8,000 of the supplies in (h).

LO 16-7, 16-8, 16-9, 16-11

48. Use the transactions in problem (47) but prepare a statement of net position for the government-wide financial statements. Assume that the general fund had \$180,000 in cash on the first day of the year and no other assets or liabilities. No amount was restricted, committed, or assigned.

LO 16-1, 16-6

49. Government officials of the City of Jones expect to receive general fund revenues of \$400,000 in 2017 but approve spending only \$380,000. Later in the year, as they receive more information, they increase the revenue projection to \$420,000. Officials also approve the spending of an additional \$15,000. For each of the following, indicate whether the statement is true or false and, if false, explain why.
- In recording this budget, appropriations should be credited initially for \$380,000.
  - The city must disclose this budgetary data within the required supplemental information section reported after the notes to the financial statements.
  - When reporting budgetary information for the year, three figures should be reported: amended budget, initial budget, and actual figures.
  - In making the budgetary entry, a debit must be made to some type of Fund Balance account to indicate the projected surplus and its effect on the size of the fund.
  - The reporting of the budget is reflected in the government-wide financial statements.

LO 16-8

50. On December 1, 2017, a state government awards a city government a grant of \$1 million to be used specifically to provide hot lunches for all schoolchildren. No money is received until June 1, 2018. For each of the following, indicate whether the statement is true or false and, if false, explain why.
- Because the government received no money until June 1, 2018, no amount of revenue can be recognized in 2017 on the government-wide financial statements.
  - If this grant has no eligibility requirements and the money is properly spent in September 2018 for the hot lunches, the revenue should be recognized during that September.
  - Because this money came from the state government and because that government specified its use, this is a government-mandated nonexchange transaction.
  - If the government had received the money on December 1, 2017, but eligibility reimbursement requirements had not been met yet, unearned revenue of \$1 million would have been recognized on the government-wide financial statements.

LO 16-7, 16-8, 16-9, 16-11

51. Indicate (i) how each of the following transactions impacts the fund balance of the general fund, and its classifications, for fund financial statements and (ii) what impact each transaction has on the net position balance of the Government Activities on the government-wide financial statements.
- Issue a five-year bond for \$6 million to finance general operations.
  - Pay cash of \$149,000 for a truck to be used by the police department.
  - The fire department pays \$17,000 to a government motor pool that services the vehicles of only the police and fire departments. Work was done on several department vehicles.

- d. Levy property taxes of \$75,000 for the current year that will not be collected until four months into the subsequent year.
- e. Receive a grant for \$7,000 that must be returned unless the money is spent according to the stipulations of the conveyance. That is expected to happen in the future.
- f. Businesses make sales of \$20 million during the current year. The government charges a 5 percent sales tax. Half of this amount is to be collected 10 days after the end of the current year with the remainder to be collected 14 weeks later. “Available” has been defined by this government as 75 days.
- g. Order a computer for the school system at an anticipated cost of \$23,000.
- h. A cash transfer of \$18,000 is approved from the general fund to a capital projects fund.
52. Fund A transfers \$20,000 to Fund B. For each of the following, indicate whether the statement is true or false and, if false, explain why.
- a. If Fund A is the general fund and Fund B is an enterprise fund, nothing will be shown for this transfer on the statement of activities within the government-wide financial statements.
- b. If Fund A is the general fund and Fund B is a debt service fund, nothing will be shown for this transfer on the statement of activities within the government-wide financial statements.
- c. If Fund A is the general fund and Fund B is an enterprise fund, a \$20,000 reduction will be reported on the statement of revenues, expenditures, and other changes in fund balance for the governmental funds within the fund financial statements.
- d. If Fund A is the general fund and Fund B is a special revenue fund (which is not considered a major fund), no changes will be shown on the statement of revenues, expenditures, and other changes in fund balance within the fund financial statements.
- e. If Fund A is the general fund and Fund B is an internal service fund and this is for work done, the general fund will report an expense of \$20,000 within the fund financial statements.

LO 16-4, 16-5, 16-11

**Use the following information for Problems 53–59:**

Assume that the City of Coyote has already produced its financial statements for December 31, 2017, and the year then ended. The city’s general fund was only for education and parks. Its capital projects funds worked with each of these functions at times during the current year. The city also had established an enterprise fund to account for its art museum.

The government-wide financial statements indicated the following figures:

- Education reported net expenses of \$600,000.
- Parks reported net expenses of \$100,000.
- Art museum reported net revenues of \$50,000.
- General government revenues for the year were \$800,000 with an overall increase in the city’s net position of \$150,000.

The fund financial statements indicated the following for the entire year:

- The general fund reported a \$30,000 increase in its fund balance.
- The capital projects fund reported a \$40,000 increase in its fund balance.
- The enterprise fund reported a \$60,000 increase in its net position.

The CPA firm of Abernethy and Chapman has been asked to review several transactions that occurred during 2017 and indicate how to correct any erroneous reporting and the impact of each error. View each of the following situations as independent.

53. During 2017, the City of Coyote contracted to build a bus stop for schoolchildren costing \$10,000 as a special assessments project for which it collected \$10,000 from affected citizens. The government had no obligation in connection with this project. Both a \$10,000 revenue and a \$10,000 expenditure were recorded in the capital projects fund. In preparing government-wide financial statements, an asset and a general revenue were recorded for \$10,000.
- a. In the general information above, the capital projects fund reported a \$40,000 increase in its fund balance for this year. What was the correct change in the capital projects fund’s balance during 2017?
- b. In the general information, a \$150,000 overall increase in the city’s net position was found on the government-wide financial statements. What was the correct overall change in the city’s net position on the government-wide financial statements?

LO 16-2, 16-5, 16-10

## LO 16-9

54. On December 30, 2017, the City of Coyote borrowed \$20,000 for the general fund on a 60-day note. In that fund, both Cash and Other Financing Sources were recorded. In the general information above for this city, a \$30,000 overall increase was reported in the general fund balance. What was the correct change in the general fund's balance for 2017?

## LO 16-2, 16-4, 16-5

55. An art display set up for the City of Coyote was recorded within the general fund and generated revenues of \$9,000 but had expenditures of \$45,000 (\$15,000 in expenses and \$30,000 to buy land for the display). The CPA firm has determined that this program should have been recorded as an enterprise fund activity because it was offered in association with the art museum.

- Based on the information provided, what was the correct change in the fund balance for the general fund for 2017?
- What was the correct overall change in the city's net position on the government-wide financial statements?
- What was the correct change in the net position of the enterprise fund on the fund financial statements?

## LO 16-2, 16-5, 16-8

56. The City of Coyote mailed property tax bills for 2018 to its citizens during August 2017. Payments could be made early to receive a discount. The levy becomes legally enforceable on February 15, 2018. All money received must be spent during 2018 or later. The total assessment is \$300,000; 40 percent of that amount, less a 10 percent discount, is collected in 2017. The city expects to receive all of the remaining money during 2018 with no discount. During 2017, the government increased cash as well as a revenue for the amount received. No change was made in creating the government-wide financial statements.

- What was the correct overall change in the city's net position as shown on the government-wide financial statements?
- What was the correct change for 2017 in the fund balance reported in the general fund?

## LO 16-2, 16-5, 16-8

57. The City of Coyote mailed property tax bills for 2018 to its citizens during August 2017. Payments could be made early to receive a discount. The levy becomes legally enforceable on February 15, 2018. All money received must be spent during 2018 or later. The total assessment is \$300,000, and 40 percent of that amount is collected in 2017 less a 10 percent discount. The city expects to receive all remaining money during 2018 with no discount. During 2017, the government increased cash and a revenue for the amount received. In addition, a receivable account and an unavailable revenue account for \$180,000 were recognized.

- In the general information above, an overall increase in the city's net position of \$150,000 was found on the government-wide financial statements. What was the correct overall change in the city's net position as reported on the government-wide financial statements?
- In the general information above, an overall increase of \$30,000 was reported in the general fund balance. What was the correct change during 2017 in the general fund's balance?

## LO 16-2, 16-5, 16-7, 16-8

58. In 2017, the City of Coyote received a \$320,000 cash grant from the state to reduce air pollution. Assume that although a special revenue fund could have been set up, the money remained in the general fund. Cash was received immediately but had to be returned if the city had not lowered air pollution by 25 percent by 2020. On December 31, 2017, Coyote spent \$210,000 of this money for a large machine to help begin the process of reducing air pollution. The machine is expected to last for five years and was recorded as an expenditure in the general fund and as an asset on the government-wide financial statements where it was depreciated based on the straight-line method and the half-year convention. Because the money had been received, all \$320,000 was recorded as a revenue on both the fund and the government-wide financial statements.

- What was the correct change for 2017 in the total fund balance reported by the general fund?
- What was the correct overall change in the net position reported on the government-wide financial statements?

## LO 16-2

59. During 2017, the City of Coyote's General Fund received \$10,000, which was recorded as a general revenue when it was actually a program revenue earned by its park program.

- What was the correct overall change for 2017 in the net position reported on the government-wide financial statements?
- In the general information above, the parks reported net expenses for the period of \$100,000. What was the correct amount of net expenses reported by the parks?

## Develop Your Skills

### RESEARCH CASE 1



The City of Hampshire is currently preparing financial statements for the past fiscal year. The city manager is concerned because the city encountered some unusual transactions during the current fiscal period and is unsure as to their handling.

#### Required

Locate a copy (either in hard copy or online) of GASB's *Codification of Governmental Accounting and Reporting Standards*. Either through an online search or a review of the index, answer each of the following questions.

1. For government accounting, what is the definition of an *extraordinary item*?
2. For government accounting, what is the definition of a *special item*?
3. On government-wide financial statements, how should extraordinary items and special items be reported?

### RESEARCH CASE 2



The City of Danmark is preparing financial statements. Officials are currently working on the statement of activities within the government-wide financial statements. A question has arisen as to whether a particular revenue should be identified on government-wide statements as a program revenue or a general revenue.

#### Required

Locate a copy (either in hard copy or online) of GASB's *Codification of Governmental Accounting and Reporting Standards*. Either through an online search or a review of the index, answer each of the following questions.

1. How is a program revenue defined?
2. What are common examples of program revenues?
3. How is a general revenue defined?
4. What are common examples of general revenues?

### ANALYSIS CASE



Search the Internet for the official website of one or more state or local governments. After reviewing this website, determine whether the latest comprehensive annual financial report (CAFR) is available on the site. For example, the most recent comprehensive annual financial report for the City of Des Moines can be found at <https://www.dmgov.org/Departments/Finance/Pages/CAFR.aspx>. Use the financial statements that you locate to answer the following questions.

#### Required

1. How does the audit opinion given to this city by its independent auditors differ from the audit opinion rendered on the financial statements for a for-profit business?
2. A reconciliation should be presented to explain the difference between the net changes in fund balances for the governmental funds (fund financial statements) and the change in net position for the governmental activities (government-wide financial statements). What were several of the largest reasons for the difference?
3. What were the city's largest sources of general revenues?
4. What was the total amount of expenditures recorded by the general fund during the period? How were those expenditures classified?
5. What assets are reported for the general fund?

6. Review the notes to the financial statements and then determine the number of days the government uses to define the end-of-year financial resources that are viewed as currently available.
7. Did the size of the general fund balance increase or decrease during the most recent year and by how much?

## COMMUNICATION CASE 1



Go to the website [www.gasb.org](http://www.gasb.org) and click on “Projects” included in the list that runs across the top of the page. Then click on “Current Projects & Pre-Agenda Research.” Click on one of the current projects that is listed. Read the sections that are titled “Project Plan” and “Recent Minutes.”

### Required

Write a memo to explain the reason that this issue has been chosen for study by GASB. Describe the progress that has been made to date as well as the potential impact on state and local government accounting.

## COMMUNICATION CASE 2



Go to the website [www.gasb.org](http://www.gasb.org) and click on “About Us” included in the list that runs across the top of the page. Then click on “Mission, Vision, and Core Values.” Read the information provided by GASB.

### Required

Assume that a financial analyst with whom you are working is interested in knowing more about the purpose of GASB. Write a short memo explaining the work of GASB based on its vision, mission, core values, and goals.

## COMMUNICATION CASE 3



Obtain a copy of the original version of GASB *Statement 34*. Read paragraphs 239 through 277.

### Required

Write a report describing alternatives that the GASB considered when it created *Statement 34*. Indicate the alternative that you would have viewed as most appropriate, and describe why the GASB did not choose it.

## COMMUNICATION CASE 4



Search the Internet for the official website of one or more state or local governments. On this website, determine whether the latest comprehensive annual financial report (CAFR) is available. For example, a recent comprehensive annual financial report for the City of Minneapolis can be found at <https://www.talgov.com/traffic/accounting-annualrpts.aspx>. Read the Management’s Discussion and Analysis (MD&A) that should be located near the beginning of the annual report.

### Required

Write a memo to explain four or five of the most interesting pieces of information that the Management’s Discussion and Analysis provides.

**EXCEL CASE**

The City of Bainland has been undergoing financial difficulties because of a decrease in its tax base caused by corporations leaving the area. On January 1, 2017, the city has a fund balance of only \$400,000 in its governmental funds. In 2016, the city had revenues of \$1.4 million and expenditures of \$1.48 million. The city's treasurer has forecast that, unless something is done, revenues will decrease at 2 percent per year while expenditures will increase at 3 percent per year.

**Required**

1. Create a spreadsheet to predict in what year the government will have a zero fund balance.
2. One proposal is that the city slash its expenditures by laying off government workers. That will lead to a 3 percent decrease in expenditures each year rather than a 3 percent increase. However, because of the unemployment, the city will receive less tax revenue. Thus, instead of a 2 percent decrease in revenues, the city expects a 5 percent decrease per year. Adapt the spreadsheet created in requirement (1) to predict what year the government will have a zero fund balance if this option is taken.
3. Another proposal is to increase spending to draw new businesses to the area. This action will lead to a 7 percent increase in expenditures every year, but revenues are expected to rise by 4 percent per year. Adapt the spreadsheet created in requirement (1) to predict what year the government will have a zero fund balance under this option.



# Accounting for State and Local Governments (Part 2)

The previous chapter introduced many of the unique aspects of financial reporting applicable to state and local governments. Fund accounting, budgets, encumbrances, expenditures, revenue recognition, transfers, the issuance of bonds, and the like were all presented in connection with both traditional fund financial statements and the newer government-wide financial statements. This coverage was designed to explain the rationale underlying the accounting required of these government entities, especially the differences caused by the dual nature of the financial reporting process.

The current chapter carries this analysis further, first by delving into more complex financial situations. Many state and local government units are quite large and face numerous transactions as complicated as any encountered by a for-profit business. Tax abatements, solid waste landfills, defined benefit pension plans, donated artworks, and the depreciation of infrastructure assets are all examined to broaden the understanding of state and local government accounting.

Second, the chapter discusses the overall financial reporting model for state and local governments. Within this coverage, the actual composition of a government is examined. Because of the wide variety of agencies, departments, and other activities often connected to a government, determining inclusion within the financial statements is not as easy as in a for-profit business where ownership of more than 50 percent of the voting stock is the primary criterion.

## The Hierarchy of U.S. Generally Accepted Accounting Principles (GAAP) for State and Local Governments

State and local governments often face complicated reporting issues. Governmental financial events can be just as unusual and complex as those encountered in large for-profit entities. Officials in cities like Chicago and Boston must manage billion-dollar budgets that include a wide array of monetary resources and costs. Those accounting issues rival anything that companies like Coca-Cola and Proctor & Gamble have to solve.

For a vast majority of transactions, appropriate application of U.S. GAAP is not a serious question. Most events such as tax collections and bond issuances occur with regularity so that the reporting has become

## Learning Objectives

**After studying this chapter, you should be able to:**

- LO 17-1** Understand how the hierarchy of U.S. generally accepted accounting principles for state and local government accounting can be used to resolve financial reporting issues.
- LO 17-2** Explain the informational benefit from required disclosure of tax abatements provided by state and local governments.
- LO 17-3** Recognize the liability caused by the eventual closure and postclosure costs of operating a solid waste landfill.
- LO 17-4** Explain the reporting of a net pension liability resulting from a defined benefit pension plan provided to employees by a state or local government.
- LO 17-5** Record the donation and acquisition of works of art and historical treasures.
- LO 17-6** Explain the reporting and possible depreciation of infrastructure assets.
- LO 17-7** Understand the composition of a state or local government's comprehensive annual financial report (CAFR).
- LO 17-8** Explain the makeup of a primary government and its relationship to component units and related organizations as well as the combination of governments.
- LO 17-9** Describe the physical structure of a complete set of government-wide financial statements and a complete set of fund financial statements.
- LO 17-10** Understand the presentation of financial statements for a public college or university.



## LO 17-1

Understand how the hierarchy of U.S. generally accepted accounting principles for state and local government accounting can be used to resolve financial reporting issues.

widely accepted. For example, the accounting procedures discussed in the previous chapter are all well established through official pronouncements or long-term practical use.

However, periodically, events can arise or be created that do not lend themselves to easy reporting solutions. Perhaps a new type of transaction is undertaken with an unusual nature or a particular twist that seems unique. To further complicate the reporting, different rules can sometimes provide guidance that seems to be contradictory. For financial statements to be in conformity with U.S. GAAP, state and local government accountants must be able to establish the validity of the suggested reporting. The same challenge holds true for independent auditors (CPAs) who are hired to certify that the information is presented fairly, in all material respects, in accordance with the accounting principles generally accepted in the United States.

When faced with a new or unusual transaction, how do accountants and auditors determine what accounting is consistent with U.S. GAAP? Or, when a variety of sources indicate different possible reporting resolutions, which guidance should be followed?

In 2015, the Governmental Accounting Standards Board (GASB) issued its Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. This pronouncement was designed to provide reporting guidance whenever the question of establishing conformity with U.S. GAAP arises. According to this standard, all sources of authoritative U.S. GAAP for state and local governments can be divided into two categories, with Category A having more authority than Category B.

**Category A:** This first level of authoritative rules is made up of the official statements of the GASB. Those statements are available on the Board's website ([www.gasb.org](http://www.gasb.org)). In addition, prior to the release of Statement No. 76, GASB occasionally issued interpretations to help clarify, explain, or provide more detailed information about various GASB statements. Over the years, the Board issued only a few interpretations and has decided to discontinue any further usage. Going forward, the Board will use other methods (see Category B) to provide this type of guidance about U.S. GAAP. However, previously released interpretations that still remain in effect are included in this highest level of authority.

**Category B:** The second level is made up of GASB Technical Bulletins, GASB Implementation Guides, and any literature of the American Institute of Certified Public Accountants (AICPA) that has been cleared by GASB. Again, specific listings of these resources can be found on GASB's website.

- Technical bulletins are created when needed to serve much the same function as the interpretations described previously. Technical bulletins outline practical guidance concerning GASB statements. They can be issued by GASB in a shorter period of time to provide solutions for pressing reporting problems. In the past, technical bulletins have not been frequently developed but can still be released whenever a majority of the Board does not object to a proposed method of reporting. In this manner, GASB has an official procedure by which reporting problems can be addressed quickly.
- Implementation guides clarify, explain, or elaborate on existing U.S. GAAP for state and local governments. In contrast to technical bulletins, they do not go beyond that function. Therefore, they do not establish the acceptability of new approaches to reporting issues. Because implementation guides tend to have a broader impact and less urgency, a period of public exposure provides a chance for feedback that can highlight potential problems before the guide is issued. Like technical bulletins, they are released only when a majority of the Board does not object to the guidance being given.

Thus, to establish the validity of a proposed reporting treatment, accountants and auditors first look to Category A and, then, only to Category B if no answer is found at the first level.

What happens if no satisfactory answer can be found in either Category A or Category B? No set of generally accepted accounting principles can ever anticipate all of the wide variety of reporting issues that might be faced by a government. At that point, reasoned judgment becomes essential. "If specific guidance cannot be found in either category, financial statement preparers and auditors are to consider guidance for similar transactions or events."<sup>1</sup> Is official guidance available that is similar enough to be considered applicable? For example, if a rule on the

<sup>1</sup>Stephen J. Gauthier, "New Guidance on the GAAP Hierarchy," *Government Finance Review*, December 2015, pages 47–48.

costing of a highway is provided in a GASB statement, can the same logic be used in accounting for a parking lot? Ultimately, the reporting of complex transactions in governmental accounting (as well as that used with for-profit entities) requires accountants and auditors to have a strong understanding of the purpose of the reporting process and the principles on which it is founded.

For further help, GASB also provides a list of nonauthoritative sources that can be considered in determining the reporting that is most consistent with generally accepted accounting principles: GASB Concepts Statements, pronouncements of other accounting bodies such as FASB and the IASB, practices that are prevalent in state and local governments, published literature of professional associations and regulatory agencies, and accounting textbooks and articles.

No function carried out by an accountant or auditor is more significant than the determination of how a unique transaction or event should be reported to be in conformity with U.S. GAAP. That decision requires both deep knowledge and sound judgment. The nature of the event must be understood completely and then compared to the rules that have been established over the decades. With Statement 76, GASB has specified which of these rules (and other sources of guidance) should be analyzed and which has the most authority.

### LO 17-2

Explain the informational benefit from required disclosure of tax abatements provided by state and local governments.

## Tax Abatement Disclosure

For years, taxpayers have questioned whether the estimated \$70 billion in subsidies governments shower on the free enterprise system each year are savvy investments or corporate welfare run amok. Soon, they will have more information to make that call. This month, the Governmental Accounting Standards Board – the Norwalk, Connecticut, body that oversees government accounting rules – said it will require governments to disclose how much tax revenue they are foregoing because of incentives provided to businesses. State and local governments, as well as school districts, also will have to disclose the jobs promises and other commitments businesses make in order to avoid paying taxes.<sup>2</sup>

Accounting rules do not always come down to specifying the correct debits and credits that must be entered to reflect a transaction. Disclosure issues can be just as challenging as the reporting of an actual event. One question stands at the center of any disclosure discussion: What information should be provided to create a representative financial picture for interested parties without requiring so much data that (a) readers become overwhelmed and (b) unnecessary costs are incurred? Financial statements should enlighten outside parties and not confuse them with excessive information. In any accounting debate, the reporting entities usually argue for less disclosure whereas the decision makers typically call for more.

Governments often make agreements with outside organizations to forego tax revenues for some period of time in exchange for a specific action. GASB recently ruled (in GASB Statement No. 77, *Tax Abatement Disclosures*) that information about such tax abatement programs is beneficial and worth the associated cost of disclosure. This disclosure is necessary when agreement is reached.

For example, in 2014, the city of Fort Worth, Texas, listed 18 ongoing tax abatement programs provided to individual companies in exchange for commitments that were believed to benefit the city and its citizens.<sup>3</sup> This is a common practice. Fort Worth officials had agreed to approximately one new tax abatement program per year for the previous decade. The benefiting companies were allowed to avoid either a portion or all of their real and personal property taxes for periods of up to ten years by promising to carry out specified projects such as a hotel construction, construction of a new production facility, construction of a data center, and the like. The various investments made by these companies in Fort Worth ranged from \$1.5 million to \$173 million and were estimated to create or retain area jobs, as few as 7 in one case and as many as 1,940 in another.

These abatement programs represent exchanged promises. The city reduces or eliminates an organization's taxes (for example, sales, income, or property taxes) for a period of time. In return, the organization agrees to a defined action such as keeping operations in the city or the construction of a new facility. These tax abatements were received by companies such as Coca-Cola Enterprises, Blue Cross Blue Shield of Texas, and Omni Fort Worth.

<sup>2</sup> Len Boselovic, "Pittsburgh Post—Gazette Len Boselovic's Heard Off the Street Column," *McClatchy Tribune Business News*, August 30, 2015.

<sup>3</sup> <http://fortworthtexas.gov/uploadedfiles/hed/business/tax-abatement-agreements-2014.pdf>.

In a traditional sense, there is no transaction to report. The choice to forego the collection of taxes is not easy to reflect in a journal entry that would be meaningful. However, the financial impact of such agreements can be quite significant. Is a company's promise to create 20 jobs and invest \$1.5 million worth giving up real estate tax collections for ten years? If government officials make such a decision, citizens need to be aware of the financial ramifications.

GASB has now decided that information about tax abatements must be disclosed in a government's financial statements. "Tax abatement has been a common carrot that communities use to attract development. To date, however, cities and other tax-abating governments haven't shared much information about the accumulated financial consequences of those tax breaks. Now, because of an edict from the board that oversees government accounting, they will. That means that the counties, cities and public authorities in seven counties in Northeast Ohio will have to provide details about the roughly \$1.4 billion in taxes that are passed up annually. . . . 'I'm going to be the happy recipient of more information,' said Tim Offtermatt, an investment banker with the Cleveland office of Stifel Financial Corp. who specializes in public finance. 'It helps us put together a comprehensive credit package for credit analysts.'"<sup>4</sup>

Based on the GASB statement, a state or local government must disclose significant information about abatement agreements including:

- The purpose of the tax abatement program.
- The type of tax being abated.
- Dollar amount of taxes abated.
- The type of commitments made by the tax abatement recipients.
- Any commitments made by the government (or other parties), for example, agreeing to construct infrastructure assets such as roads.

Interestingly, GASB has been criticized for not also requiring the governments to identify the companies receiving the abatements. Additional criticism came from parties who wanted to know about the long-term financial impact of these abatement decisions. Because of the importance of reported information, few accounting rules manage to escape some level of criticism. "Critics disagree, arguing that governments should at least be required to disclose the names of the largest recipients. One reason for this is that many believe subsidies don't generally help small, homegrown businesses flourish."<sup>5</sup> "Policy Matters Ohio's Schiller questioned the lack of long-term cost projections—a key element in the pension fund crisis. 'It's hard to figure why (GASB) didn't approve any kind of forward-looking cost of this,' Schiller said. 'From (a municipal bond) investor's standpoint, isn't your biggest concern not what they paid last year, but what they have to pay in the future?'"<sup>6</sup>

### LO 17-3

Recognize the liability caused by the eventual closure and post-closure costs of operating a solid waste landfill.

## Solid Waste Landfill

As of June 30, 2015, the City of Greensboro, North Carolina, reported a \$500,000 current liability in its statement of net position as an accrued landfill liability. Then, within its non-current liabilities, the city reported an additional obligation of nearly \$25 million with the same account title. Both balances were listed under business-type activities.

Many communities operate landfills and they often lead to large liabilities. The notes to the financial statements of the City of Greensboro, North Carolina, as of June 30, 2015, help explain the reporting of the government's landfill debt.

The City owns and operates a regional landfill site located in the northeast portion of the City. State and federal laws require the City to place a final cover on its White Street landfill site and

<sup>4</sup> Jay Miller, "GASB Ruling Will Make Tax Breaks More Transparent," *Crain's Cleveland Business*, September 7, 2015, page 3.

<sup>5</sup> Liz Farmer, "3 Things the New Tax Incentive Disclosures Rules Won't Reveal," *McClatchy Business News*, November 24, 2015.

<sup>6</sup> Jay Miller, "GASB ruling will make tax breaks more transparent," *Crain's Cleveland Business*, September 7, 2015, page 3.

to perform certain maintenance and monitoring functions at the site for thirty years after closure. The City reports a portion of these closure and postclosure care costs as an operating expense in each period based on landfill capacity used as of each June 30. The \$25,179,925 reported as landfill closure and postclosure care liability at June 30, 2015, is based on 100% use of the estimated capacity of Phase II and Phase III, Cells 1 and 2. Phase III, Cell 3, is estimated at 49.3% of capacity. . . .

The estimated liability amounts are based on what it would cost to perform all closure and postclosure care in the current year. Actual cost may be higher due to inflation, changes in technology, or changes in regulations. At June 30, 2015, the City had expended \$3,876,035 to complete closure for the White Street facility, Phase II and \$2,666,334 to begin closure activities at the construction and demolition site located on top of the municipal waste filled space. The balance of closure costs, estimated at \$12,853,068, and an estimated \$12,326,857 for postclosure care will be funded over the remaining life of the landfill estimated to be 20 to 35 years.

Thousands of state and local governments operate solid waste landfills to provide a place for citizens and local companies to dispose of trash and other forms of garbage and refuse. Governments frequently report landfill operations within their enterprise funds if these facilities require a user fee. However, other landfills are open to the public without fee so that reporting within the general fund is appropriate.

Regardless of the type of fund utilized, solid waste landfills can create huge liabilities for these governments. The U.S. Environmental Protection Agency has strict rules on closure requirements as well as groundwater monitoring and other postclosure activities. Satisfying such requirements can be costly. The operation of a landfill can ultimately necessitate large payments to ensure that the facility is closed properly and then monitored and maintained for an extended period. The relevant accounting question has always been how to report these eventual costs while the landfill is still in operation.

To illustrate, assume that a city opens a landfill in Year 1 that is expected to take 10 years to fill. To determine the annual amount to be reported, the city must estimate the current costs required to close the landfill. Such costs include the amount to be paid to cover the area and for all postclosure maintenance. As mentioned above by the City of Greensboro, the government uses current—rather than an estimate of future—closure and postclosure costs as a better measure of the present obligation. However, such amounts must then be adjusted each period for inflation, technology, and regulation changes.

Assume here that the current cost for closure is set at \$10 million and for postclosure maintenance at \$4 million for a total obligation of \$14 million. Assume that during Year 1 the city makes an initial payment of \$300,000 toward these closure costs. At the end of this first year, city engineers determine that 16 percent of the available space has been filled.

### Landfills—Government-Wide Financial Statements

Regardless of whether the city reports this solid waste landfill as a governmental activity (within the general fund) or as a business-type activity (within an enterprise fund), the closure and postclosure costs in the government-wide statements must be based on accrual accounting and the economic resources measurement basis. The government anticipates that the total current cost of closure and cleanup is \$14 million. Because the landfill is 16 percent filled, \$2,240,000 should be accrued at the end of this first year (\$14 million  $\times$  16%). The initial \$300,000 payment made this year reduces the liability being reported:

#### *Government-Wide Financial Statements—Estimated Landfill Closure Costs*

<b>Year 1</b>		
Expense—Landfill Closure . . . . .	2,240,000	
Landfill Closure Liability . . . . .		2,240,000
To recognize the Year 1 portion of total costs (16 percent) for eventual closure of landfill.		
Landfill Closure Liability . . . . .	300,000	
Cash . . . . .		300,000
To record first payment of costs necessitated by eventual closure of landfill.		

To complete this example, assume that the landfill is judged to be 27 percent filled at the end of Year 2 and the city makes another \$300,000 payment toward future closure costs. However, because of inflation and recent changes in technology, the city now believes that current closure costs are \$11 million with postclosure costs amounting to \$5 million. The current cost of the total landfill obligation has thus jumped from \$14 million to \$16 million.

Based on this new and revised information, the city should recognize an estimated total cost of \$4,320,000 at the end of Year 2 (\$16 million  $\times$  27%). Because \$2,240,000 was recognized in Year 1, the city should accrue an additional \$2,080,000 in Year 2 (\$4,320,000 – \$2,240,000):

### ***Government-Wide Financial Statements—Estimated Landfill Closure Costs***

<b>Year 2</b>		
Expense—Landfill Closure . . . . .	2,080,000	
Landfill Closure Liability . . . . .		2,080,000
To recognize Year 2 portion of costs for eventual closure of landfill.		
Landfill Closure Liability . . . . .	300,000	
Cash . . . . .		300,000
To record second payment necessitated by eventual closure of the landfill.		

Consequently, in the city's Year 2 government-wide financial statements, the following is reported regardless of whether the landfill is viewed as part of the general fund (a governmental activity) or as an enterprise fund (a business-type activity):

Expense—Landfill closure . . . . .	<u>\$2,080,000</u>
Landfill closure liability	
(\$2,240,000 + 2,080,000 – 300,000 – 300,000) . . . . .	<u>\$3,720,000</u>

### **Landfills—Fund Financial Statements**

If a solid waste landfill is maintained as an enterprise fund, reporting is the same in the fund financial statements as shown for the government-wide statements. All economic resources are again measured based on accrual accounting.

However, if the landfill is recorded in the general fund because there is little or no user fee charged, the city reports only the actual change in current financial resources. Despite the huge eventual liability, the reduction in current financial resources is limited to the annual payments of \$300,000. The remaining liability is too far into the future to necessitate reporting. When fund financial statements are prepared, the only entry required each year is as follows:

### ***Fund Financial Statements—Payment toward Landfill Closure Costs—Governmental Funds***

<b>Year 1 and Year 2</b>		
<b>General Fund</b>		
Expenditures—Closure Costs . . . . .	300,000	
Cash . . . . .		300,000
To record annual payment toward the eventual closure costs of the city's solid waste landfill.		

#### **LO 17-4**

Explain the reporting of a net pension liability resulting from a defined benefit pension plan provided to employees by a state or local government.

## **Defined Benefit Pension Plans**

Many state and local governments provide pension plans for employees such as school teachers, police officers, firefighters, and sanitation workers. An educator in the public schools, for example, might be eligible to retire with full benefits after a specified length of

employment (such as 30 years). These plans represent a huge financial obligation for many governments across the United States. In for-profit businesses, defined contribution plans are now much more prevalent than defined benefit plans. However, defined benefit plans (with their potentially huge obligations) continue to be common for government employees. Retirees are usually entitled to future benefits based on a contractually set formula. “Future pension obligations of both companies and state governments collectively amount to trillions of dollars; obligations of numerous pension plans can be measured individually in billions of dollars. Public sector pension obligations generally dwarf those in the private sector.”<sup>7</sup>

State and local governments often establish pension trust funds to accumulate and invest monetary resources and eventually pay out pension benefits. Because that money is held for retirees, these pension trusts are classified as fiduciary funds and, thus, are not included in the reporting of government-wide financial statements. A question has long been raised as to what amount of a government’s pension obligation should be included in the overall financial reporting. Historically, as long as all funding requirements were met in a timely manner, governments reported no pension liability. Because funding requirements did not always cover the maximum amount of the eventual pension payments, financial analysts have argued that the financial position of many state and local governments was much more precarious than reported.

GASB in its *Statement No. 68*, “Accounting and Financial Reporting for Pensions,” now requires a more complete reporting of pension liabilities by state and local governments. Because virtually all of these payments will take place well beyond the current period, this reporting applies almost exclusively to government-wide financial statements (and also to the fund financial statements for proprietary funds). Similar requirements have now been created for postemployment benefit plans other than pension plans to better reflect each government’s total obligation.

For pensions, this authoritative guidance establishes several steps to be followed in reporting a government’s liability.

- First, the pension benefit payments that will ultimately be required are estimated by an actuary.
- Second, the portion of those payments that are attributable to past periods of employee service is calculated.
- Third, the present value of the payments relating to those past amounts is determined in order to arrive at the government’s obligation at the present time.
- Fourth, if that liability balance is larger than the net asset position held in the pension trust fund, the excess is shown in the government-wide financial statements as a net pension liability. Conversely, if the net position of the pension trust is larger than the present value of the pension benefits earned to date, a net pension asset is reported. This net liability or asset is placed on the statement of net position as either a governmental activity or a business-type activity depending on the nature of the party responsible for the payments.

To illustrate, assume that a city government has had a pension plan for several decades to cover all of the teachers in its school system who remain employed for at least three years. A pension trust fund was created years ago that now holds \$1 billion in cash and investments. No payments are currently due to retirees. Assume that the total amount of expected pension payments has been determined by an actuary as \$10 billion. To date, current and retired employees have only earned \$8 billion of that amount. These future cash payments have a present value of \$3 billion. On the government-wide financial statements, the city reports \$2 billion as the net pension liability. The \$1 billion held by government’s pension trust fund is subtracted from the \$3 billion present value of the future payments to indicate the unfunded portion of the obligation. Because the school system is responsible, the debt is reported within the governmental activities.

<sup>7</sup>Kathryn E. Easterday and Tim V. Eaton, “Defined Benefit Pension Plans,” *The CPA Journal*, September 1, 2012, p. 22.

A number of complex challenges must be dealt with in applying this reporting rule. Although many of these problems are beyond the scope of this textbook, a brief discussion of several key issues is warranted:

- In any present value computation, the question of an appropriate discount rate is essential. The size of the rate is inversely related to the size of the liability that must be reported. The higher the rate, the more interest is assigned to the future cash flows, leaving a smaller liability balance to report. GASB requires that, in most cases, the present value of the future obligation is determined using the estimated long-term investment yield for the plan's assets.

That decision has proven controversial. Because the expected rate of return on investments is normally higher than other possible discount rates, the remaining pension liability to be reported is smaller. That decrease appears to reduce the apparent future cost of these pension plans to the taxpayers.<sup>8</sup>

Financial economists have recommended for decades that governments calculate pension liabilities using so-called 'risk-free' rates pegged to high-grade municipal bonds or long-term Treasuries. . . . However, GASB let governments stick with their desired, er, expected rate of return, which is typically about 8 percent. Public pension funds have returned 5.7 percent on average since 2000. Achieving much higher returns over the long run would require markets to perform as well as they did in the 1980s and '90s. Would that be true. Governments have resisted climbing down from Fantasyland because using lower discount rates would explode their liabilities.<sup>9</sup>

- The components to be recognized immediately as pension expense must be identified. GASB lists those as the service cost for the current period, interest expense on the total pension liability, and projected earnings on plan investments. Any increases or decreases in the liability caused by changes in benefit terms are included in pension expense immediately rather than being amortized over time.
- Numerous assumptions (such as the life expectancy of retirees) are necessary to arrive at a total pension liability figure. The impact of changes in those assumptions and differences between those assumptions and actual experience are not included immediately by the government as pension expense. Instead, those amounts are recorded as either deferred outflows of resources or deferred inflows of resources and amortized to pension expense over the average expected remaining service lives of all employees in the pension plan. For example, at June 30, 2015, the state of Tennessee explains its reported deferred inflows of resources as "the primary government has one item that qualifies for reporting in this category. This item is the result of two pension-related factors. The first factor is investment returns were better than projected and the other is the difference between the actual and expected economic and demographic factors that were more favorable than anticipated. In the governmental activities column of the government-wide statement of net position, the state reported \$701 million for these factors."

Throughout any analysis of these rules, some elements of the reporting used by for-profit organizations for defined benefit pension plans can be seen. However, several unique aspects have also been introduced by GASB for state and local government entities.

#### LO 17-5

Record the donation and acquisition of works of art and historical treasures.

## Works of Art and Historical Treasures

As will be discussed in the following chapter, private not-for-profit entities have long debated the proper reporting of artworks and other museum pieces whether bought or received by gift. State and local governments can face the same issue. How should works of art, historical artifacts, and other such treasures be reported in governmental financial statements? These properties have value but are they really assets in an accounting sense?

<sup>8</sup> "The not-so-Great GASB," *The Economist*, Buttonwood's notebook, May 2, 2013, <http://www.economist.com/blogs/buttonwood/2013/05/pensions>.

<sup>9</sup> "Pension Accounting for Dummies; New government reporting rules are no better than the old ones," *The Wall Street Journal* (online), July 11, 2012.

Assume, for example, that a city maintains a museum in a building formerly used as a high school. The museum was created to display documents, maps, paintings, and other works that depict the history of the city. Admission is free. No revenue is generated.

The government bought a number of the items on display. Local citizens donated the remaining pieces. Several are quite valuable.

Although optional reporting is allowed, the basic rule in accounting for such items is clear. Other than a few specific exceptions, “governments should capitalize works of art, historical treasures, and similar assets at their historical cost or fair value at date of donation (estimated if necessary) whether they are held as individual items or in a collection.”<sup>10</sup>

Thus, the government-wide statement of net position will report an antique map bought for \$5,000 as an asset at that cost. A similar map received as a gift is also recorded as a \$5,000 asset. Such donations qualify as voluntary nonexchange transactions. In recording the gift, revenue is also recognized for the map’s value but only when all eligibility requirements are met. Until that time, a liability is recorded.<sup>11</sup>

For fund financial statements, the museum might be viewed as an enterprise fund if an entrance fee is charged. In that case, the reporting of these assets is simply replicated. However, if the museum is listed within the governmental funds, any such acquisition is reported as an expenditure (rather than an asset) to reflect the decrease in current financial resources. For gifts of this type property, no entry is made because no change took place in the amount of current financial resources. No money was spent to acquire the map.

In government-wide financial statements, a theoretical problem arises in the recognition of such properties regardless of whether they were purchased or obtained by gift. Do such items qualify as assets to be reported by the government? Historical maps, artistic paintings, and the like are often displayed for the public to see but do not generate any direct cash inflows or other economic benefit. Does that satisfy the characteristics of an asset?

GASB encourages the capitalization of all artworks, historical treasures, and the like as assets. However, if all three of the following criteria are met, the recording of such properties as an asset is optional:

1. It is held for public exhibition, education, or research in furtherance of public service rather than for financial gain.
2. It is protected, kept unencumbered, cared for, and preserved.
3. It is subject to an organizational policy that requires the proceeds from sales of collection items to be used to acquire other items for collections.<sup>12</sup> This last requirement ensures that the work is not being held for investment purposes.

If these guidelines are met, the artwork or historical treasure will not provide direct economic benefit to the government. Although the transaction must be recorded, recognition of an asset is not required. For the government-wide statements, an expense rather than an asset can be recorded whether the item is obtained by purchase or by gift.

In the asset section of its 2014 government-wide financial statements, the City of Chicago reported works of art and historical collections with a reported value of \$45.2 million although other items of this type are not capitalized. A footnote explains the reporting of these properties.

The City has a collection of artwork and historical treasures presented for public exhibition and education that are being preserved for future generations. The proceeds from sales of any pieces of the collection are used to purchase other acquisitions. A portion of this collection is not capitalized or depreciated as part of capital assets.

GASB’s handling of artwork and historical treasures closely parallels rules established by FASB for private not-for-profit entities. However, as the next chapter explains, differences do remain.

<sup>10</sup> Governmental Accounting Standards Board, *Codification of Governmental Accounting and Financial Reporting Standards as of December 31, 2014*, Sec. 1400.109.

<sup>11</sup> A deferred inflow of resources is recorded rather than a liability if all eligibility requirements have been met except for a time requirement.

<sup>12</sup> GASB, *Codification*, Sec. 1400.109.



One related issue needs to be addressed: depreciation. Does the map on display in the museum actually depreciate in value over time? Does the *Mona Lisa* have a finite life? For such works of art or museum artifacts, depreciation is required but only if the asset is deemed as “exhaustible”—that is, if its utility will be consumed by display, education, or research. Depreciation is not necessary if the item is judged to be inexhaustible. As long as properly maintained, many such properties can be considered as inexhaustible assets so that depreciation is allowed but not required.

### LO 17-6

Explain the reporting and possible depreciation of infrastructure assets.

## Infrastructure Assets and Depreciation

Many governments hold a significant number of infrastructure assets. As mentioned in the previous chapter, infrastructure is a general term for long-lived capital assets that normally are stationary in nature and can be preserved for a significantly greater number of years than most capital assets. Common examples include roads, bridges, tunnels, lighting systems, curbing, and sidewalks.

At one time in government accounting, the recording of infrastructure items was an optional practice. Now, though, infrastructure costs are recorded as assets in the government-wide statements. As of June 30, 2014, the City of Cincinnati, Ohio, listed infrastructure assets, net of accumulated depreciation, of \$584.0 million on its government-wide statements. For governmental funds, these costs continue to be recorded as expenditures in the fund statements because acquisition or construction creates a reduction in current financial resources.

As discussed previously, depreciation is required for all capital assets (such as buildings) that have a finite life as well as capitalized artworks and historical treasures that are deemed to be exhaustible. In creating government-wide financial statements, the need for depreciating infrastructure assets was debated by GASB: Is depreciation appropriate for this type of asset? “The responses to the Statement’s exposure draft included arguments that infrastructure assets should not be depreciated because they are intended to be preserved in perpetuity.”<sup>13</sup>

For example, construction of the Brooklyn Bridge was finished in 1883 at a cost of about \$15 million. That particular piece of infrastructure has operated now for more than 130 years and, with proper maintenance, might well continue to carry traffic for another 130 years. Much the same can be said of many roads, sidewalks, and the like. With appropriate repair and maintenance, such assets could have lives that are almost indefinite. What expected life should New York City use to depreciate the cost incurred in constructing a street such as Fifth Avenue?

Depreciation of infrastructure items is recorded in government-wide financial statements. Not surprisingly, governments tend to depreciate some of their infrastructure over extended periods. The City of Portland, Oregon, with approximately \$5.0 billion in infrastructure uses lives that range from 20 to 100 years. The City of Portland, Maine, with \$250 million in infrastructure depreciates this cost over periods from 30 to 67 years.

However, a unique alternative to depreciating the cost of eligible infrastructure assets such as the Brooklyn Bridge or Fifth Avenue was created by GASB. This method, known as the *modified approach*, eliminates the need for depreciating infrastructure assets. If specified guidelines are met, a government can choose to expense all maintenance costs each year in lieu of recording depreciation. Additions and improvements must be capitalized, but the cost of maintaining the infrastructure in proper working condition is expensed. Thus, if applied, New York City would expense the amount spent on the repair and other maintenance of Fifth Avenue so that no depreciation of the street’s capitalized cost need be recorded. Effectively, proper maintenance of infrastructure assets can extend their lives indefinitely.

Use of the modified approach requires the government to accumulate information about all infrastructure assets within either a network or a subsystem of a network. For example, all roads could be deemed a network while state roads, rural roads, and interstate highways might make up three subsystems of that network.

<sup>13</sup> Charlotte A. Pryor, “Local Governments and the Modified Approach to Reporting the Cost of Infrastructure,” *Government Accountants Journal*, April 1, 2013.

- For eligible assets, the government must establish a minimum acceptable condition level and then document that this minimum level is being met.
- The government must have an asset management system in place to monitor the eligible assets. This system assesses the ongoing condition to ensure that the eligible assets are, indeed, operating at the predetermined level.

The City of Los Angeles has adopted the modified approach in reporting all of its bridges. In its comprehensive annual financial report, the system used by that government is explained as follows. This description does indicate that the city has properly followed the rules above.

The modified approach is used in reporting the City's bridges infrastructure system. A comprehensive bridge database system, the Bridges and Tunnel System, enables the City to track the entire bridge inventory, the structural condition of various bridge elements, and bridge sufficiency ratings. Condition assessments of these structures are completed in a three-year cycle. The latest assessment report was as of July 1, 2013. A system of letter grades identifies the condition of each structure. Letter grades "A" through "D" represent the condition of the structure as Very Good, Good to Fair, Fair to Poor, and Very Poor. "F" rating symbolizes a failed condition where replacement of the structure is necessary. These letter grades are based on sufficiency ratings, or the overall condition of the structure based on the last inspection. It is the City's policy that at least 70% of the bridges are rated "B" or better and that no bridge shall be rated less than "D". It is also the intent of the City that at least 80% of bridges be rated "B" or better by 2017. The City performs regular inspection and maintenance of the various structural elements for any defects. Funds for annual estimated inspection, maintenance and repair costs are provided in the City's budget. Bridges infrastructure system is excluded in the determination of depreciation provisions for capital assets, while preservation and maintenance costs are charged to expense.

The modified approach provides a method by which governments can avoid depreciating infrastructure assets such as the Brooklyn Bridge that have virtually an unlimited life. The issue is: How many governments will be like the City of Los Angeles and go to the trouble of creating the standards and documentation required by this approach simply to avoid recording depreciation expense? According to one expert in the field, "There are relatively few governmental entities that have adopted the modified approach. Airports, transportation authorities and large transportation departments are really the only ones that I've seen that follow the modified approach."<sup>14</sup>

#### LO 17-7

Understand the composition of a state or local government's comprehensive annual financial report (CAFR).

## Comprehensive Annual Financial Report

Government-wide financial statements and fund financial statements are most often presented to the public as part of a comprehensive annual financial report (CAFR). The CAFR is not limited to the financial statements and includes an extensive amount of other information about the reporting government. For example, the 2015 CAFR for the City of Orlando, Florida, with total assets of \$3.2 billion, was approximately 250 pages long. In comparison, the 2015 financial statements for Walmart, with more than \$203 billion in assets, was only about 50 pages.

The CAFR of a state or local government is composed of three broad sections:

1. *Introductory section*—includes a letter of transmittal from appropriate government officials, an organization chart, and a list of principal officers.
2. *Financial section*—presents the general purpose external financial statements (both the government-wide and fund financial statements) and reproduces the auditor's report. The government also presents the management's discussion and analysis (MD&A) and other required supplementary information.
3. *Statistical section*—discloses a wide range of data about the government encompassing both financial and nonfinancial information. This statistical information can be fascinating. In its 2015 CAFR, the City of Buffalo, New York, reports the following for that year

<sup>14</sup> From Jack Reagan, partner, Grant Thornton LLP, Washington, DC, March 27, 2016.

(along with considerable other information): number of police officers (699), number of firefighters (654), traffic violations (40,021), fire stations (20), fire hydrants (7,962), streetlights (31,879), traffic lights (665), acreage for parks (1,842), street resurfacing (472,056 square yards), and materials used to fill potholes (1,452 tons).

The financial section of the CAFR is composed of three distinct sections:

1. Management's discussion and analysis. The MD&A is required supplemental information that "should provide an objective and easily readable analysis of the government's financial activities based on currently known facts, decisions, or conditions."<sup>15</sup>
2. Financial statements:
  - a. Government-wide financial statements.
  - b. Fund financial statements.
  - c. Notes to the financial statements.
3. Required supplementary information (other than the MD&A). This section includes information required by U.S. GAAP but not within the financial statements or accompanying notes. For example, the City of Orlando, Florida, compares budgetary figures here for the city with actual results for each major fund although a separate statement within the fund financial statements could also have been used for this purpose. Orlando also includes required supplementary information about the pensions and postemployment benefits that it provides to former employees including a schedule of employer contributions, a schedule of investment returns, and a schedule of net pension liability.

For many readers, one of the most interesting aspects of the financial section is the MD&A because it provides a plain English description of the past, future, and present of the government's financial situation and operations. As an illustration, the 2015 CAFR for the City of Raleigh, North Carolina, includes a management's discussion and analysis 15 pages in length that presents information such as the following:

- "The parking facilities operations generated \$13.2 million of revenues in 2014–15, an increase of 9.1% compared to 2013–14. This was driven by an increase in reserved parking rates and an increase in downtown parking demand."
- "Convention Center operations including the Performing Arts venue delivered \$13.3 million of operating revenues in 2014–15, an increase of 3.1% compared to 2013–14. This increase was a result of positive increases in event revenue as compared to the prior year. Operating expenses remained relatively flat as compared to the prior year."
- The City issued \$66.7 million in limited obligation bonds to finance the construction of the new communications center and a fire station

### LO 17-8

Explain the makeup of a primary government and its relationship to component units and related organizations as well as the combination of governments.

## The Primary Government and Component Units

### Primary Government

It always should be possible in the public sector to trace financial accountability to elected officials. Consistent with this presumption of the ultimate financial accountability of elected officials, a typical state or local government financial report is built around the core of a single government with an elected governing body, known as the primary government.<sup>16</sup>

Each state and local government will prepare and distribute a CAFR if it qualifies as a reporting entity. However, the composition of a reporting entity must be identified. Normally, the reporting process begins with a primary government such as a town, city, county, or state. A primary government has separate legal status, a separately elected governing board, and is

<sup>15</sup> GASB, *Codification, as of December 31, 2014*, Sec. 2200.106.

<sup>16</sup> Stephen J. Gauthier, *Governmental Accounting, Auditing, and Financial Reporting* (Chicago: Government Finance Officers Association, 2012), p. 73.

fiscally independent. Beyond that, each reporting entity also includes all of the organizations, agencies, offices, and departments that are not legally separate from the primary government.

However, many of the activities that interact closely with a primary government are legally separate. Should they also be included as part of the reporting entity and its financial statements? That question is not as complicated in for-profit accounting. Except in rare cases, a business enterprise such as IBM or PepsiCo consolidates all businesses over which it holds control through majority ownership. Control is not so clearly delineated in governmental accounting. Should legally separated organizations be included within a government's CAFR and, if so, what reporting is appropriate?

The almost unlimited number of activities that can be connected to a primary government raises problems for officials who are attempting to outline the parameters of the entity being reported. Organizations such as turnpike commissions, port authorities, public housing boards, and downtown development commissions have become commonplace for many cities and counties. The primary government may have created many of these, but they are structured as legally separate organizations. Such operations are usually designed to focus attention on specific issues or problems.

As an example, notes to the financial statements in the 2015 CAFR for the City of Boston, Massachusetts, identifies four discretely presented component units (Boston Redevelopment Authority, Economic Development Industrial Corporation, Boston Public Health Commission, and Trustees of the Boston Public Library) and one blended component unit (State-Boston Retirement System). The city also recognizes three related organizations (Boston Housing Authority, Boston Industrial Development Finance Authority, and Boston Water and Sewer Commission). Discretely presented component units? Blended component units? Related organizations? How do all of these entities relate to the primary government (the City of Boston) and what impact do they have on the financial reporting for that city?

### Identifying Component Units

In its CAFR as of June 30, 2015, the City of Atlanta, Georgia, describes the reporting entity: "The government-wide financial statements include not only the City itself (known as the primary government), but also the legally separate Atlanta Fulton County Recreation Authority and the Atlanta Development Authority (doing business as Invest Atlanta) for which the City is financially accountable. Financial information for these component units is reported separately from the financial information presented for the primary government. The Atlanta Housing Opportunity, Inc. and Atlanta CoRA, Inc., are also component units but their financial statements are blended with the primary government. Other blended component units of the City include Urban Design Commission, Atlanta Public Safety and Judicial Facilities Authority and Solid Waste Management Authority."

When producing a CAFR, the major requirement for inclusion as a component unit is the financial accountability of the primary government. "Financial reporting based on accountability should enable the financial statement reader to focus on the body of organizations that are related by a common thread of accountability to the constituent citizenry."<sup>17</sup> When elected officials of the primary government are financially accountable for an outside organization, it is labeled a component unit. Such legally separate activities are so closely connected to the primary government that omission from the financial statements cannot be justified.

That is the reason the City of Atlanta included the Atlanta Fulton County Recreation Authority and the other activities mentioned above in its CAFR. They qualified as component units. They are not part of the government but are reported to reflect the City of Atlanta's financial accountability.

Because of the potential impact on the financial statements of a primary government, the determination of component units is often of significant importance. Two sets of criteria have been established to indicate financial accountability. If either is met, the activity qualifies as a component unit to be reported within the CAFR of the primary government. A legally separate entity can also be included in this way even if it does not meet either of these criteria if exclusion is believed to be misleading.

<sup>17</sup> GASB, *Codification, as of December 31, 2014*, Sec. 2100.102.

***Criterion 1 for Financial Accountability***

The separate entity (such as the Atlanta Fulton County Recreation Authority) is viewed as a component unit if it fiscally depends on the primary government (the City of Atlanta). *Fiscal dependency* means that the organization cannot do one or more of the following without approval of the primary government: adopt its own budget, levy taxes or set rates, or issue bonded debt. This criterion also requires that the primary government and the component unit must be financially interdependent (there is a relationship of potential financial benefit or burden between the two).

***Criterion 2 for Financial Accountability***

First, officials of the primary government must appoint a voting majority of the governing board of the separate organization. Second, either the primary government must be able to impose its will on that board or the separate organization provides a financial benefit or imposes a financial burden on the primary government.

Because of the importance of this identification process, three aspects of these criteria will be explained further to ensure proper application.

***Voting Majority of the Governing Board***

The authority to elect a voting majority must be substantive. If, for example, the primary government simply confirms the choices made by other parties, then financial accountability is not present. In the same way, financial accountability does not result when the primary government merely selects the governing board from a limited slate of candidates (such as picking three individuals from an approved list of five). The primary government must have the actual responsibility of appointing a voting majority of the board to meet this provision of the second criterion.

***Imposition of the Primary Government's Will on the Governing Board***

Such power is indicated if the primary government can significantly influence programs, projects, activities, or level of services the separate organization provides. This degree of influence is present if the primary government is able to remove an appointed board member at will, modify or approve budgets, override decisions of the board, modify or approve rate or fee changes, or hire or dismiss the individuals responsible for day-to-day operations. Such possible actions indicate the level of authority held by the primary government.

***Financial Benefit or Financial Burden on the Primary Government***

A financial connection exists between the separate organization and the primary government if the government is entitled to the organization's resources, the government is legally obligated to finance any deficits or provide support, or the government is responsible for the organization's debts.

**Reporting Component Units**

After being identified, component units are reported by a primary government in one of two ways: discretely presented or blended. If discretely presented, component units are presented on the far right side of the government-wide statements. For example, as of June 30, 2014, the government-wide statements for the City of Detroit, Michigan, show that the primary government holds total assets and deferred outflows of resources of more than \$9.9 billion, whereas its discretely presented component units shown just to the right of the primary government reports similar accounts totaling \$473.5 million.

According to notes to the city's financial statements, these component unit figures were gathered from 12 separate organizations:

- Detroit Brownfield Redevelopment Authority.
- Detroit Public Library.
- Detroit Transportation Corporation.
- Downtown Development Authority.
- Eastern Market Corporation.

- Economic Development Corporation.
- Greater Detroit Resource Recovery Authority.
- Local Development Finance Authority.
- Museum of African American History.
- Detroit Land Bank Authority.
- Eight Mile/Woodward Corridor Improvement Authority.
- Detroit Employment Solutions Corporation.

As an alternative placement within the CAFR, a primary government can include a component unit as an actual part of the reporting government as if it were another fund (a process referred to as *blending*). The City of Detroit blends four of its component units: Detroit Building Authority, Detroit General Retirement System Service Corporation, Detroit Police and Fire Retirement System Service Corporation, and the Public Lighting Authority. Although legally separate, each of these components is so intertwined with the primary government that inclusion is necessary to present the financial information in an appropriate fashion. The blending of a component unit is usually up to the judgment of government officials. Blending is required if the separate entity's debt will be repaid entirely, or almost entirely, from resources of the primary government.

The City of Detroit also lists several related organizations. They are not closely tied to the primary government so that less reporting is necessary. The primary government is accountable only because it appoints a voting majority of the outside organization's governing board. Fiscal dependency as defined previously is not present, and the primary government cannot impose its will on the board or gather financial benefits or burdens from the relationship. Consequently, the separate organization does not qualify as a component unit. For a related organization, the primary government must still disclose the nature of the relationship. The City of Detroit discloses related organizations that include the Detroit Historical Society, Detroit Institute of Arts, and Detroit Zoological Society.

### Special Purpose Governments

Most individuals think of primary governments in terms of general purpose governments such as states, cities, counties, towns, and the like. However, numerous special purpose governments also exist around the country. As noted at the start of the previous chapter, over 50,000 school systems and other special purpose districts were in existence across the United States. Their qualifications as primary governments can be seen in a note to the 2014 CAFR for the Atlanta Independent School System:

The Atlanta Independent School System (School System of the District) was established by the Georgia State Legislature and is composed of nine publicly elected members serving four-year terms. The School System has the authority to approve its own budget and to provide for the levy of taxes to cover the cost of operations and maintenance and to cover debt service payments. Additionally, the School System has decision-making authority, the power to approve selection of management personnel, the ability to significantly influence operations, and primary accountability for fiscal matters. Accordingly, the School System is a primary government and consists of all the organizations that compose its legal entity.

Special purpose governments carry out only a single function or a limited number of functions. Common examples include public school districts, colleges and universities, water utilities, hospitals, transit authorities, and library services. For the accountant, one question must be addressed: Is such an operation truly a special purpose government or merely a part of a larger government such as a city or county so that it should be reported as a fund or a component unit. Or, perhaps, it is not a government entity at all but rather a nongovernmental not-for-profit organization.

As shown by the note in the CAFR for the Atlanta Independent School System, an activity or function is deemed a special purpose government if it meets the following criteria:

1. Has a separately elected governing body.
2. Is legally independent, which can be demonstrated by having corporate powers such as the right to sue and be sued as well as the right to buy, sell, and lease property in its own name.



## Discussion Question

### IS IT PART OF THE COUNTY?

Harland County is in a financially distressed area of Missouri. In hopes of enticing business to this county, the state legislature appropriated \$3 million to start an industrial development commission. The federal government provided an additional \$1 million. The state appointed 15 individuals to a board to oversee the operations of this commission, and Harland County officials named five additional members. The commission began operations by raising funds from local citizens and businesses. Over the past 12 months, it received \$700,000 in donations and pledges. The county provided clerical assistance and allowed the commission to use one wing of a county office building for its headquarters. The Harland County government must approve the commission's annual operating budget. The county will also cover any deficits that might occur.

During the current period, the commission spent \$2.4 million and achieved notable success. Several large manufacturing companies recently began to explore the possibility of opening plants in the county.

Harland County is currently preparing its comprehensive annual financial report. Should the county's CAFR include the revenues, expenditures, assets, expenses, and liabilities of the industrial development commission? Is it a fund within the county's primary government, a component unit, or a related organization?

Is the industrial development commission a component unit of the State of Missouri? How should its activities be presented in the state's comprehensive annual financial report?

3. Is fiscally independent of other state and local governments. As mentioned previously, an activity is normally considered to be fiscally independent if its leadership can determine the activity's budget without having to seek the approval of an outside party, levy taxes or set rates without having to seek outside approval, or issue bonded debt without outside approval.

A school system or other government activity that satisfies all three of these requirements is reported as a special purpose government that produces its own CAFR. If that same activity fails to meet any one of these criteria, its financial transactions are likely to be maintained within the general fund or special revenue funds of a city or county government.

### LO 17-8

Explain the makeup of a primary government and its relationship to component units and related organizations as well as the combination of governments.

## Acquisitions, Mergers, and Transfers of Operations

With so many general purpose governments, special purpose governments, component units, and related organizations, combinations and realignment transactions are common. A city government might take over operations of a homeless shelter from a not-for-profit entity. A toll road operated as a special purpose government might be acquired by a local county. Two independent school systems might be brought together to create more efficient operations. "After voters approved a ballot question last month approving the consolidation of the Atwood-Hammond and Arthur school districts, school officials, teachers and students have begun the process of merging the two districts into a single entity. Atwood-Hammond Superintendent Kenny Schwengel said the two school districts will spend the 2013–14 school year getting ready for the merger, which takes effect on July 1, 2014."<sup>18</sup>

<sup>18</sup> Tim Mitchell, "School Districts Prepare for Merger," *The News-Gazette*, May 20, 2013, <http://www.news-gazette.com/news/local/2013-05-20/school-districts-prepare-merger.html>.

GASB views a combination as a *merger* if two legally separate entities are brought together to form a new entity and no significant consideration is exchanged. The combination is still a merger even if one of those entities ceases to exist while the other continues to function. The combination of two agencies or two school systems might well meet this criteria. In a merger, because of the lack of paid consideration, the net carrying values for all assets, deferred outflows of resources, liabilities, and deferred inflows of resources are simply combined. Balances are not changed. Additional accounts are neither created nor recognized as a result of this type of combination.

The reporting of an *acquisition* is quite different. In an acquisition, a significant amount of consideration is exchanged. For example, the cash purchase of a special purpose government toll road by a county government is reported as an acquisition if the toll road ceases to exist as a separate entity and becomes part of the county government. In government-wide financial statements, the acquiring government records all acquired assets, deferred outflows of resources, liabilities, and deferred inflows of resources at acquisition value (other than a few specific exceptions such as landfills). Acquisition value is defined by GASB as the market-based entry price—the amount that the government would have to pay to acquire or discharge each separate item. Most of the additional costs incurred to create this type of combination are recorded as expenses (government-wide financial statements) or as expenditures (fund financial statements).

As with for-profit transactions, an acquiring entity might have to pay more than the total acquisition values assigned to the various assets, liabilities, and deferrals. In for-profit accounting—as seen in earlier chapters of this textbook—any excess payment is reported as the asset “goodwill.” This balance is then tested periodically for possible impairment. On government-wide financial statements, any excess consideration is reported as a deferred outflow of resources on the statement of net position. The balance is written off to expense over a period of time that is determined based on factors such as the service life of capital assets, technology available, and contracts acquired.

When an acquisition takes place, fund financial statements for the governmental funds record any acquired current financial resources and the claims against those resources. That approach is in line with the usual reporting of those funds. Once again, acquisition value is applied to each balance. Any reduction in current financial resources caused by payment is also recorded. The fund balance reported for that fund is adjusted to reflect the net change. To illustrate, assume cash of \$4 million is paid to acquire an outside agency which holds current financial resources having a total acquisition fair value of \$1 million and capital assets with a total acquisition fair value of \$2 million. In fund financial statements, cash is reduced by \$4 million with the acquired current financial resources recorded at \$1 million. The capital assets are not reported on fund statements. The fund balance for the acquiring fund must be reduced to reflect the \$3 million difference.

Occasionally, an entity will convey one of its activities to another entity. A government might transfer the operations of a soup kitchen to a local charity. A not-for-profit entity might transfer a homeless shelter to the local city. If a government receives an operation purely by transfer, all assets, deferred outflows of resources, liabilities, and deferred inflows of resources are recorded at the previous net carrying amounts. Conversely, if a state or local government is turning over an activity to another party, a gain or loss on disposal is reported depending on whether any resources are received in return.

#### LO 17-9

Describe the physical structure of a complete set of government-wide financial statements and a complete set of fund financial statements.

## Government-Wide and Fund Financial Statements Illustrated

At the core of a governmental reporting entity’s CAFR are the general purpose financial statements. These statements are made up of government-wide financial statements and fund financial statements. Government-wide statements present financial information for both governmental activities and business-type activities (and often component units). They measure economic resources and utilize accrual accounting.



Separate fund financial statements are created for the governmental funds, the proprietary funds, and the fiduciary funds. The measurement focus and timing of recognition depend on the fund in question. For governmental funds, the current financial resources measurement focus is used with modified accrual accounting. In contrast, both proprietary funds and fiduciary funds use accrual accounting to report all economic resources.

Four of these statements were outlined briefly in the previous chapter to introduce their basic structure. Now that a deeper understanding of government accounting has been established, government-wide and fund financial statements can be examined in more detail.<sup>19</sup>

### Statement of Net Position—Government-Wide Financial Statements

Exhibit 17.1 presents a hypothetical version of the June 30, 2017, statement of net position for the City of Eastern South. As a government-wide financial statement, it reports the economic resources of the government as a whole (except for the fiduciary funds, which are not included because those resources must be used for a purpose outside the government).

Several aspects of this statement of net position should be noted:

- The measurement focus is on the economic resources controlled by the government. Thus, all assets including capital assets are reported. Noncurrent liabilities are presented for the same reason.
- Capital assets other than land, inexhaustible works of art, and construction in progress (and infrastructure assets if the modified approach is applied) are reported net of accumulated depreciation. Other than these exceptions, depreciation of capital assets is required on the government-wide statements. (See Point A.)
- As discussed in the previous chapter, categories titled Deferred Outflows of Resources and Deferred Inflows of Resources are included on this statement. These sections provide a location for balances that do not qualify as either assets or liabilities in government accounting.
- The primary government is divided into governmental activities and business-type activities. Governmental funds are reported as governmental activities, whereas enterprise funds comprise most, if not all, of the business-type activities. Even though recorded within the proprietary funds, most internal service funds are classified as governmental activities. That is appropriate when those services are rendered primarily for the benefit of activities within the governmental funds (for example, a print shop works mainly for the local schools).
- The internal balances shown in the asset section (Point B) reflect receivables and payables between the governmental activities and the business-type activities. These internal balances have no impact outside of the government and are offset so that no effect is created on the totals reported for the primary government.
- Discretely presented component units are grouped and shown to the far right side of the statement (Point C) so that reported amounts do not affect the primary government figures. In contrast, blended component units are included, as appropriate, within either the governmental activities or the business-type activities as if they were individual funds. As seen in the final column of Exhibit 17.1, this city has only one discretely presented component unit: the Eastern South Regional Art Space. The government could also have blended component units but their presence can be ascertained only by a review of the disclosure notes.
- As the Net Position section shows, several amounts have been restricted for capital projects, debt service, and the like. Restrictions are reported in this manner only if usage of those resources has been designated (a) by external parties such as creditors, grantors, or other external party, or (b) as a result of laws that have been passed through constitutional provisions or enabling legislation.

<sup>19</sup> The examples presented here illustrate the government-wide financial statements and the fund financial statements for both governmental funds and proprietary funds. Because they are more specialized, the fund financial statements for the fiduciary funds have been omitted.

**EXHIBIT 17.1 Government-Wide Financial Statements—Statement of Net Position**

<b>CITY OF EASTERN SOUTH</b>				
<b>Statement of Net Position</b>				
<b>June 30, 2017</b>				
<b>(in thousands)</b>				
	<b>Primary Government</b>			<b>Component Unit—Eastern South Regional Art Space ©</b>
	<b>Governmental Activities</b>	<b>Business-Type Activities</b>	<b>Total</b>	
<b>Assets</b>				
Cash and investments .....	\$ 232,450	\$ 149,333	\$ 381,783	\$ 25,735
Receivables, net .....	219,435	59,812	279,247	–0–
Internal balances ® .....	23,876	(23,876)	–0–	–0–
Inventories and supplies .....	11,654	12,922	24,576	2,159
Prepaid items .....	5,075	2,117	7,192	822
Land and other capital assets not depreciated .....	250,883	165,873	416,756	1,451
Other capital assets, net of depreciation Ⓐ .....	821,490	688,523	1,510,013	11,434
Total assets .....	<u>\$ 1,564,863</u>	<u>\$ 1,054,704</u>	<u>\$ 2,619,567</u>	<u>\$ 41,601</u>
<b>Deferred outflows of resources</b>				
Unamortized excess cost of acquisition .....	\$ 59,447	\$ –0–	\$ 59,447	\$ –0–
<b>Liabilities</b>				
Accounts payable .....	\$ 23,775	\$ 14,315	\$ 38,090	\$ 5,076
Other liabilities and unearned revenue .....	30,766	5,225	35,991	432
Bonds payable—current .....	87,922	12,885	100,807	3,124
Landfill closure obligation .....	–0–	9,078	9,078	–0–
Bonds payable—noncurrent .....	289,217	221,441	510,658	6,780
Net pension liability .....	111,000	–0–	111,000	–0–
Lease payable—noncurrent .....	24,548	21,669	46,217	2,277
Total liabilities .....	<u>\$ 567,228</u>	<u>\$ 284,613</u>	<u>\$ 851,841</u>	<u>\$ 17,689</u>
<b>Deferred inflows of resources</b>				
Unavailable property tax collections .....	\$ 26,500	\$ –0–	\$ 26,500	\$ –0–
<b>Net Position</b>				
Invested in capital assets, net of related debt .....	\$ 811,487	\$ 723,656	\$ 1,535,143	\$ 872
Restricted for:				
Capital projects .....	125,769	19,774	145,543	5,045
Debt service .....	2,355	1,056	3,411	84
Other .....	29,267	–0–	29,267	–0–
Unrestricted .....	61,704	25,605	87,309	17,911
Total net position .....	<u>\$ 1,030,582</u>	<u>\$ 770,091</u>	<u>\$ 1,800,673</u>	<u>\$ 23,912</u>

The notes to the financial statements are an integral part of this statement.

### Statement of Activities—Government-Wide Financial Statements

The statement of activities presents a wide array of information about the various functions of a state or local government. As shown in the statement for the City of Eastern South in Exhibit 17.2, the same general classification system of governmental activities, business-type activities, and component units used in Exhibit 17.1 forms the structural basis for reporting. However, the format here is more complex and requires close analysis.

**EXHIBIT 17.2 Government-Wide Financial Statements—Statement of Activities**

<b>CITY OF EASTERN SOUTH</b>									
<b>Statement of Activities</b>									
<b>For the Fiscal Year Ended June 30, 2017</b>									
<b>(in thousands)</b>									
<b>Functions/Programs</b>	<b>Operating Expenses <sup>(D)</sup></b>	<b>Charge for Services</b>	<b>Program Revenues <sup>(E)</sup></b>			<b>Net (Expenses) Revenues and Changes in Net Position</b>			<b>Component Unit-Eastern South Regional Art Space</b>
			<b>Operating Grants and Contributions</b>	<b>Capital Grants and Contributions</b>	<b>Governmental Activities</b>	<b>Business-type Activities</b>	<b>Total</b>		
<b>Primary government:</b>									
Governmental activities									
General government	\$ (28,055)	\$ 6,554	\$ 5,472	\$ 2,384	\$ (13,645)	\$ (13,645)			
Police	(103,465)	17,980	13,256	6,747	(65,482) <sup>(H)</sup>	(65,482)			
Fire	(97,687)	5,306	19,821	23,063	(49,497)	(49,497)			
Transportation	(96,088)	31,365	355	16,984 <sup>(G)</sup>	(47,384)	(47,384)			
Economic development	(5,563)	898	143	1,875	(2,647)	(2,647)			
Parks and recreation	(64,725)	17,168	16,778	4,221	(26,558)	(26,558)			
Neighborhood services	(3,965)	649	132	2,993	(191)	(191)			
Library	(17,744)	5,365	2,784	2,257	(7,338)	(7,338)			
Interest on noncurrent debt	(23,550) <sup>(E)</sup>	—	—	—	(23,550)	(23,550)			
Total governmental activities	<u>\$ (440,842)</u>	<u>\$ 85,285</u>	<u>\$ 58,741</u>	<u>\$ 60,524</u>	<u>\$ (236,292) <sup>(I)</sup></u>	<u>\$ (236,292)</u>			
Business-type activities									
Water	\$ (39,273)	\$ 50,877	\$ 121	\$ 6,339	\$ 18,064 <sup>(J)</sup>	\$ 18,064			
Sewer	(12,868)	11,836	488	2,451	1,907	1,907			
Parking	(11,776)	25,990	1,342	844	16,400	16,400			
Others	(8,074)	795	5,434	6,009	4,164	4,164			
Total business-type activities	<u>(71,991)</u>	<u>89,498</u>	<u>7,385</u>	<u>15,643</u>	<u>40,535 <sup>(K)</sup></u>	<u>40,535</u>			
Total primary government	<u>\$ (512,833)</u>	<u>\$ 174,783</u>	<u>\$ 66,126</u>	<u>\$ 76,167</u>	<u>\$ (236,292)</u>	<u>\$ (236,292)</u>			
<b>Component unit:</b>									
Eastern South Regional Art Space	\$ (8,128)	\$ 2,896	\$ 1,676	\$ —	\$ —	\$ —			<u>\$ (3,556) <sup>(L)</sup></u>

(continued)

**EXHIBIT 17.2 (Continued)**

<b>General revenues</b>				
Property taxes	\$ 111,762	\$ -0-	\$ 111,762	
Income taxes	49,079	-0-	49,079	
Sales Taxes	43,809	-0-	43,809	
Unrestricted grants	17,227		17,227	
Gain on sale of capital asset	-0-	556	556	
Investment earnings	13,244	3,101	16,345	279
Transfers	18,633	(18,633)	-0-	
Total general revenues, transfers and others	\$ 253,754	\$ (14,976)	\$ 238,778	\$ 279
Change in net position	\$ 17,462	\$ 25,559	\$ 43,021	\$ (3,277)
<b>Net position, beginning of year</b>	\$1,013,120	\$744,532	\$1,757,652	\$27,189
<b>Net position, end of year</b>	\$1,030,582	\$770,091	\$1,800,673	\$23,912

The notes to the financial statements are an integral part of this statement.

- Operating expenses are presented in the first column (Point D). They are not classified according to individual causes such as salaries, rent, depreciation, or insurance. Instead, expenses are shown by function: general government, police, fire, general services, and the like. This approach is viewed as more relevant to the needs of the people reading the statements. “As a minimum, governments should report direct expenses for each function. Direct expenses are those that are specifically associated with a service, program, or department and, thus, are clearly identifiable to a particular function.”<sup>20</sup> Expenses are shown in this statement for governmental activities, business-type activities, and discretely presented component units.
- Interest expense on general long-term debt is normally considered an indirect expense because borrowed money can benefit many government activities. However, it is usually a large amount with significant informational value. It can be difficult to allocate among different activities. For those reasons, interest expense can be reported as shown in this example (Point E) as a separate “function.”
- After operating expenses have been reported for each function, related program revenues are listed in the next three columns (Point F). Program revenues are derived by the function itself or from outsiders seeking to reduce the government’s cost for providing that function. Program revenues are different from general government revenues (such as sales taxes) that are reported toward the bottom of the statement. As Exhibit 17.2 shows, program revenues are usually classified as
  1. *Charges for services.* For example, a monthly charge is normally assessed for water service. Therefore, this first business-type activity shows nearly \$50.9 million in program revenues. In contrast, most government functions generate only small amounts of revenue from sources such as parking meter revenues, fines for speeding tickets, concessions at parks, and the like.
  2. *Operating grants and contributions.* This column reports resources received from outside grants and similar sources that were designated for some type of operating purpose. For example, the police department is shown here as having earned approximately \$13.3 million in operating grants and contributions during the year.
  3. *Capital grants and contributions.* This column presents outside grants and similar sources that were designated for capital asset additions (rather than operations). For the City of Eastern South, over \$16.9 million in capital grants and contributions went to transportation (Point G).
- After operating expenses have been assigned along with related program revenues, a net (expense) or revenue is determined for each function. This figure is an important measure of the financial cost (or benefit) of each of the various government functions. For example, in Exhibit 17.2, the police had \$103.5 million in operating expenses but generated enough charges, grants, and contributions so that (at Point H) taxpayers can see that they had to bear a financial burden of roughly \$65.5 million for police protection. That cost is significant information to the citizens studying these statements. Are they satisfied with that level of protection? Or, do they wish that some of that money had been spent in other ways? In contrast, the water system reported operating expenses of \$39.3 million. Because of its charges, grants, and contributions, this business-type activity still managed to generate net revenues of approximately \$18.1 million (see Point I) as a financial benefit for the government.
- All of the governmental activities are combined to report net expenses of \$236.3 million (see Point J) while the business-type activities generated total net revenues of approximately \$40.5 million (see Point K). The component units reported net expenses of \$3.6 million (see Point L). The financial cost or benefit from each government function is evident. Such information leads to informed citizens.
- General revenues are reported next as additions to either the governmental activities, business-type activities, or component units. All taxes are general revenues because they do

<sup>20</sup> GASB, *Codification*, Sec. 2200.129.

not reflect a charge for services. They are obtained from the population as a whole. At Point M, property taxes of nearly \$112 million are shown as the largest revenue source. That money is taken from the citizens in order to meet the cost of the various governmental activities provided by the City of Eastern South. Significant amounts were also collected as income taxes and sales taxes.

- Transfers of \$18.6 million between governmental activities and business-type activities are also shown under general revenues. The inflow and the outflow are offset for reporting purposes to indicate that no impact is created on the total figures for the primary government (Point N).

### Balance Sheet—Governmental Funds—Fund Financial Statements

Switching now to fund financial statements, Exhibit 17.3 presents the balance sheet for the governmental funds reported by the City of Eastern South. This statement reports only current financial resources (along with some supplies and prepaid items) as well as all claims to those current financial resources. It was produced using modified accrual accounting for timing purposes. No proprietary funds, discretely presented component units, or fiduciary funds are included. This fund-based statement reflects just the governmental funds. Several parts of this statement should be noted:

- Separate columns are shown for the general fund and any other major fund within the governmental funds. The city has identified two other funds as major. The Highway 61 Construction Fund is a major capital projects fund. The Educational Services Fund is a major special revenue fund. All funds that are not considered major are combined and reported as “Other Governmental Funds.”
- The balance sheet reports no capital assets or long-term debts simply because they are neither current financial resources nor claims to current financial resources.
- The Fund Balances figures (Point O) indicate the nonspendable, restricted, committed, assigned, and unassigned categories discussed in the previous chapter.
- The total Fund Balances figure for the governmental funds of \$319.2 million (Point P) is significantly different from the \$1.0 billion total net position reported for governmental activities in the statement of net position (Exhibit 17.1). To explain that large disparity, a reconciliation is presented along with the balance sheet. This reconciliation starts with the total fund balance figure and shows the differences with the total net position amount. For example, this reconciliation might look something like the following for the City of Eastern South.

<b>Reconciliation of the Balance Sheet Governmental Funds to the Governmental Activities in the Statement of Net Position June 30, 2017 (in thousands)</b>	
Total fund balance for governmental funds, June 30, 2017, as reported on balance sheet . . . . .	\$ 319,200
Capital assets reported by governmental activities but not reported in governmental funds. . . . .	1,021,800
Bonds payable reported by governmental activities but not reported in governmental funds. . . . .	(422,650)
Other assets and liabilities reported by governmental activities but not reported in governmental funds . . . . .	(43,866)
Revenues reported by governmental activities but not reported in governmental funds because they are not available . . . . .	32,845
Internal service funds reported by governmental activities but not reported in governmental funds . . . . .	<u>123,253</u>
Total net position, governmental activities, June 30, 2017, as reported in statement of net position . . . . .	<u>\$1,030,582</u>

**EXHIBIT 17.3 Fund Financial Statements—Balance Sheet for the Governmental Funds**

CITY OF EASTERN SOUTH Governmental Funds Balance Sheet June 30, 2017 (in thousands)					
	General Fund	Highway 61 Construction	Educational Services	Other Governmental Funds	Total Governmental Funds
<b>Assets:</b>					
Cash and investments	\$ 111,673	\$ 87,056	\$ 11,908	\$ 10,905	\$ 221,542
Receivables, net					
Taxes	53,875	—	17,854	—	71,729
Accounts	108,654	—	—	—	108,654
Inventory of supplies	3,222	2,076	3,112	2,175	10,585
Prepaid items	887	1,015	1,322	556	3,780
Total assets	<u>\$ 278,311</u>	<u>\$ 90,147</u>	<u>\$ 34,196</u>	<u>\$ 13,636</u>	<u>\$ 416,290</u>
<b>Liabilities:</b>					
Accounts payable	\$ 21,659	\$ 776	\$ 452	\$ 298	\$ 23,185
Accrued liabilities	7,174	323	2,572	1,963	12,032
Other claims to financial resources	1,128	1,733	—	312	3,173
Bonds currently due	25,000	—	7,200	—	32,200
Total liabilities	<u>\$ 54,961</u>	<u>\$ 2,832</u>	<u>\$ 10,224</u>	<u>\$ 2,573</u>	<u>\$ 70,590</u>
<b>Deferred inflows of resources:</b>					
Unavailable property tax collections	\$ 26,500	\$ —	\$ —	\$ —	\$ 26,500
Total liabilities and deferred inflows of resources	<u>\$ 81,461</u>	<u>\$ 2,832</u>	<u>\$ 10,224</u>	<u>\$ 2,573</u>	<u>\$ 97,090</u>
<b>Fund balances: ©</b>					
Nonspendable	\$ 11,465	\$ 3,091	\$ 4,434	\$ 2,989	\$ 21,979
Restricted	46,717	—	19,538	875	67,130
Committed	2,044	1,159	—	993	4,196
Assigned	35,009	83,065	—	6,206	124,280
Unassigned	101,615	—	—	—	101,615
Total fund balances	<u>\$ 196,850</u>	<u>\$ 87,315</u>	<u>\$ 23,972</u>	<u>\$ 11,063</u>	<u>\$ 319,200</u> ⊕
Total liabilities, deferred inflows of resources, and fund balances	<u>\$ 278,311</u>	<u>\$ 90,147</u>	<u>\$ 34,196</u>	<u>\$ 13,636</u>	<u>\$ 416,290</u>

The notes to the financial statements are an integral part of this statement.

## Statement of Revenues, Expenditures, and Other Changes in Fund Balances—Governmental Funds—Fund Financial Statements

Exhibit 17.4 presents the statement of revenues, expenditures, and other changes in fund balances for the governmental funds of the City of Eastern South. Once again, the general fund is detailed in a separate column along with each of the other major funds previously identified. Figures for all remaining nonmajor funds are accumulated and shown together.

In examining Exhibit 17.4, note the following:

- Because the current financial resources measurement focus is being utilized, expenditures (Point Q) rather than expenses are reported. For example, Capital Outlay is presented here as a reduction in resources rather than as the acquisition of an asset. In the same way, Debt Service—Principal is reported as an expenditure instead of a decrease in long-term liabilities.
- Because the modified accrual method of accounting is used for timing purposes, reported amounts will be different than those previously shown under accrual accounting. For example, property taxes are reported here as \$107.2 million but as \$111.8 million in Exhibit 17.2.
- At Point R, Exhibit 17.4 presents other financing sources and uses to reflect the financial impact of the issuance of long-term debt and transfers made between the funds. Current financial resources are changed but no revenues or expenditures take place. Because the fund statements focus on individual activities rather than government-wide figures, no elimination of the transfers is made.

Another reconciliation is needed because of the significant difference that exists between the amounts reported in the statement of revenues, expenditures, and other changes in fund balances and the statement of activities. At Point S, Exhibit 17.4 indicates that the fund balances for the governmental funds increased during the period by over \$24.8 million. However, in Exhibit 17.2, Point T reports an increase in the net position of the governmental activities by only \$17.5 million. A \$7.3 million variation exists between two figures that sound alike. That is a difference that might well be confusing to readers of those two statements.

This reconciliation begins with the change in the total fund balances and makes all necessary adjustments to arrive at the reported change in net position. Those changes often include

- The acquisition of capital assets during the period that decreases the fund balance but not the government's net position.
- The recording of depreciation that decreases the city's net position but not its fund balance.
- The recording of revenues and expenses that do not impact current financial resources but do change the net position of the government.
- The issuance of long-term debt that increases the city's fund balance but not its net position.

## Statement of Net Position—Proprietary Funds—Fund Financial Statements

The assets and liabilities of the City of Eastern South's proprietary funds, as reported in the fund financial statements, are presented in Exhibit 17.5. This statement shows individual information about three major enterprise funds, with a single column for the summation of all other enterprise funds. The statement then provides a combined total for all of the enterprise funds. Because of their size, specific information is available for the water fund, sewer fund, and parking fund.

In examining Exhibit 17.5, several features should be noted:

- This fund statement combines and exhibits all internal service funds (Point U) because they are identified as proprietary funds. However, in the government-wide financial statements, these same internal service funds are usually reported as part of governmental activities. Those are the activities that are typically served by these internal operations.



**EXHIBIT 17.4 Fund Financial Statements—Statement of Revenues, Expenditures, and Other Changes in Fund Balances**

CITY OF EASTERN SOUTH Governmental Funds					
Statement of Revenues, Expenditures, and Other Changes in Fund Balance For the Fiscal Year Ended June 30, 2017 (in thousands)					
	General Fund	Highway 61 Construction	Educational Services	Other Governmental Funds	Total Governmental Funds
<b>Revenues:</b>					
Property taxes	\$ 99,737	\$ 0-	\$ 7,500	\$ 0-	\$ 107,237
Income taxes	43,556	0-	0-	0-	43,556
Sales taxes	38,760	5,000	0-	0-	43,760
Charges for services	61,223	0-	3,327	1,196	65,746
Fines and penalties	2,657	0-	0-	312	2,969
Grants and contributions	87,332	17,901	9,448	1,323	116,004
Investment earnings and miscellaneous	20,775	3,989	2,887	624	28,275
Total revenues	<u>\$354,040</u>	<u>\$26,890</u>	<u>\$23,162</u>	<u>\$ 3,455</u>	<u>\$407,547</u>
<b>Expenditures: ⑥</b>					
Current:					
General government	\$ 23,909	\$ 0-	\$ 0-	\$ 0-	\$ 23,909
Police	79,565	0-	0-	0-	79,565
Fire	81,100	0-	0-	0-	81,100
Transportation	76,826	8,554	0-	0-	85,380
Economic development	5,129	0-	0-	656	5,785
Parks and recreation	53,119	0-	547	134	53,800
Neighborhood services	1,445	0-	1,389	0-	2,834
Library	6,022	0-	10,083	0-	16,105
Capital outlay	42,459	17,809	8,220	2,500	70,988
Debt service:					
Principal	5,334	0-	2,108	0-	7,442
Interest	3,989	0-	434	0-	4,423
Total expenditures	<u>\$378,897</u>	<u>\$26,363</u>	<u>\$22,781</u>	<u>\$ 3,290</u>	<u>\$431,331</u>
Excess (deficiency) of revenues over (under) expenditures	<u>\$ (24,857)</u>	<u>\$ 527</u>	<u>\$ 381</u>	<u>\$ 165</u>	<u>\$ (23,784)</u>
Other financing sources (uses): ⑧					
Transfers in	\$ 16,157	\$ 442	\$ 2,331	\$ 11,090	\$ 30,020
Transfers out	(30,050)	0-	0-	(6,552)	(36,602)
Issuance of long-term debt	45,000	8,112	2,090	0-	55,202
Total other financing sources (uses)	<u>\$ 31,107</u>	<u>\$ 8,554</u>	<u>\$ 4,421</u>	<u>\$ 4,538</u>	<u>\$ 48,620</u>
Net change in fund balances	<u>\$ 6,250</u>	<u>\$ 9,081</u>	<u>\$ 4,802</u>	<u>\$ 4,703</u>	<u>\$ 24,836 ⑨</u>
Fund balance, beginning of year	<u>\$190,600</u>	<u>\$78,234</u>	<u>\$19,170</u>	<u>\$ 6,360</u>	<u>\$294,364</u>
Fund balance, end of year	<u>\$196,850</u>	<u>\$87,315</u>	<u>\$23,972</u>	<u>\$11,063</u>	<u>\$319,200</u>

The notes to the financial statements are an integral part of this statement.

**EXHIBIT 17.5 Fund Financial Statements—Statement of Net Position for Proprietary Funds**

**CITY OF EASTERN SOUTH  
Proprietary Funds  
Statement of Net Position  
June 30, 2017  
(in thousands)**

	Water	Sewer	Parking	Other Enterprise Funds	Total Enterprise Funds	Internal Service Funds ①
<b>Assets</b>						
Current assets						
Cash and equivalents	\$ 18,400	\$ 16,150	\$ 17,100	\$ 9,225	\$ 60,875	\$ 5,000
Investments	35,045	12,285	25,803	15,325	88,458	8,882
Receivables, net						
Accounts	22,943	9,076	7,577	3,782	43,378	2,178
Other	8,435	3,081	2,290	2,628	16,434	3,006
Due from other funds	—	—	366	43	409	9,092
Inventories and supplies	3,642	1,810	1,708	5,762	12,922	722
Prepaid items	461	226	824	606	2,117	658
Total current assets	\$ 88,926	\$ 42,628	\$ 55,668	\$ 37,371	\$ 224,593	\$ 29,538
Noncurrent assets						
Capital assets						
Land	\$ 62,981	\$ 55,773	\$ 29,100	\$ 18,019	\$ 165,873	\$ 9,817
Buildings	388,278	206,149	72,925	45,785	713,137	12,713
Leased property	3,672	8,179	10,433	7,734	30,018	2,058
Vehicles	33,012	26,567	37,007	18,633	115,219	3,118
Equipment	34,227	15,995	4,303	7,883	62,408	5,004
Less: Accumulated depreciation	(83,445)	(77,881)	(41,642)	(29,291)	(232,259)	(11,886)
Total noncurrent assets	\$438,725	\$234,782	\$112,126	\$ 68,763	\$ 854,396	\$ 20,824
Total assets	\$527,651	\$277,410	\$167,794	\$106,134	\$ 1,078,989	\$ 50,362

(continued)

<b>Liabilities</b>												
Current liabilities												
Accounts payable and other accrued expenses	\$	9,260	\$	3,065	\$	2,084	\$	1,696	\$	16,105	\$	983
Due to other funds		11,522		8,044		4,088		631		24,285		375
Unearned revenue		1,418		883		316		154		2,771		310
Lease payable, current		327		125		98		114		664		55
Bonds and notes payable, current		5,837		3,992		1,760		1,296		12,885		100
Total current liabilities	\$	<u>28,364</u>	\$	<u>16,109</u>	\$	<u>8,346</u>	\$	<u>3,891</u>	\$	<u>56,710</u>	\$	<u>1,823</u>
Noncurrent liabilities												
Liability for landfill closure	\$	-0-	\$	-0-	\$	-0-	\$	9,078	\$	9,078	\$	-0-
Capital lease payable, long-term		3,607		7,503		8,291		2,268		21,669		1,323
Bonds and notes payable, long-term		96,048		47,155		26,121		52,117		221,441		19,880
Total noncurrent liabilities		<u>99,655</u>		<u>54,658</u>		<u>34,412</u>		<u>63,463</u>		<u>252,188</u>		<u>21,203</u>
Total liabilities	\$	<u>128,019</u>	\$	<u>70,767</u>	\$	<u>42,758</u>	\$	<u>67,354</u>	\$	<u>308,898</u>	\$	<u>23,026</u>
<b>Net Position</b>												
Invested in capital assets, net of related debt	\$	389,145	\$	215,103	\$	92,771	\$	26,637	\$	723,656	\$	10,831
Restricted for:												
Capital projects		4,083		11,092		415		4,184		19,774		-0-
Debt service		227		284		432		113		1,056		-0-
Unrestricted		6,177		(19,836)		31,418		7,846		25,605		16,505
Total Net Position	\$	<u>399,632</u>	\$	<u>206,643</u>	\$	<u>125,036</u>	\$	<u>38,780</u>	\$	<u>770,091</u>	\$	<u>27,336</u>

The notes to the financial statements are an integral part of this statement.

- Because the proprietary funds utilize accrual accounting to measure economic resources, the totals for the enterprise funds in Exhibit 17.5 agree in most ways with the total figures in Exhibit 17.1. The amount of detail, however, is more extensive in the fund financial statements. For example, the statement in Exhibit 17.1 uses only two accounts to describe capital assets, whereas Exhibit 17.5 uses five.

### Statement of Revenues, Expenses, and Other Changes in Net Position—Proprietary Funds—Fund Financial Statements

Just as the statement of net position in Exhibit 17.5 provides individual information about specific enterprise funds (and totals for the internal service funds), the statement of revenues, expenses, and changes in net position in Exhibit 17.6 gives the revenues, expenses, nonoperating items, and transfers for those same funds in detail.

As an example, in Exhibit 17.2 operating expenses are listed for each of the business-type activities (water, sewer, parking, and community center). Here, in Exhibit 17.6 (Point V), operating expenses are separately listed by the type of expense for each of the proprietary funds: employee services, services and supplies, depreciation and amortization, utilities, maintenance and repairs, and others. In addition, several nonoperating items are identified including investment earnings and a gain on disposal of a capital asset. Finally, because this statement reflects all changes in the net position of each proprietary activity, transfers are included at the bottom. Thus, extensive information is available about the operation of each of these major enterprise funds, which is the objective of fund financial statements.

### Statement of Cash Flows—Proprietary Funds—Fund Financial Statements

One of the most unique aspects of the fund financial statements is the statement of cash flows for the proprietary funds (Exhibit 17.7). Because a proprietary fund operates in a manner similar to a for-profit business, information about cash flows is considered as vital as it is in analyzing Intel or Coca-Cola. However, the physical structure is not entirely the same.

One of the main differences is that the statement of cash flows shown for the proprietary funds has four sections rather than just the three required of for-profit entities:

1. Cash flows from operating activities.
  2. Cash flows from noncapital financing activities.
  3. Cash flows from capital and related financing activities.
  4. Cash flows from investing activities.
- The presentation of cash flows from operating activities (Point W) is similar to that prepared by a for-profit business. However, the direct method of reporting is required rather than being an allowed option as in for-profit accounting. The indirect method that is almost universally used by businesses is not allowed for state and local governments.
  - Cash flows from noncapital financing activities includes (1) proceeds and payments on debt *not* attributable to the acquisition or construction of capital assets and (2) grants and subsidies *not* restricted for either capital purposes or operating activities.
  - As the title implies, cash flows from capital and related financing activities focus on the amounts spent on capital assets and the source of that funding. Exhibit 17.7 shows typical examples (Point X): proceeds from issuance of debt, acquisition of capital assets, and proceeds from disposition of capital assets.
  - Cash flows from investing activities disclose amounts paid and received from investments.
  - The government should also provide a reconciliation of operating income to operating cash flows. That information has been omitted here because of space considerations.

**EXHIBIT 17.6 Fund Financial Statements—Statement of Changes in Revenues, Expenses, and Other Changes in Net Position for the Proprietary Funds**

<b>CITY OF EASTERN SOUTH Proprietary Funds</b>						
<b>Statement of Revenues, Expenses, and Other Changes in Net Position For the Fiscal Year Ended June 30, 2017</b>						
(in thousands)						
	Water	Sewer	Parking	Other Enterprise Funds	Total Enterprise Funds	Internal Service Funds ①
Operating revenues:						
Charges for services	\$ 50,877	\$ 11,836	\$ 25,990	\$ 795	\$ 89,498	\$ 9,044
Miscellaneous	3,776	2,189	772	290	7,027	112
Total operating revenues	<u>\$ 54,653</u>	<u>\$ 14,025</u>	<u>\$ 26,762</u>	<u>\$ 1,085</u>	<u>\$ 96,525</u>	<u>\$ 9,156</u>
Operating expenses: ②						
Employee services	\$ 16,118	\$ 5,017	\$ 3,982	\$ 1,298	\$ 26,415	\$ 3,372
Services and supplies	3,109	812	971	618	5,510	611
Depreciation and amortization	6,271	1,219	1,311	294	9,095	476
Utilities	7,216	1,315	2,045	416	10,992	1,342
Maintenance and repairs	3,894	2,119	3,183	1,220	10,416	682
Others	2,665	2,386	284	4,228	9,563	525
Total operating expenses	<u>\$ 39,273</u>	<u>\$ 12,868</u>	<u>\$ 11,776</u>	<u>\$ 8,074</u>	<u>\$ 71,991</u>	<u>\$ 7,008</u>
Total operating income (loss)	<u>\$ 15,380</u>	<u>\$ 1,157</u>	<u>\$ 14,986</u>	<u>\$ (6,989)</u>	<u>\$ 24,534</u>	<u>\$ 2,148</u>
Nonoperating revenues and expenses:						
Grant revenue	\$ 2,684	\$ 750	\$ 1,414	\$ 11,153	\$ 16,001	\$ 447
Investment earnings	704	525	1,561	311	3,101	29
Gain on disposal of capital asset	400	—	156	—	556	—
Total nonoperating revenues and expenses	<u>\$ 3,788</u>	<u>\$ 1,275</u>	<u>\$ 3,131</u>	<u>\$ 11,464</u>	<u>\$ 19,658</u>	<u>\$ 476</u>
Income (loss) before transfers	\$ 19,168	\$ 2,432	\$ 18,117	\$ 4,475	\$ 44,192	\$ 2,624
Transfers to governmental and fiduciary funds	(8,703)	(454)	(9,000)	(476)	(18,633)	—
Change in net position	\$ 10,465	\$ 1,978	\$ 9,117	\$ 3,999	\$ 25,559	\$ 2,624
Net position, beginning of year	389,167	204,665	115,919	34,781	744,532	24,712
Net position, end of year	<u>\$399,632</u>	<u>\$206,643</u>	<u>\$125,036</u>	<u>\$38,780</u>	<u>\$770,091</u>	<u>\$27,336</u>

The notes to the financial statements are an integral part of this statement.

**EXHIBIT 17.7 Fund Financial Statements—Statement of Cash Flows for Proprietary Funds**

**CITY OF EASTERN SOUTH  
Proprietary Funds  
Statement of Cash Flows  
For the Fiscal Year Ended June 30, 2017  
(in thousands)**

	Water	Sewer	Parking	Other Enterprise Funds	Total Enterprise Funds	Internal Service Funds
Cash flows from operating activities: ☉						
Receipts from customers	\$ 49,772	\$ 12,816	\$ 25,045	\$ 996	\$ 88,629	\$ 8,961
Payments to employees	(16,553)	(4,849)	(3,717)	(1,011)	(26,130)	(3,402)
Payments to suppliers	(2,816)	(785)	(963)	(580)	(5,144)	(529)
Payments on operating expenses	(13,287)	(6,612)	(5,030)	(6,016)	(30,945)	(1,873)
Receipts from operating grants	3,178	2,985	1,040	8,211	15,414	—
Net cash provided by operating activities	\$ 20,294	\$ 3,555	\$ 16,375	\$ 1,600	\$ 41,824	\$ 3,157
Cash flows from noncapital financing activities:						
Issuance of revenue anticipation notes	\$ 5,000	\$ —	\$ 800	\$ —	\$ 5,800	\$ —
Transfers	(8,703)	(454)	(9,000)	(476)	(18,633)	—
Net cash provided by (used for) noncapital financing activities	\$ (3,703)	\$ (454)	\$ (8,200)	\$ (476)	\$ (12,833)	\$ —
Cash flows from capital and related financing activities: ☉						
Proceeds from bonds issued for construction	\$ 27,500	\$ 8,100	\$ 10,500	\$ —	\$ 46,100	\$ 2,316
Receipt of capital grants	2,375	—	1,100	—	3,475	—
Received from sale of capital assets	1,980	—	753	—	2,733	—
Paid to acquire capital assets	(28,900)	(17,446)	(2,545)	(5,667)	(54,558)	(1,895)
Paid on bonds issued for construction	(2,300)	(540)	(1,508)	(944)	(5,292)	(135)
Paid interest on bonds issued for construction	(1,122)	(665)	(513)	(1,029)	(3,329)	(271)
Net cash provided by (used for) capital and related financing activities	\$ (467)	\$ (10,551)	\$ 7,787	\$ (7,640)	\$ (10,871)	\$ 15
Cash flows from investing activities:						
Purchase of investments	\$ (41,200)	\$ (19,884)	\$ (19,936)	\$ (2,415)	\$ (83,435)	\$ (6,552)
Received from sale and maturity of investments	35,375	20,900	16,650	7,000	79,925	7,255
Received from investment earnings	704	500	1,510	300	3,014	29
Net cash provided by (used for) investing activities	\$ (5,121)	\$ 1,516	\$ (1,776)	\$ 4,885	\$ (496)	\$ 732
Net increase (decrease) in cash and cash equivalents	\$ 11,003	\$ (5,934)	\$ 14,186	\$ (1,631)	\$ 17,624	\$ 3,904
Cash and cash equivalents, beginning of year	7,397	22,084	2,914	10,856	43,251	1,096
Cash and cash equivalents, end of year	\$ 18,400	\$ 16,150	\$ 17,100	\$ 9,225	\$ 60,875	\$ 5,000

The notes to the financial statements are an integral part of this statement.

## LO 17-10

Understand the presentation of financial statements for a public college or university.

## Reporting Public Colleges and Universities

Private schools such as Harvard, Duke, and Stanford follow the FASB *Accounting Standards Codification*<sup>®</sup>. Authoritative accounting literature on contributions and the proper form of financial statements provides a significant amount of official reporting guidance for these private institutions. As will be discussed in the following chapter, generally accepted accounting principles developed for private not-for-profit organizations have progressed greatly over the years.

In contrast, GASB has retained primary authority over the reporting of public colleges and universities. For decades the question of whether the financial statements prepared for public colleges and universities (such as The Ohio State University and the University of Kansas) should resemble those of private schools has been the subject of much theoretical discussion. Generally, the operations of public colleges and universities differ in at least two important ways from private schools.

- First, state and other governments directly provide a significant amount of funding, lessening the reliance on tuition and fees. For example, the 2014 financial statements for the Oregon University System disclosed federal grants and contracts of \$309.8 million, state and local grants and contracts of \$17.9 million, and governmental appropriations of \$341.9 million.
- Second, because of the ongoing support from the government, public schools often accumulate a smaller amount of endowment funds than private colleges and universities. Private schools usually try to build a large endowment to help ensure financial security. This is a less urgent need for public schools that are backed by the state or another government. For example, at June 30, 2015, Princeton University, a private school, held investments with a fair value of approximately \$22.5 billion, an amount (roughly equal to \$2.83 million per student) that is nearly beyond the comprehension of officials at most public colleges. On that same date, the University of Georgia reported \$201.4 million in investments (about \$7,500 per student).

Do these and other differences warrant unique financial statements for public colleges and universities? In many ways, public and private schools are much alike. They both educate students, charge tuition and other fees, conduct scholarly research, maintain libraries and sports teams, operate cafeterias and museums, and the like. What should be the measurement basis and form of the financial statements to reflect the financial activity and position of a public college or university?

Over the years, four alternatives have been suggested for constructing the financial statements that public colleges and universities prepare and distribute:

1. Adopt FASB's requirements so that all colleges and universities (public and private) prepare comparable financial statements. As the next chapter discusses, the private school reporting model is relatively well developed. Some worry that this suggestion presents potential problems. FASB has not had to deal with the intricacies of governmental entities and might fail to comprehend the unique aspects of public schools. The specific reporting needs associated with such institutions might go unnoticed.
2. Apply a more traditional model focusing on fund financial statements and the wide variety of funds that such schools often have to maintain. However, both private not-for-profit organizations and governments (at least in part) have abandoned the reporting of individual funds. For public schools to continue relying on this approach seems somewhat outdated.
3. Create an entirely new set of financial statements designed specifically to meet the unique needs of public colleges and universities. If FASB's *Accounting Standards*

*Codification*<sup>®</sup> is not to be followed, the fundamental differences between private and public schools must be significant. Identify those differences and new statements could be developed to reflect the events and transactions of public institutions and satisfy the informational needs of users. Unfortunately, the creation of a new set of financial statements would require an enormous amount of work by GASB. Does the benefit gained from tailor-made financial statements outweigh the cost of producing new standards for the reporting of public schools?

4. Adopt the same reporting model for public schools that has been created for state and local governments. Because a large amount of funding for public schools comes directly from governments, the financial statement format utilized by a city or county could be applied.

GASB has officially selected the fourth option by specifying that public colleges and universities are special purpose governments. “‘Public universities, hospitals, utilities, and other business-type activities may operate similar to businesses but they are nonetheless governments—and therefore are accountable to the citizenry.’ said GASB Chairman Robert H. Attmore.”<sup>21</sup> This decision creates a standard reporting model for schools such as the University of Tennessee and Michigan State University.

Nevertheless, a review of public college and university financial statements shows that many do not prepare both government-wide and fund financial statements. Such schools can logically be viewed as large enterprise funds. They have a user charge (tuition and fees), and they are open to the public. As has been discussed, accounting for enterprise funds in government-wide statements and fund financial statements is very similar. For such proprietary funds, both statements report all economic resources and use accrual accounting.

Thus, having two sets of almost identical statements was viewed by GASB as redundant. For this reason, public schools usually only prepare a single set of statements equivalent to those of an enterprise fund (similar to the previous examples shown in this chapter for the proprietary funds of the City of Eastern South). Consequently, Note 1 to the 2015 financial statements for Middle Tennessee State University provides a common rationale for the method by which the statements are structured.

For financial statement purposes, Middle Tennessee University is considered a special-purpose government engaged *only in business-type activities*. Accordingly, the financial statements have been prepared using the economic resources measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met. [Emphasis added.]

Exhibit 17.8 presents the financial statements for June 30, 2014, and the year then ended for James Madison University (a public school) for illustration purposes, although the accompanying notes have been omitted. The component unit that is reported here is identified as follows:

The James Madison University Foundation, Inc. meets the criteria which qualify it as a component unit of the University. The Foundation is a legally separate, tax-exempt organization formed to promote the achievements and further the aims and purposes of the University.

Note, as expected, that these statements are quite similar to the fund financial statements presented in this chapter for the proprietary funds of the City of Eastern South (Exhibits 17.5, 17.6, and 17.7).

<sup>21</sup>Business Wire, “GASB Publishes New User Guide on Business-Type Activities,” March 12, 2013.



## EXHIBIT 17.8

<b>JAMES MADISON UNIVERSITY</b>		
<b>Statement of Net Position</b>		
<b>As of June 30, 2014</b>		
	<b>2014</b>	
	<b>James Madison University</b>	<b>Component Unit</b>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents (Note 2) . . . . .	\$ 134,394,162	\$ 3,996,832
Securities lending—Cash and cash equivalents (Note 2) . . . . .	8,040,739	—
Short-term investments (Note 2) . . . . .	260,332	—
Accounts receivable (Net of allowance for doubtful accounts of \$598,752) (Note 3) . . . . .	5,983,689	56,475
Contributions receivable (Net of allowance for doubtful contributions of \$37,983) (Note 3) . . . . .	—	1,126,150
Due from the Commonwealth (Note 4) . . . . .	6,364,503	—
Prepaid expenses . . . . .	10,735,912	90,497
Inventory . . . . .	955,854	—
Notes receivable (Net of allowance for doubtful accounts of \$46,598) . . . . .	388,080	—
Total current assets . . . . .	<u>167,123,271</u>	<u>5,269,954</u>
Noncurrent assets:		
Restricted cash and cash equivalents (Note 2) . . . . .	41,430,267	—
Endowment investments (Note 2) . . . . .	—	51,529,317
Other long-term investments (Note 2) . . . . .	2,111,959	42,035,137
Land held for future use . . . . .	—	4,860,348
Contributions receivable (Net of allowance for doubtful contributions of \$33,458) (Note 3) . . . . .	—	1,639,479
Prepaid expenses . . . . .	273,646	—
Notes receivable (Net of allowance for doubtful accounts of \$227,508) . . . . .	1,895,267	—
Capital assets, net: (Note 5)		
Nondepreciable . . . . .	116,972,861	1,250,552
Depreciable . . . . .	777,424,233	3,859,658
Other assets . . . . .	—	19,655
Total noncurrent assets . . . . .	<u>940,108,233</u>	<u>105,194,146</u>
<b>DEFERRED OUTFLOW OF RESOURCES</b>		
Deferred outflow of resources (Note 9) . . . . .	1,831,849	—
Total assets and deferred outflow of resources . . . . .	<u>1,109,063,353</u>	<u>110,464,100</u>
<b>LIABILITIES</b>		
Current liabilities:		
Accounts payable and accrued expenses (Note 6) . . . . .	45,361,541	208,100
Unearned revenue . . . . .	12,825,654	326,363
Obligations under securities lending . . . . .	8,301,071	—

(continued)

**EXHIBIT 17.8**  
**(Continued)**

	<b>2014</b>	
	<b>James Madison University</b>	<b>Component Unit</b>
Deposits held in custody for others . . . . .	7,288,631	—
Long-term liabilities—current portion (Note 7) . . . . .	16,961,338	234,176
Advance from the Treasurer of Virginia . . . . .	50,000	—
Total current liabilities . . . . .	<u>90,788,235</u>	<u>768,639</u>
Noncurrent liabilities:		
Long-term liabilities (Note 7) . . . . .	<u>256,293,156</u>	<u>2,709,394</u>
<b>DEFERRED INFLOW OF RESOURCES</b>		
Related to debt refundings (Note 9)	<u>273,166</u>	<u>—</u>
<b>NET POSITION</b>		
Net investment in capital assets . . . . .	669,184,291	2,812,432
Restricted for:		
Nonexpendable:		
Scholarships and fellowships . . . . .	—	36,181,726
Research and public service . . . . .	—	2,130,282
Other . . . . .	—	14,111,315
Expendable:		
Scholarships and fellowships . . . . .	—	14,718,426
Research and public service . . . . .	1,925,310	1,852,860
Debt service . . . . .	368,013	—
Capital projects . . . . .	5,885,386	2,230,789
Loans . . . . .	317,366	—
Other . . . . .	—	20,053,582
Unrestricted . . . . .	<u>84,028,430</u>	<u>12,894,655</u>
Total net position . . . . .	<u>\$ 761,708,796</u>	<u>\$ 106,986,067</u>

The accompanying Notes to Financial Statements are an integral part of this statement.

**JAMES MADISON UNIVERSITY**  
**Statement of Revenues, Expenses, and Changes in Net Position**  
**For the Year Ended June 30, 2014**

	<b>2014</b>	
	<b>James Madison University</b>	<b>Component Unit</b>
Operating revenues:		
Student tuition and fees (Net of scholarship allowances of \$13,099,419) . . . . .	\$ 177,989,678	\$ —
Gifts and contributions . . . . .	—	6,465,956
Federal grants and contracts . . . . .	13,266,312	—
State grants and contracts . . . . .	7,895,698	—
Non-governmental grants and contracts . . . . .	6,026,609	—
Auxiliary enterprises (Net of scholarship allowances of \$9,676,813) (Note 11) . . . . .	162,183,276	—
Sales and Services of Education and General Activities . . . . .	1,816,718	—
Other operating revenues . . . . .	1,453,033	574,088
Total operating revenues . . . . .	<u>370,631,324</u>	<u>7,040,044</u>
Operating expenses (Note 12):		
Instruction . . . . .	140,358,805	639,174

(continued)

**EXHIBIT 17.8**  
**(Continued)**

	<b>2014</b>	
	<b>James Madison University</b>	<b>Component Unit</b>
Research . . . . .	4,842,870	9,881
Public service . . . . .	13,074,273	90,016
Academic support . . . . .	39,656,736	736,996
Student services . . . . .	15,873,848	91,543
Institutional support . . . . .	25,682,435	5,094,382
Operation and maintenance—plant . . . . .	39,290,677	57,550
Depreciation . . . . .	35,036,678	78,567
Student aid . . . . .	9,759,658	3,073,024
Auxiliary activities (Note 11). . . . .	123,981,584	661,907
Total operating expenses . . . . .	<u>447,557,564</u>	<u>10,533,040</u>
Operating loss . . . . .	<u>(76,926,240)</u>	<u>(3,492,996)</u>
Nonoperating revenues/(expenses):		
State appropriations (Note 13) . . . . .	82,188,926	—
Grants and contracts (Note 1 L.) . . . . .	11,117,769	—
Gifts . . . . .	847,606	—
Investment income (Net of investment expense of \$11,762 for the University and \$444,729 for the Foundation). . . . .	785,908	11,416,060
In-kind support from James Madison University . . . . .	—	3,463,148
Interest on capital asset - related debt . . . . .	(8,365,194)	(45,438)
Gain(Loss) on disposal of plant assets. . . . .	(1,300,783)	—
Payment to the Commonwealth . . . . .	<u>(2,890,082)</u>	<u>—</u>
Net nonoperating revenues/(expenses) . . . . .	<u>82,384,150</u>	<u>14,833,770</u>
Income before other revenues, expenses, gains, or losses. . . . .	<u>5,457,910</u>	<u>11,340,774</u>
Capital appropriations and contributions (Note 14) . . . . .	42,411,324	—
Capital gifts . . . . .	104,435	—
Additions to permanent endowments . . . . .	—	3,169,548
Net other revenues . . . . .	<u>42,515,759</u>	<u>3,169,548</u>
Increase in net position. . . . .	47,973,669	14,510,322
Net position—beginning of year . . . . .	713,735,127	92,475,745
Net position—end of year. . . . .	<u>\$761,708,796</u>	<u>\$106,986,067</u>

The accompanying Notes to Financial Statements are an integral part of this statement.

**JAMES MADISON UNIVERSITY**  
**Statement of Cash Flows**  
**For the Year Ended June 30, 2014**

	<b>2014</b>
Cash flows from operating activities:	
Student tuition and fees . . . . .	\$ 177,185,743
Grants and contracts . . . . .	28,222,240
Auxiliary enterprises . . . . .	161,501,322
Other receipts . . . . .	3,392,715
Payments for compensation and benefits. . . . .	(235,225,167)

*(continued)*

**EXHIBIT 17.8**  
**(Continued)**

	<b>2014</b>
Payments for services, supplies and utilities .....	(138,986,177)
Payments for scholarships and fellowships .....	(9,759,658)
Payments for noncapitalized plant improvements and equipment .....	(24,999,068)
Loans issued to students .....	(502,121)
Collections of loans from students .....	482,102
Net cash used by operating activities .....	<u>(38,688,069)</u>
Cash flows from noncapital financing activities:	
State appropriations .....	82,190,555
Nonoperating grants and contracts .....	10,697,170
Payment to the Commonwealth .....	(2,890,082)
Loans issued to students and employees .....	(3,625)
Collections of loans from students and employees .....	3,520
Gifts and grants for other than capital purposes .....	847,606
Agency receipts .....	104,997,405
Agency payments .....	<u>(103,188,980)</u>
Net cash provided by noncapital financing activities .....	<u>92,653,569</u>
Cash flows from capital and related financing activities:	
Capital appropriations and contributions .....	51,138,411
Proceeds from capital debt .....	49,979,361
Proceeds from sale of capital assets .....	53,430
Purchase of capital assets .....	(83,850,792)
Principal paid on capital debt, leases, and installments .....	(11,574,326)
Interest paid on capital debt, leases, and installments .....	<u>(9,202,141)</u>
Net cash used by capital financing activities .....	<u>(3,456,057)</u>
Cash flows from investing activities:	
Interest on investments .....	98,060
Interest on cash management pools .....	<u>1,134,477</u>
Net cash provided by investing activities .....	<u>1,232,537</u>
Net increase in cash .....	51,741,980
Cash and cash equivalents—beginning of the year .....	124,082,449
Cash and cash equivalents—end of the year .....	<u>\$175,824,429</u>
<b>RECONCILIATION OF NET OPERATING LOSS TO NET CASH USED BY OPERATING ACTIVITIES:</b>	
Operating loss .....	\$ (76,926,240)
Adjustments to reconcile net loss to net cash used by operating activities: .....	
Depreciation expense .....	35,036,678
Changes in assets and liabilities:	
Receivables, net .....	619,831
Due from the Commonwealth .....	177,302
Prepaid expenses .....	1,773,297
Inventory .....	60,151
Notes receivable, net .....	(8,113)
Accounts payable and accrued expenses .....	1,323,289
Unearned revenue .....	(1,092,650)
Accrued compensated absences .....	602,752
Accrued retirement plan .....	(247,929)
Federal loan programs contributions refundable .....	(6,437)
Net cash used by operating activities .....	<u>\$ (38,688,069)</u>

(continued)

**EXHIBIT 17.8**  
(Continued)**NONCASH INVESTING, NONCAPITAL  
FINANCING, AND CAPITAL AND RELATED  
FINANCING TRANSACTIONS:**

Gift of capital assets . . . . .	\$ 104,435
Amortization of bond premium/discount and gain/loss on debt refinancing . . . . .	(767,451)
Capitalization of interest revenue and expense, net. . . . .	(413,863)
Change in fair value of investments recognized as a component of interest income . . . . .	68,623
Loss on disposal of capital assets . . . . .	(1,354,212)

The accompanying Notes to Financial Statements are an integral part of this statement

**Summary**

1. GASB has established a hierarchy for the generally accepted accounting principles for state and local governments. Two categories of authoritative GAAP are listed. Category A is most important and includes GASB's official statements. Category B is composed of GASB Technical Bulletins, GASB Implementation Guides, and literature of the AICPA cleared by GASB. Sources of nonauthoritative accounting literature include GASB Concepts Statements and pronouncements and other literature of the Financial Accounting Standards Board, Federal Accounting Standards Advisory Board, and International Accounting Standards Board.
2. Governments can give tax breaks to entice desired actions by businesses and other taxpayers. These abatements limit the government's ability to collect tax money. To provide citizens and other interested parties with pertinent information about the actions of government officials, disclosure is required for tax abatements. These disclosures indicate the type of commitment that was made and the benefit expected in return.
3. Solid waste landfills create large potential debts for a government because of eventual closure and postclosure costs. Government-wide statements accrue a liability each period based on the latest current cost estimations and the portion of the property that has been filled to date. Fund financial statements report no expenditures until a claim to current financial resources is made.
4. State and local governments determine amounts to be reported for defined benefit pension plans. Future benefits that have been earned to date are estimated and the present value calculated. If the resulting obligation is greater than the net position held by the related pension trust fund, the excess is shown in government-wide statements as the net pension liability.
5. A state or local government that obtains a work of art or historical treasure normally records it as a capital asset on government-wide financial statements. However, if specified guidelines are met, an expense can replace recognition of the asset. Whether recorded as expense or asset, a state or local government that receives such a work of art or historical treasure through donation must still recognize revenue according to the rules established for voluntary nonexchange transactions. Fund financial statements for the governmental funds report no capital assets and, therefore, do not recognize these items except as expenditures if acquired.
6. Depreciation must be recorded each period for works of art and historical treasures that are capitalized unless they are judged to be inexhaustible.
7. Infrastructure assets are capitalized on government-wide financial statements. Depreciation is recorded over time unless the modified approach is applied. Under this method, a monitoring system is created to ensure that each network of infrastructure is maintained yearly at a predetermined condition. When applied, the cost of this upkeep is expensed by the government in lieu of recording depreciation.
8. A state or local government must include a management's discussion and analysis (MD&A) as part of its general purpose external financial reporting. As with for-profit businesses, this MD&A provides a verbal explanation of the government's operations and financial position.
9. A primary government produces a comprehensive annual financial report (CAFR). Both general purpose governments (such as states, cities, towns, counties, and the like) as well as any special purpose governments (such as some school systems and transit systems) that meet certain provisions are viewed as primary governments. A component unit is any function that is legally separate from a primary government but where financial accountability still exists. In government-wide statements, component units are either discretely presented to the right of the primary government or blended within the actual funds of the primary government.

10. A statement of net position and a statement of activities are prepared as government-wide financial statements based on the economic resources measurement focus and accrual accounting. These statements separate governmental activities from business-type activities. Internal service funds are usually included within the governmental activities. The statement of activities reports expenses by function along with related program revenues to determine the net expense or revenue resulting from each function. The government then lists the various general revenues to show its way of covering the net expenses of the various functions.
11. In fund financial statements reported for the governmental funds, the general fund and any other major fund are reported in separate columns. These statements are based on measuring current financial resources using modified accrual accounting. Additional statements are presented for proprietary funds and fiduciary funds.
12. Financial statements prepared by public colleges and universities must follow the same reporting guidelines as those created for state and local government units. As discussed in the following chapter, those statements will differ in several ways from the statements produced by private schools that follow FASB guidelines. Public schools are normally viewed as special purpose governments. They often assume that they are engaged only in business-type activities like an enterprise fund. Thus, such schools present only the fund financial statements of a proprietary fund.

## Comprehensive Illustration

### Problem

(Estimated Time: 40 minutes) The following is a series of transactions for a city. Indicate how the city reports each transaction within the government-wide financial statements and then on the fund financial statements. Assume that the city follows a policy of considering resources as available if they will be received within 60 days. Incurred liabilities are assumed to be claims to current resources if they will be paid within 60 days.

1. Borrowed money by issuing a 20-year bond for \$3 million, its face value. This money is to be used to construct a highway around the city.
2. Transferred cash of \$100,000 from the general fund to the debt service funds to make the first payment of principal and interest on the bond in (1).
3. Paid the cash in (2) on the bond. Of this total, \$70,000 represents interest; the remainder reduces the principal of the bond payable.
4. Completed construction of the highway and paid the entire \$3 million.
5. The highway (in 4) is expected to last 30 years. However, the government qualifies to use the modified approach, which it has adopted for this system. A \$350,000 cost is incurred during the year to maintain the highway at an appropriate, predetermined condition. Of this amount, \$290,000 was paid immediately, but the other \$60,000 will not be paid until the sixth month of the subsequent year.
6. Received lights for the new highway donated from a local business. The lights are valued at \$200,000 and should last 20 years. The modified approach is not used for this network of infrastructure. Straight-line depreciation is applied using the half-year convention.
7. Agreed to stop collecting property taxes from the Acme Company for eight years in exchange for the promise that a small manufacturing plant will be built within the city to generate capital investment and new job opportunities for the residents.
8. Recorded cash revenues of \$2 million from the local subway system and made salary expense payments of \$300,000 to its employees.
9. Opened a solid waste landfill at the beginning of the year that will be used for 20 years. This year an estimated 4 percent of the capacity was filled. The city anticipates closure, and postclosure requirements will be \$2 million based on current cost figures although no costs have been incurred to date.

### Solution

1. *Government-wide financial statements.* On the statement of net position under the governmental activities column, both cash and noncurrent liabilities increase by \$3 million.  
*Fund financial statements.* The cash balance increases on the balance sheet by \$3 million, whereas other financing sources increases by the same amount on the statement of revenues, expenditures, and changes in fund balances. These amounts will be shown in the other governmental funds column unless this particular capital projects fund is judged to be major so that a separate column is required.
2. *Government-wide financial statements.* No recording of this transfer is shown because the amount is an intra-activity transaction entirely carried out within the governmental activities.

*Fund financial statements.* The cash balance of the general fund on the balance sheet decreases while the cash listed for other governmental funds (or debt service fund) increases. On the statement of revenues, expenditures, and other changes in fund balances, the general fund shows an other financing use of \$100,000, whereas the other governmental funds report an other financing source. These balances will not be offset in arriving at total figures.

3. *Government-wide financial statements.* On the statement of net position, cash for the governmental activities decreases by \$100,000 and the total reported for noncurrent liabilities drops by \$30,000 because of the principal payment. The statement of activities then recognizes \$70,000 in interest expense as a governmental activity.

*Fund financial statements.* First, cash decreases by \$100,000 on the balance sheet under the other governmental funds (or debt service fund) column. Second, on the statement of revenues, expenditures, and changes in fund balances, a \$30,000 principal expenditure is reported with a \$70,000 interest expenditure. These amounts are shown within other governmental funds (or debt service fund).

4. *Government-wide financial statements.* Under the governmental activities listed on the statement of net position, cash decreases by \$3 million and capital assets increases by the same amount. All new infrastructure costs are capitalized.

*Fund financial statements.* On the balance sheet, cash reported for other governmental funds decreases. Again, if this particular capital projects fund qualifies as major, the effects are shown in a separate column rather than in the other governmental funds column. The statement of revenues, expenditures, and changes in fund balances reports a \$3 million expenditure as a capital outlay.

5. *Government-wide financial statements.* The statement of net position reports a \$290,000 decrease in cash under governmental activities and a \$60,000 increase in a current liability. The statement of activities includes the \$350,000 expense within an appropriate function such as public works. Because the modified approach is being applied, maintenance expense is recognized instead of depreciation expense.

*Fund financial statements.* Because the \$60,000 liability will not require the use of current financial resources (it will not be paid within 60 days), it is not recorded at this time at the fund level. Thus, the balance sheet reports only a \$290,000 drop in cash, probably under the general fund. A \$290,000 expenditure is recorded on the statement of revenues, expenditures, and changes in fund balances for public works.

6. *Government-wide financial statements.* The lights do not qualify as works of art or historical treasures and must therefore be reported as capital assets on the statement of net position at the \$200,000 value. Based on a 20-year life and the half-year convention, \$5,000 in accumulated depreciation must be recognized to reduce the reported net position balance to \$195,000. For the statement of activities, a \$200,000 revenue is appropriate unless eligibility requirements for the donation have not yet been fulfilled. This revenue should be shown as a program revenue (capital grants and contributions) to offset the expenses reported for public works. Depreciation of \$5,000 should also be included as an expense for public works ( $\$200,000/20 \text{ years} \times 0.5 \text{ year}$ ).

*Fund financial statements.* No reporting is required because current financial resources were not affected.

7. *Government-wide financial statements and fund financial statements.* Tax abatement information should be disclosed and include the purpose of the tax abatement program, the tax being abated, dollar amount of taxes abated, the type of commitments made by the tax abatement recipients, and other commitments made by the government such as agreeing to build infrastructure assets like roads or sewer systems.

8. *Government-wide financial statements.* Cash reported on the statement of net position increases under the business-type activities by \$1.7 million. The statement of activities reports expenses for the subway system as \$300,000 while the related program revenues for charges for services rendered increase by \$2 million so that the net revenue resulting from this business-type activity is \$1.7 million.

*Fund financial statements.* The statement of net position for the proprietary funds (see Exhibit 17.5) should include a separate column for the subway system, assuming that it qualifies as a major fund. Cash in this column increases by \$1.7 million. Likewise, the statement of revenues, expenses, and changes in net position for the proprietary funds (see Exhibit 17.6) reports operating revenues of \$2 million for the subway system. The list of operating expenses will include personnel services of \$300,000. The statement of cash flows (see Exhibit 17.7) also reports both the inflow and outflow of cash under cash flows from operating activities.

9. *Government-wide financial statements.* Because the landfill is 4 percent filled and this is its first year of operations, that portion of the overall \$2 million cost (\$80,000) must be recognized. The statement of net position shows this amount as a noncurrent liability. The balance is presented as either a governmental activity or a business-type activity, depending on the landfill's fund classification. Likewise, the statement of activities reports the same \$80,000 figure as an expense.

*Fund financial statements.* This liability does not require the use of current financial resources and is not reported if the landfill is considered a governmental fund. However, if the landfill is viewed as an enterprise fund, the separate statements prepared for the proprietary funds include both the \$80,000 expense and liability (see Exhibits 17.5 and 17.6).

## Questions

1. Authoritative GAAP for state and local governments is divided into two categories with the first category having more authority than the second. What sources of GAAP are found in both of these categories?
2. The accountants for a city government are attempting to determine the appropriate method of reporting a series of unique financial transactions. They have reviewed all of the authoritative sources of GAAP and have not located an answer. What action should they take next?
3. Officials for the city of Winfield have agreed to forgo real estate taxes normally charged to Jamieson Corporation for the subsequent 10 years. In exchange, Jamieson has agreed to build a distribution facility that is expected to hire 500 new employees. What information must the city provide in its financial statements to inform taxpayers and other interested parties about the nature of this tax abatement?
4. Why does the operation of a solid waste landfill create reporting concerns for a local government?
5. A landfill is scheduled to be filled to capacity gradually over a 10-year period. However, at the end of the first year of operations, the landfill is only 7 percent filled. How much liability for closure and postclosure costs should be recognized on government-wide financial statements? How much liability should be recognized on fund financial statements assuming that the landfill is recorded in an enterprise fund? How much liability should be recognized on fund financial statements assuming that the landfill is recorded in the general fund?
6. The City of VanStone operates a solid waste landfill. This facility is 11 percent full after the first year of operation and 24 percent after the second year. How much expense should be recognized on the government-wide financial statements in the second year for closure costs? Assuming that the landfill is reported in the general fund, what expenditure should be recognized in the second year on the fund financial statements?
7. A teacher working for the City of Lights will be provided with a defined benefit pension plan. The city sets up a pension trust fund to monitor the resources held for these future payments. How is the amount of net pension liability to be reported in the government-wide financial statements determined?
8. The City of Ronchester has a defined benefit pension plan for its firefighters. How is the amount of pension expense determined that should be recognized in the current year?
9. A local citizen gives the City of Salem a painting by Picasso to display in city hall. Under what condition will the city *not* report this painting as a capital asset on its government-wide financial statements? If it does report the painting as a capital asset, must the city report depreciation?
10. Assume in question (9) that the city does not choose to report the painting on the government-wide financial statements as a capital asset. Must the city report a revenue for the gift?
11. Under what condition is the modified approach applied by a state or local government?
12. What impact does the use of the modified approach have on reporting within the government-wide financial statements?
13. What does the management's discussion and analysis (MD&A) normally include? Where does a state or local government present this information?
14. What does a comprehensive annual financial report (known as the CAFR) include?
15. A primary government can be either a general purpose government or a special purpose government. What is the difference in these two? How does an activity qualify as a special purpose government?
16. The Willingham Museum qualifies as a component unit of the City of Willingham. How does an activity or function meet the requirements to be deemed a component unit of a primary government?
17. What is the difference between a blended component unit and a discretely presented component unit?



18. What are the two government-wide financial statements? What does each normally present?
19. What are the two fund financial statements for governmental funds? What information does each normally present?
20. What is the difference in program revenues and general revenues? Why is that distinction important?
21. Why does a government determine the net expenses or revenues for each of the functions within its statement of activities?
22. How are internal service funds reported on government-wide financial statements?
23. In governmental accounting, what is the difference between an acquisition and a merger? What differences exist between the accounting for an acquisition and for a merger?
24. A general purpose government takes over a special purpose government in an acquisition. The consideration is larger than the acquisition value of all assets and liabilities. How is the excess reported?
25. What are some of the major differences that exist between private colleges and universities and public colleges and universities that affect financial reporting?
26. What is the most common form for the financial statements prepared by public colleges and universities?

## Problems

### LO 17-1

1. Which of the following has the least amount of official authority for the financial reporting of state and local governments?
  - a. GASB Technical Bulletins.
  - b. GASB Statements of Governmental Accounting Standards.
  - c. GASB Concepts Statements.
  - d. GASB Implementation Guides.

### LO 17-1

2. City government officials are analyzing a complicated financial transaction. A GASB Implementation Guide seems to provide one reporting answer and a GASB Concepts Statement seems to provide a different answer. What reporting is most appropriate?
  - a. The government can use either method and still be in conformity with GAAP.
  - b. Government officials should follow the guidance provided by the GASB Implementation Guide.
  - c. The city's financial statements must be in conformity with the GASB Concepts Statement.
  - d. The city's accountants should seek some type of compromise that takes both of these pronouncements into consideration.

### LO 17-1

3. The accountants for a city are attempting to determine the proper reporting for a new transaction so that the financial statements are in conformity with generally accepted accounting principles. No authoritative answer can be found. What should happen next?
  - a. The city will receive a qualified audit report on its financial statements.
  - b. The accountants can report the transaction in the way that they believe is best.
  - c. The accountants should study other nonauthoritative sources such as GASB Concepts Statements and the official standards produced by FASB.
  - d. The city will separate the transaction and report it separately in such a way as to draw attention to the method of reporting that was followed.

### LO 17-3

4. A city agrees to allow the Jones Company to operate within its geographical boundaries without having to pay real estate taxes for the following 10 years. In exchange, Jones agrees to continue employing at least 120 people at all times. For this tax abatement, which of the following does the city not have to disclose?
  - a. The party receiving the tax abatement.
  - b. The purpose of the tax abatement program.
  - c. Dollar amount of taxes abated.
  - d. The tax being abated.

### LO 17-3

5. A city provides a local business with a tax abatement so that real estate taxes will be avoided for the next five years. In exchange, the business agrees to construct a new facility to hire 50 or more individuals. How is this reported?
  - a. Only on the government-wide financial statements.
  - b. Only on the fund financial statements.
  - c. On both the government-wide and fund financial statements.
  - d. Only as a footnote disclosure.

LO 17-3

6. A city creates a solid waste landfill. It assesses a charge to every person or company that uses the landfill based on the amount of materials contributed. In which of the following will the landfill probably be recorded?
- General fund.
  - Special revenues funds.
  - Internal service funds.
  - Enterprise funds.

**Use the following information for problems 7, 8, and 9**

A city starts a solid waste landfill that it expects to fill to capacity gradually over a 10-year period. At the end of the first year, it is 8 percent filled. At the end of the second year, it is 19 percent filled. Currently, the cost of closure and postclosure is estimated at \$1 million. None of this amount will be paid until the landfill has reached its capacity.

LO 17-3

7. Which of the following is true for the Year 2 government-wide financial statements?
- Both expense and liability will be zero.
  - Both expense and liability will be \$110,000.
  - Expense will be \$110,000 and liability will be \$190,000.
  - Expense will be \$100,000 and liability will be \$200,000.

LO 17-3

8. If this landfill is judged to be a proprietary fund, what liability will be reported at the end of the second year on fund financial statements?
- \$-0-
  - \$110,000
  - \$190,000
  - \$200,000

LO 17-3

9. If this landfill is judged to be a governmental fund, what liability will be reported at the end of the second year on fund financial statements?
- \$-0-
  - \$110,000
  - \$190,000
  - \$200,000

LO 17-4

10. The City of Nomanchester has a defined benefit pension plan for a number of its employees. A pension trust fund has been set up that currently has a net position of \$32.7 million because quite a number of investments are being held. An actuary estimates that employees will eventually receive \$99.7 million as a result of this pension. However, only \$72.4 million of that amount is for past work that has been provided. The present value of the \$72.4 million in payments is \$49.8 million. On its government-wide financial statements, what amount of net pension liability should be reported?
- Zero
  - \$17.1 million
  - \$39.7 million
  - \$67.0 million

LO 17-4

11. The City of Huble has a defined benefit pension plan for a number of its employees. Which of the following is not included immediately in the determination of pension expense that this government should recognize in its government-wide financial statements?
- Service cost.
  - Interest on total pension liability.
  - Changes in pension liability as a result of a change in benefit terms.
  - Changes in pension liability as a result of a change in economic or demographic assumptions.

LO 17-5

12. The City of Wilson receives a large sculpture valued at \$240,000 as a gift to be placed in front of the municipal building. Which of the following is true for reporting the gift within the government-wide financial statements?
- A capital asset of \$240,000 must be reported.
  - No capital asset will be reported.
  - If conditions are met, recording the sculpture as a capital asset is optional.
  - The sculpture will be recorded but only for the amount paid by the city.

## LO 17-5

13. In Problem 12, which of the following statements is true about reporting a revenue in connection with this gift?
- A revenue will be reported.
  - Revenue is reported but only if the asset is reported.
  - If the asset is not capitalized, no revenue should be recognized.
  - As a gift, no revenue would ever be reported.

## LO 17-5

14. Assume in Problem 12 that the city reports the work as a capital asset. Which of the following is true?
- Depreciation is not recorded because the city has no cost.
  - Depreciation is not required if the asset is viewed as being inexhaustible.
  - Depreciation must be recognized because the asset is capitalized.
  - Because the property was received as a gift, recognition of depreciation is optional.

## LO 17-6

15. A city builds sidewalks throughout its various neighborhoods at a cost of \$2.1 million. Which of the following is *not* true?
- Because the sidewalks qualify as infrastructure, the asset is viewed in the same way as land so that no depreciation is recorded.
  - Depreciation is required unless the modified approach is utilized.
  - The modified approach recognizes maintenance expense in lieu of depreciation expense for qualifying infrastructure assets.
  - The modified approach is allowed only if the city maintains the network of sidewalks at least at a predetermined condition.

## LO 17-6

16. Which of the following is true about use of the modified approach?
- It can be applied to all capital assets of a state or local government.
  - It is used to adjust depreciation expense either up or down based on conditions for the period.
  - It is required for infrastructure assets.
  - For qualified assets, it eliminates the recording of depreciation.

## LO 17-7

17. Which of the following is true about the management's discussion and analysis (MD&A)?
- It is an optional addition to the comprehensive annual financial report, but the GASB encourages its inclusion.
  - It adds a verbal explanation for the numbers and trends presented in the financial statements.
  - It appears at the very end of a government's comprehensive annual financial report.
  - It replaces a portion of the fund financial statements traditionally presented by a state or local government.

## LO 17-8

18. Which of the following is *not* necessary for a special purpose local government to be viewed as a primary government for reporting purposes?
- It must have a separately elected governing body.
  - It must have specifically defined geographic boundaries.
  - It must be fiscally independent.
  - It must have corporate powers to prove that it is legally independent.

## LO 17-8

19. An accountant is trying to determine whether the school system of the City of Abraham is fiscally independent. Which of the following is *not* a requirement for being deemed fiscally independent?
- Holding property in its own name.
  - Issuing bonded debt without outside approval.
  - Passing its own budget without outside approval.
  - Setting taxes or rates without outside approval.

## LO 17-8

20. An employment agency for individuals with disabilities works closely with the City of Hanover. The employment agency is legally separate from the city but still depends on it for financial support, which leads to a potential financial burden for the city. How should Hanover report the employment agency in its comprehensive annual financial report?
- Not at all because the agency is legally separate.
  - As a part of the general fund.
  - As a component unit.
  - As a related organization.

LO 17-8

21. The City of Bacon is located in the County of Pork. The city has a school system and reports buildings at a net \$3.6 million although they are actually worth \$4.2 million. The county has another school system and reports buildings at a net \$5.2 million although they are actually worth \$5.6 million. Both school systems are viewed as special purpose governments. If the school systems are combined in a merger, what should be reported for the buildings?
- \$8.6 million
  - \$8.8 million
  - \$9.4 million
  - \$9.8 million

LO 17-8

22. For component units, what is the difference in *discrete presentation* and *blending*?
- A blended component unit is shown to the left of the statements; a discretely presented component unit is shown to the right.
  - A blended component unit is shown at the bottom of the statements; a discretely presented component unit is shown within the statements like a fund.
  - A blended component unit is shown within the statements like a fund; a discretely presented component unit is shown to the right.
  - A blended component unit is shown to the right of the statements; a discretely presented component unit is shown in completely separate statements.

LO 17-9

23. A government reports that its public safety function had expenses of \$900,000 last year and program revenues of \$200,000 so that its net expenses were \$700,000. On which financial statement is this information presented?
- Statement of activities.
  - Statement of cash flows.
  - Statement of revenues and expenditures.
  - Statement of net position.

LO 17-9

24. Government-wide financial statements make a distinction between program revenues and general revenues. How is that difference shown?
- Program revenues are offset against the expenses of a specific function; general revenues are assigned to governmental activities and business-type activities in general.
  - General revenues are shown at the top of the statement of revenues and expenditures; program revenues are shown at the bottom.
  - General revenues are labeled as operating revenues; program revenues are shown as miscellaneous income.
  - General revenues are broken down by type; program revenues are reported as a single figure for the government.

LO 17-9

25. Which of the following is true about the statement of cash flows for the proprietary funds of a state or local government?
- The indirect method of reporting cash flows from operating activities is allowed although the direct method is recommended.
  - The structure of the statement is virtually identical to that of a for-profit business.
  - The statement is divided into four separate sections of cash flows.
  - Amounts spent on capital assets are reported in a separate section from amounts raised to finance those capital assets.

LO 17-10

26. Which of the following is most likely to be true about the financial reporting of a public college or university?
- It resembles the financial reporting of private colleges and universities.
  - It will continue to use its own unique style of financial reporting.
  - It resembles the financial reporting made by a proprietary fund within the fund financial statements for a state or local government.
  - It will soon be reported using a financial statement format unique to the needs of public colleges and universities that GASB is scheduled to create.

LO 17-3

27. On January 1, 2017, the City of Hastings created a solid waste landfill that it expects to reach capacity gradually over the next 20 years. If the landfill were to be closed at the current time, closure costs would be approximately \$1.2 million plus an additional \$700,000 for postclosure work. Of these totals, the city must pay \$50,000 on December 31 of each year for preliminary closure work.

At the end of 2017, the landfill reached 3 percent of capacity. At the end of 2018, the landfill reached 9 percent of capacity. Also at the end of 2018, a reassessment is made; total closure costs are determined to be \$1.4 million rather than \$1.2 million.

- a. Assuming that the landfill is viewed as an enterprise fund, what journal entries are made in 2017 and 2018 on the government-wide financial statements?
- b. Assuming that the landfill is reported within the general fund, what journal entries are made in 2017 and 2018 on the government-wide financial statements?
- c. Assuming that the landfill is viewed as an enterprise fund, what journal entries are made in 2017 and 2018 on fund financial statements?
- d. Assuming that the landfill is reported within the general fund, what journal entries are made in 2017 and 2018 on fund financial statements?

**LO 17-3**

28. The City of Lawrence opens a solid waste landfill in 2017 that is at 54 percent of capacity on December 31, 2017. The city had initially anticipated closure costs of \$2 million but later that year decided that closure costs would actually be \$2.4 million. None of these costs will be incurred until 2021 when the landfill is scheduled to be closed.
  - a. What will appear on the government-wide financial statements for this landfill for the year ended December 31, 2017?
  - b. Assuming that the landfill is recorded within the general fund, what will appear on the fund financial statements for this landfill for the year ended December 31, 2017?

**LO 17-4**

29. The City of Columbus has approximately 2,000 employees. For the past three decades, the city has provided its employees with a defined benefit pension plan. The plan contract calls for specific payment amounts to be made to each retiree based on a set formula. Money is transferred periodically to a pension trust fund where it is accumulated and invested so that eventual payments can be made.
  - a. Describe how the city determines the amount (if any) of a net pension liability that should be reported within its government-wide financial statements.
  - b. Describe how the city determines the amount (if any) of pension expense that should be reported within its government-wide financial statements.
  - c. How is the pension reported in the fund financial statements for the governmental funds?

**LO 17-5**

30. On January 1, 2017, a rich citizen of the Town of Ristoni donates a painting valued at \$300,000 to be displayed to the public in a government building. Although this painting meets the three criteria to qualify as an artwork, town officials choose to record it as an asset. There are no eligibility requirements for the gift. The asset is judged to be inexhaustible so that depreciation will not be reported.
  - a. For the year ended December 31, 2017, what will be reported on government-wide financial statements in connection with this gift?
  - b. How does the answer to requirement (a) change if the government decides to depreciate this asset over a 10-year period using straight-line depreciation?
  - c. How does the answer to requirement (a) change if the government decides not to capitalize the asset?

**LO 17-6**

31. On January 1, 2017, the City of Graf pays \$60,000 for a work of art to display in the local library. The city will take appropriate measures to protect and preserve the piece. However, if the work is ever sold, the money received will go into unrestricted funds. The work is viewed as inexhaustible, but the city has opted to depreciate this cost over 20 years (using the straight-line method).
  - a. How is this work to be reported on the government-wide financial statements for the year ended December 31, 2017?
  - b. How is this work to be reported in the fund financial statements for the year ended December 31, 2017?

**LO 17-6**

32. A city government adds street lights within its boundaries at a total cost of \$300,000. The lights should burn for at least 10 years but can last significantly longer if maintained properly. The city sets up a system to monitor these lights with the goal that 97 percent will be working at any one time. During the year, the city spends \$48,000 to clean and repair the lights so that they are working according to the specified conditions. However, it spends another \$78,000 to construct lights for several new streets in the city.

Describe the various ways these costs could be reported on government-wide statements.

**LO 17-7**

33. The City of Francois, Texas, has begun the process of producing its current comprehensive annual financial report (CAFR). Several organizations that operate within the city are related in some way

to the primary government. The city's accountant is attempting to determine how these organizations should be included in the reporting process.

- a. What is the major criterion for inclusion in a government's CAFR?
- b. How does an activity or function qualify as a special purpose government?
- c. How is the legal separation of a special purpose government evaluated?
- d. How is the fiscal independence of a special purpose government evaluated?
- e. What is a component unit, and how is it normally reported on government-wide financial statements?
- f. How does a primary government prove that it can impose its will on a component unit?
- g. What is meant by the blending of a component unit?

**LO 17-4**

34. The County of Maxnell decides to create a sanitation department and offer its services to the public for a fee. As a result, county officials plan to account for this activity within the enterprise funds. Prepare journal entries for this operation for the following 2017 transactions as well as necessary adjusting entries at the end of the year. Assume the information is being gathered to prepare fund financial statements. Only entries for the sanitation department are required here:

January 1—Received unrestricted funds of \$160,000 from the general fund as permanent financing.

February 1—Borrowed an additional \$130,000 from a local bank at a 12 percent annual interest rate.

March 1—Ordered a truck at an expected cost of \$108,000.

April 1—Received the truck and made full payment. The actual cost amounted to \$110,000. The truck has a 10-year life and no salvage value. Straight-line depreciation is to be used.

May 1—Received a \$20,000 cash grant from the state to help supplement the pay of the sanitation workers. The money must be used for that purpose.

June 1—Rented a garage for the truck at a cost of \$1,000 per month and paid 12 months of rent in advance.

July 1—Charged citizens \$13,000 for services. Of this amount, \$11,000 has been collected.

August 1—Made a \$10,000 cash payment on the 12 percent note of February 1. This payment covers both interest and principal.

September 1—Paid salaries of \$18,000 using the grant received on May 1.

October 1—Paid truck maintenance costs of \$1,000.

November 1—Paid additional salaries of \$10,000, first using the rest of the grant money received May 1.

December 31—Sent invoices totaling \$19,000 to customers for services over the past six months. Collected \$3,000 cash immediately.

December 31—A new landfill was opened this year. It is 12 percent filled as of the end of the year. The estimated current cost for the eventual closure of this facility is \$4 million although no payments will be made for approximately 9 years.

**LO 17-5, 17-7, 17-9**

35. The following information pertains to the City of Williamson for 2017, its first year of legal existence. For convenience, assume that all transactions are for the general fund, which has three separate functions: general government, public safety, and health and sanitation.

## Receipts:

Property taxes	\$320,000
Franchise taxes	42,000
Charges for general government services	5,000
Charges for public safety services	3,000
Charges for health and sanitation services	42,000
Issued long-term note payable	200,000

## Receivables at end of year:

Property taxes (90% estimated to be collectible)	90,000
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## Payments:

## Salary:

General government	66,000
Public safety	39,000
Health and sanitation	22,000

(continued)

Rent:	
General government .....	11,000
Public safety .....	18,000
Health and sanitation .....	3,000
Maintenance:	
General government .....	21,000
Public safety .....	5,000
Health and sanitation .....	9,000
Insurance:	
General government .....	8,000
Public safety (\$2,000 still prepaid at end of year) .....	11,000
Health and sanitation .....	12,000
Interest on debt .....	16,000
Principal payment on debt .....	4,000
Storage shed .....	120,000
Equipment .....	80,000
Supplies (20% still held) (public safety) .....	15,000
Investments .....	90,000
Ordered but not received:	
Equipment .....	12,000
Due in one month at end of year:	
Salaries:	
General government .....	4,000
Public safety .....	7,000
Health and sanitation .....	8,000

Compensated absences (such as vacations and sick days) legally owed to general government workers at year-end total \$13,000. These amounts will not be taken by the employees until so late in 2018 that the payment is not viewed as requiring 2017 current financial resources.

The city received a piece of art this year as a donation. It is valued at \$14,000. It will be used for general government purposes. There are no eligibility requirements. The city chose not to capitalize this property.

The general government uses the storage shed that was acquired this year. It is being depreciated over 10 years using the straight-line method with no salvage value. The city uses the equipment for health and sanitation and depreciates it using the straight-line method over five years with no salvage value.

The investments are valued at \$103,000 at the end of the year.

For the equipment that has been ordered but not yet received, the City Council (the highest decision-making body in the government) has voted to honor the commitment when the equipment is received.

- a. Prepare a statement of activities and a statement of net position for governmental activities for December 31, 2017, and the year then ended.
- b. Prepare a statement of revenues, expenditures, and other changes in fund balances and a balance sheet for the general fund as of December 31, 2017, and the year then ended. Assume that the city applies the consumption method.

**LO 17-2, 17-4, 17-8, 17-10**

36. The City of Bernard starts the year of 2017 with the following unrestricted amounts in its general fund: cash of \$20,000 and investments of \$70,000. In addition, it holds a small building bought on January 1, 2016, for general government purposes for \$300,000 and related long-term debt of \$240,000. The building is being depreciated on the straight-line method over 10 years. The interest rate is 10 percent. The general fund has four separate functions: general government, public safety, public works, and health and sanitation. Other information includes the following:

Receipts:	
Property taxes .....	\$510,000
Sales taxes .....	99,000
Dividend income .....	20,000
Charges for general government services .....	15,000
Charges for public safety services .....	8,000
Charges for public works .....	4,000

(continued)

Charges for health and sanitation services . . . . .	31,000
Charges for landfill . . . . .	8,000
Grant to be used for salaries for health workers (no eligibility requirements) . . . . .	25,000
Issued long-term note payable . . . . .	200,000
Sold above investments . . . . .	84,000
Receivables at year-end:	
Property taxes (\$10,000 is expected to be uncollectible) . . . . .	130,000
Payments:	
Salary:	
General government . . . . .	90,000
Public safety . . . . .	94,000
Public works . . . . .	69,000
Health and sanitation (all from grant) . . . . .	22,000
Utilities:	
General government . . . . .	9,000
Public safety . . . . .	16,000
Public works . . . . .	13,000
Health and sanitation . . . . .	4,000
Insurance:	
General government . . . . .	25,000
Public safety . . . . .	12,000
Public works (all prepaid as of the end of the year) . . . . .	6,000
Health and sanitation . . . . .	4,000
Miscellaneous:	
General government . . . . .	12,000
Public safety . . . . .	10,000
Public works . . . . .	9,000
Health and sanitation . . . . .	7,000
Interest on previous debt . . . . .	24,000
Principal payment on previous debt . . . . .	10,000
Interest on new debt . . . . .	18,000
Building (public works) . . . . .	210,000
Equipment (public safety) . . . . .	90,000
Public works supplies (30% still held) . . . . .	20,000
Investments . . . . .	111,000
Ordered but not received:	
Equipment . . . . .	24,000
Supplies . . . . .	7,000
Due at end of year:	
Salaries:	
General government . . . . .	14,000
Public safety . . . . .	17,000
Public works . . . . .	5,000

On the last day of the year, the city borrowed \$64,000 from a local bank and used that money to buy a truck. The first payment on the loan (plus interest) will be made at the end of the next year.

The city started a landfill this year that it is recording within its general fund. It is included as a public works function. Closure costs today would be \$260,000 although the landfill is not expected to be filled for nine more years. The city has incurred no costs to date although the landfill is now 15 percent filled.

For the equipment and supplies that have been ordered but not yet received, the City Council (the highest decision-making body in the government) has voted to honor the commitment when the items are received.

The new building is being depreciated over 20 years using the straight-line method and no salvage value, whereas depreciation of the equipment is similar except that its life is only 10 years. Assume the city records a full year's depreciation in the year of acquisition.



The investments are valued at \$116,000 at year-end.

- a. Prepare a statement of activities and a statement of net position for governmental activities for December 31, 2017, and the year then ended.
- b. Prepare a statement of revenues, expenditures, and other changes in fund balances and a balance sheet for the general fund as of December 31, 2017, and the year then ended. Assume that the purchases method is being applied.

**LO 17-6, 17-7, 17-8, 17-10**

37. The City of Pfeiffer starts the year of 2017 with the general fund and an enterprise fund. The general fund has two activities: education and parks/recreation. For convenience, assume that the general fund holds \$123,000 cash and a new school building costing \$1 million. The city utilizes straight-line depreciation. The building has a 20-year life and no salvage value. The enterprise fund has \$62,000 cash and a new \$600,000 civic auditorium with a 30-year life and no salvage value. The enterprise fund monitors just one activity, the rental of the civic auditorium for entertainment and other cultural affairs.

The following transactions for the city take place during 2017. Assume that the city's fiscal year ends on December 31.

- a. Decides to build a municipal park and transfers \$70,000 into a capital projects fund and immediately expends \$20,000 for a piece of land. The creation of this fund and this transfer were made by the highest level of government authority.
- b. Borrows \$110,000 cash on a long-term bond for use in creating the new municipal park.
- c. Assesses property taxes on the first day of the year. The assessment, which is immediately enforceable, totals \$600,000. Of this amount, \$510,000 will be collected during 2017 and another \$50,000 is expected in the first month of 2018. The remainder is expected about half-way through 2018.
- d. Constructs a building in the park in (b) for \$80,000 cash so that local citizens can play basketball and other sports. It is put into service on July 1 and should last 10 years with no salvage value.
- e. Builds a sidewalk around the new park for \$10,000 cash and puts it into service on July 1. It should last for 10 years, but the city plans to keep it up to a predetermined quality level so that it will last almost indefinitely.
- f. Opens the park and charges an entrance fee of only a token amount so that it records the park, therefore, in the general fund. Collections during this first year total \$8,000.
- g. Buys a new parking deck for \$200,000, paying \$20,000 cash and signing a long-term note for the rest. The parking deck, which is to go into operation on July 1, is across the street from the civic auditorium and is considered part of that activity. It has a 20-year life and no salvage value.
- h. Receives a \$100,000 cash grant for the city school system that must be spent for school lunches for the poor. Appropriate spending of these funds is viewed as an eligibility requirement of this grant. During the current year, \$37,000 of the amount received was properly spent.
- i. Charges students in the school system a total fee of \$6,000 for books and the like. Of this amount, 90 percent is collected during 2017 with the remainder expected to be collected in the first few weeks of 2018.
- j. Buys school supplies for \$22,000 cash and uses \$17,000 of them. The general fund uses the purchases method.
- k. Receives a painting by a local artist to be displayed in the local school. It qualifies as a work of art, and officials have chosen not to capitalize it. The painting has a value of \$80,000. It is viewed as inexhaustible.
- l. Transfers \$20,000 cash from the general fund to the enterprise fund as a capital contribution.
- m. Orders a school bus for \$99,000.
- n. Receives the school bus and pays an actual cost of \$102,000. The bus is put into operation on October 1 and should last for five years with no salvage value.
- o. Pays salaries of \$240,000 to school teachers. In addition, owes and will pay \$30,000 during the first two weeks of 2018. Vacations worth \$23,000 have also been earned but will not be taken until July 2018.
- p. Pays salaries of \$42,000 to city auditorium workers. In addition, owes and will pay \$3,000 in the first two weeks of 2018. Vacations worth \$5,000 have also been earned but will not be taken until July 2018.
- q. Charges customers \$130,000 for the rental of the civic auditorium. Of this balance, collected \$110,000 in cash and will collect the remainder in April 2018.

- r. Pays \$9,000 maintenance charges for the building and sidewalk in (d) and (e).
- s. Pays \$14,000 on the bond in (b) on the last day of 2017: \$5,000 principal and \$9,000 interest.
- t. Accrues interest of \$13,000 on the note in (g) as of the end of 2017, an amount that it will pay in June 2018.
- u. Assumes that a museum that operates within the city is a component unit that will be discretely presented. The museum reports to city officials that it had \$42,000 of direct expenses this past year and \$50,000 in revenues from admission charges. The only assets that it had at year-end were cash of \$24,000, building (net of depreciation) of \$300,000, and a long-term liability of \$210,000.

Prepare the 2017 government-wide financial statements for this city. Assume the use of the modified approach.

LO 17-6, 17-7, 17-8, 17-10

38. Use the information in problem 37 to prepare the 2017 fund financial statements for the governmental funds and the proprietary funds. A statement of cash flows is not required. Assume that “available” is defined as within 60 days and that all funds are major. The general fund is used for debt repayment. Assume that major funds are labeled as “Special Revenue Fund” and “Capital Projects Fund.”

LO 17-4, 17-5, 17-8, 17-10

39. For each of the following, indicate whether the statement is true or false and include a brief explanation for your answer.
- a. A pension trust fund appears in the government-wide financial statements but not in the fund financial statements.
  - b. Permanent funds are included as one of the governmental funds.
  - c. A fire department placed orders of \$20,000 for equipment. The equipment is received but at a cost of \$20,800. In compliance with requirements for fund financial statements, an encumbrance of \$20,000 was recorded when the order was placed, and an expenditure of \$20,800 was recorded when the order was received.
  - d. The government reported a landfill as an enterprise fund. At the end of Year 1, the government estimated that the landfill will cost \$800,000 to clean up when it is eventually full. Currently, it is 12 percent filled. At the end of Year 2, the estimation was changed to \$860,000 when it was 20 percent filled. No payments are due for several years. Fund financial statements for Year 2 should report a \$76,000 expense.
  - e. A city reports a landfill in the general fund. At the end of Year 1, the government anticipated the landfill would cost \$900,000 to clean up when it is full and reported that it was 11 percent filled. At the end of Year 2, the estimates were changed to \$850,000 and 20 percent filled. No payments are due for several years. Government-wide financial statements for Year 2 should report a \$71,000 expense.
  - f. An agency fund has neither revenues nor expenditures but reports expenses.

**For problems 40 through 43, use the following introductory information:**

The City of Wolfe has issued its financial statements for Year 4 (assume that the city uses a calendar year). The city’s general fund is made up of two functions: (1) education and (2) parks. The city also utilizes capital projects funds for ongoing construction and an enterprise fund to account for an art museum. It also has one discretely presented component unit.

The government-wide financial statements indicated the following Year 4 totals:

Education had net expenses of \$710,000.

Parks had net expenses of \$130,000.

Art museum had net revenues of \$80,000.

General revenues were \$900,000; the overall increase in net position was \$140,000.

The fund financial statements issued for Year 4 indicated the following:

The general fund had an increase of \$30,000 in its fund balance.

The capital projects fund had an increase of \$40,000 in its fund balance.

The enterprise fund had an increase of \$60,000 in its net position.

Officials for Wolfe define “available” as current financial resources to be paid or collected within 60 days.

LO 17-5

40. On the first day of Year 4, the city receives a painting as a gift that qualifies as a work of art. It has a 30-year life, is worth \$15,000, and is being displayed at one of the local parks. The accountant accidentally capitalized and depreciated it although officials had wanted to use the allowed alternative.

Respond to the following questions:

- a. According to the information provided above, the general fund reported a \$30,000 increase in its fund balance. If city officials had used proper alternatives in this reporting, what would have been the correct change in the fund balance for the general fund for the year?
  - b. According to the information provided above, the parks reported net expenses of \$130,000. If city officials had used proper alternatives in this reporting, what was the correct net expense for parks for the year?
  - c. Assume the same information except that the art was given to the art museum but not recorded at all. What should have been the overall change in net position for Year 4 on government-wide financial statements, assuming that officials still preferred the allowed alternative?
41. Assume that the one component unit had program revenues of \$30,000 and expenses of \$42,000 and spent \$10,000 for land during Year 4. However, it should have been handled as a blended component unit, not as a discretely presented component unit. According to the information provided above, the overall increase in net position reported was \$140,000. What was the correct overall change in the net position in the government-wide financial statements?
42. The city maintains a landfill that has been recorded during the current year within its parks. The landfill generated program revenues of \$4,000 in Year 4 and cash expenses of \$15,000. It also paid \$3,000 cash for a piece of land. These transactions were recorded as would have been anticipated, but no other recording was made this year. The city assumes that it will have to pay \$200,000 to clean up the landfill when it is closed in several years. The landfill was 18 percent filled at the end of Year 3 and is 26 percent filled at the end of Year 4. No payments will be necessary for several more years. For convenience, assume that the entries in all previous years were correctly handled regardless of the situation.
- a. The city believes that the landfill was included correctly in all previous years as one of its enterprise funds. According to the information provided, the overall increase in net position reported was \$140,000. What is the correct overall change in the net position in the government-wide financial statements?
  - b. The city believes that the landfill was included correctly in all previous years in one of the enterprise funds. According to the information provided, the enterprise fund reported an increase in its net position of \$60,000. What is the correct change in the net position of the enterprise fund in the fund financial statements?
  - c. The city believes that the landfill was included correctly in all previous years within the general fund. What is the correct change in the fund balance of the general fund?
43. On the first day of the year, the City of Wolfe bought \$20,000 of equipment with a 5-year life and no salvage value for its school system. It was capitalized but no other entries were ever made. The machine was monitored using the modified approach.
- a. Based on the information provided above, what was the correct overall change in the net position in the government-wide financial statements?
  - b. What was the correct amount of net expenses for education in the government-wide statements?
44. A city has a solid waste landfill that was filled 12 percent in Year 1 and 26 percent in Year 2. During those periods, the government expected that total closure costs would be \$2 million. As a result, it paid \$50,000 to an environmental company on July 1 of each of these two years. Such payments will continue for several years to come. Indicate whether each of the following *independent* statements is true or false and briefly explain each answer. The city has a December 31 year-end.
- a. The government-wide financial statements will show a \$230,000 expense in Year 2 but only if reported in an enterprise fund.
  - b. The fund financial statements will show a \$50,000 liability in Year 2 if this landfill is reported in the general fund.
  - c. The fund financial statements will show a \$50,000 liability at the end of Year 2 if this landfill is reported in an enterprise fund.
  - d. If this landfill is reported in an enterprise fund, the government-wide financial statements and the fund financial statements will basically have the same reporting.
  - e. The government-wide financial statements will show a \$420,000 liability at the end of Year 2.
  - f. Over the landfill's entire life, the amount of expense recognized in the government-wide financial statements will be the same as the amount of expenditures recognized in the fund financial statements. Assume the landfill is reported in the general fund.
45. Use the same information as in problem 44 except that, by the end of Year 3, the landfill is 40 percent filled. The city now realizes that the total closure costs will be \$3 million. Indicate

LO 17-8

LO 17-3

17-7, 17-9

LO 17-3

LO 17-3

whether each of the following *independent* statements is true or false and briefly explain each answer.

- a. If the city had known the costs were going to be \$3 million from the beginning, the reporting on the fund financial statements would have been different in the past years if the landfill had been reported in an enterprise fund.
- b. If the landfill is monitored in the general fund, a liability will be reported for the governmental activities in the government-wide financial statements at the end of Year 3.
- c. A \$680,000 expense should be recognized in Year 3 in the government-wide financial statements.
- d. Because the closure costs reflect a future flow of cash, any liability reported in the government-wide financial statements must be reported at present value.

## LO 17-5

46. A city receives a copy of its original charter from the year 1799 as a gift from a citizen. The document will be put under glass and displayed in the city hall for all to see. The fair value is estimated at \$10,000. Indicate whether each of the following *independent* statements is true or false and briefly explain each answer.
  - a. If the city government does not have a policy for handling any proceeds if it ever sells the document, the city must report a \$10,000 asset within its government-wide financial statements.
  - b. Assume that this gift qualifies for optional handling and that the city chooses to report it as an asset. For the government-wide financial statements, depreciation is required.
  - c. Assume this gift qualifies for optional handling and the document is deemed to be exhaustible. The city must report an immediate expense of \$10,000 in the government-wide financial statements.
  - d. Assume that this gift qualifies for optional handling. The city must make a decision as to whether to recognize a revenue of \$10,000 in the government-wide financial statements.
  - e. Assume that this gift qualifies for optional handling. The city can choose to report the gift in the statement of net activities for the government-wide financial statements in a way so that there is no overall net effect.

## LO 17-8

47. A city starts a public library that has separate incorporation and gets some of its money for operations from the state and some from private donations. Indicate whether each of the following *independent* statements is true or false and briefly explain each answer.
  - a. If the city appoints 9 of the 10 directors, it must report the library as a component unit.
  - b. If the library is a component unit and its financial results are shown as part of the governmental activities of the city, it is known as a *blended component unit*.
  - c. If the library appoints its own board but the city must approve its budget, the library must be reported as a blended component unit.

## LO 17-5, 17-6, 17-8, 17-9

48. The City of Dickens has a fiscal year ending December 31, Year 5. The city council is viewed as the highest level of decision-making authority for the government. For each of the following, indicate whether the overall statement is true or false. Assume that each situation is independent of all others.
  - a. On December 30, Year 5, the city spends \$900,000 on a sidewalk project that is not a special assessment. On the Year 5 financial statements, a reconciliation is presented that starts with the total change in fund balances for the governmental funds and works down to end with the total change in net position for the governmental activities. As a result of this acquisition, this \$900,000 must be subtracted as part of this reconciliation.
  - b. All members of the board of directors for a nature museum are appointed by the city. This fact alone makes this nature museum a component unit of the city.
  - c. The city appoints none of the governing board of a parks commission. This fact alone prohibits this parks commission from being a component unit of the city.
  - d. The city has a school system with a separately elected governing board (elected by the public). This fact alone makes the school system a special purpose government with its own financial reporting to be made.
  - e. The modified approach applies only to infrastructure assets.
  - f. The modified approach has become widely used in state and local government accounting over the last few years.
  - g. The city's school system charges students a \$10 per person fee each year. In the statement of activities, this fee should be shown as miscellaneous revenue directly under the general revenues.

- h. The city receives a work of art worth \$100,000 as a gift and also spends \$70,000 in cash to buy a second art work. Both art works will be exhibited publicly and properly protected and preserved. The city council passes a resolution that if either item is ever sold the proceeds will be used to buy replacement art works. Both of the art works are viewed as inexhaustible. The city has the option to report both of these pieces of art as expenses rather than as assets in the government-wide financial statements.
- i. Assume that the city issues 30-day revenue anticipation notes on December 30, Year 5, to finance the government until new taxes are collected. These notes are issued at their face value of \$500,000. On the Year 5 financial statements, there is a reconciliation that starts with the total change in fund balances for the governmental funds and works down to end with the total change in the net position for the governmental activities. As a result of the bond issuance, this \$500,000 must be subtracted as part of this reconciliation.

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## Develop Your Skills

### RESEARCH CASE 1



The City of Abernethy has three large bridges built in the later part of the 1980s that were not capitalized at the time. In creating government-wide financial statements, the city's accountant is interested in receiving suggestions as to how to determine a valid amount to report currently for these bridges.

#### Required

Use a copy of the GASB *Codification of Governmental Accounting and Financial Reporting Standards* as the basis for writing a report to this accountant to indicate various ways to make this calculation. Use the Topical Index or skim Section 1400 which covers "Reporting Capital Assets." Use examples that will help illustrate the process.

### RESEARCH CASE 2



Officials for the City of Artichoke, West Virginia, have recently formed a transit authority to create a public transportation system for the community. These same officials are now preparing the city's CAFR for the most recent year. The transit authority has already lost a considerable amount of money and the officials have become interested in its reporting and whether it qualifies as a component unit of the city.

Following are several articles written about the reporting of component units by a state or local government:

"Changes in Component Units," *Government Finance Review*, February 2011.

"GASB Issues Guidance on Financial Reporting Entity, Component Units," *Accounting Policy & Practice Report*, January 7, 2011.

"Financial Reporting for Affiliated Organizations," *The Journal of Government Financial Management*, Winter 2003.

"How to Implement GASB *Statement No. 34*," *The Journal of Accountancy*, November 2001.

"GASB Issues Guidance on Blending Certain Component Units into Financial Statements," *Investment Weekly News*, February 27, 2016.

"Accounting for Affiliated Organizations," *Government Finance Review*, December 2002.

"Component Unit Reporting in the New Reporting Model," *The CPA Journal*, October 2001.

#### Required

Read one or more of the above articles and any others that you may discover about component units. Write a memo to these city officials providing as much detailed information about component units and their reporting as you can to help these individuals understand the challenges and difficulties of this reporting.

## ANALYSIS CASE 1



Read the following journal article: “25 Years of State and Local Governmental Financial Reporting—An Accounting Standards Perspective,” *The Government Accountants Journal*, Fall 1992.

Or, as an alternative possibility, do a search of books in the college library for advanced accounting textbooks or government accounting textbooks that were published prior to 2000.

### Required

Accounting for state and local governments has changed considerably in the last 10–20 years. Write a report to highlight some of the differences you noted between the process described before 2000 and the process that has been presented in this chapter and the preceding one in this textbook.

## ANALYSIS CASE 2



Go to [www.phoenix.gov](http://www.phoenix.gov) and do a search for the term “CAFR.” Those results should lead to the latest CAFR for the City of Phoenix, Arizona. The financial statements for a state and local government must include a Management’s Discussion and Analysis of the information being reported. Read this section of the Phoenix CAFR.

### Required

Write a report indicating the types of information found in this government’s MD&A.

## COMMUNICATION CASE 1



Read the following articles and any other papers that are available on setting governmental accounting standards:

“The Governmental Accounting Standards Board: Factors Influencing Its Operation and Initial Technical Agenda,” *Government Accountants Journal*, Spring 2000.

“Governmental Accounting Standards Come of Age: Highlights from the First 20 Years,” *Government Finance Review*, April 2005.

“Forward-Looking Information: What It Is and Why It Matters,” *Government Accountants Journal*, December 1, 2010.

“GASB Simplifies GAAP Hierarchy for State and Local Governments,” *Business Wire*, June 29, 2015.

“A Century of Governmental Accounting and Financial Reporting Leadership,” *Government Finance Review*, April 2006.

“The GASB Turns 25: A Retrospective,” *Government Finance Review*, April 2009.

“Proposed Changes to the Process Used to Set the GASB’s Technical Agenda,” *Government Finance Review*, April 1, 2013.

### Required

Write a short paper discussing the evolution of governmental accounting.

## COMMUNICATION CASE 2



The City of Larissa recently opened a solid waste landfill to serve the area’s citizens and businesses. The city’s accountant has gone to city officials for guidance as to whether to record the landfill within the general fund or as a separate enterprise fund. Officials have asked for guidance on how to make that decision and how the answer will impact the government’s financial reporting.

### Required

Write a memo to the government officials describing the factors that should influence the decision as to the fund in which to report the landfill. Describe the impact that this decision will have on the city’s future comprehensive annual financial reports.

**EXCEL CASE**

Prior to the creation of government-wide financial statements, the City of Loveland did not report the cost of its infrastructure assets. Now city officials are attempting to determine reported values for major infrastructure assets that were obtained prior to the preparation of these statements. The chief concern is determining a value for the city's hundreds of miles of roads that were built at various times over the past several decades. Each road is assumed to last for 50 years (depreciation is 2 percent per year).

As of December 31, 2017, city engineers believed that one mile of new road would cost \$2.3 million. For convenience, each road is assumed to have been acquired as of January 1 of the year in which it was put into operation. Officials have done some investigation and believe that the cost of constructing a mile of road has increased by 8 percent each year over the past 30 years.

**Required**

Build a spreadsheet to determine the value that should now be reported for each mile of road depending on the year it was put into operation. For example, what reported value should be disclosed in the government-wide financial statements for 10 miles of roads put into operation on January 1, 1999?

# Accounting and Reporting for Private Not-for-Profit Entities

Americans are the world's most generous contributors to philanthropic causes. Each year, we give about 2% of our GDP to non-profit organizations, nearly twice as much as the U.K., the next closest nation, according to *The Chronicle of Philanthropy*. Some 65% of all American households with an income of less than \$100,000 donate to some type of charity, according to the Center on Philanthropy at Indiana University, as does nearly every household with an income greater than \$100,000. These contributions average out to about \$732 a year for every man, woman, and child in America.<sup>1</sup>

Not-for-profit entities carry out their operations throughout the world. Many are well known for their ongoing work to achieve one or more stated missions such as the cure for a particular disease, the eradication of hunger and poverty, or the cleanup of the environment. However, the designation *not-for-profit* is not limited to large groups with noble goals. At the beginning of 2016, 1,561,616 tax-exempt organizations existed in the United States. That figure was made up of 1,088,447 public charities, 104,165 private foundations, and 369,004 other types of not-for-profit organizations, including chambers of commerce, fraternal organizations, and civic leagues. As just one indication of the impact on the economy, nonprofits accounted for 9.2% of all wages and salaries paid in the United States in 2010.<sup>2</sup>

Many of these organizations are huge by any standard. In 2014, for example, The American National Red Cross reported holding \$3.8 billion in assets. Because of the financial impact of such figures, *Forbes* magazine presents an annual survey of the largest charities. "Collectively, the 50 charities in this 17th edition received \$33 billion in donations, up \$2 billion from the previous year."<sup>3</sup> Presented next are the four largest charities based on the amount of private donations. Although contributions are essential, many not-for-profits receive significant revenue from a variety of other sources. For example, the YMCA of the USA reported total 2015 revenue and support of \$6,609 million (quite a bit larger than the United Way), but only \$934 million of that money was received from private donations.<sup>4</sup>

<sup>1</sup>Dan Pallotta, "Why Can't We Sell Charity Like We Sell Perfume?" *The Wall Street Journal*, September 15–16, 2012, p. C1.

<sup>2</sup><http://nccs.urban.org/statistics/quickfacts.cfm>

<sup>3</sup>William P. Barrett, "The Largest U.S. Charities for 2015," December 9, 2015. <http://www.forbes.com/sites/williambarrett/2015/12/09/the-largest-u-s-charities-for-2015/#65e8703b54e4>

<sup>4</sup><http://www.forbes.com/top-charities/>

## Learning Objectives

After studying this chapter, you should be able to:

- LO 18-1** Understand the basic composition of financial statements produced for a private not-for-profit entity.
- LO 18-2** Describe the differences in assets that are unrestricted, temporarily restricted, or permanently restricted and explain the method of reporting these categories.
- LO 18-3** Explain the purpose and construction of a statement of functional expenses.
- LO 18-4** Report the various types of contributions that a private not-for-profit entity can receive.
- LO 18-5** Understand the impact of a tax-exempt status.
- LO 18-6** Account for both mergers and acquisitions of not-for-profit entities.
- LO 18-7** Describe the unique aspects of accounting for health care entities.



Largest Charities in Terms of Private Donations	2015 Revenue and Support	Private Donations
United Way	\$4,143 million	\$3,873 million
The Salvation Army	4,111 million	2,116 million
Feeding America	2,060 million	2,016 million
Task Force for Global Health	1,661 million	1,609 million

Several general characteristics are frequently identified with not-for-profits:

1. They often receive significant amounts of contributed resources from providers who do not expect a commensurate return.
2. They have an operating mission that is something other than providing goods and services for a profit.
3. They do not have ownership interests similar to those of a for-profit business enterprise.

Some not-for-profit entities are classified as governmental because they receive tax revenues or are controlled by a government. A state-operated hospital, for example, and a public university are both governmental not-for-profit organizations. The financial reporting for these activities was examined in the previous chapter. However, most not-for-profit entities are non-governmental. The American Cancer Society and Mothers Against Drunk Driving (MADD) are just two examples of charities that do not qualify as governmental.

The amount of money and other resources given to not-for-profit entities each year is staggering. Total estimated giving in 2014 totaled \$358.38 billion. This generosity comes from a wide sector:<sup>5</sup>

Individuals . . . . .	\$258.51 billion
Foundations . . . . .	53.97 billion
Bequests . . . . .	28.13 billion
Corporations . . . . .	17.77 billion

Recipients of these contributions represent an eclectic assortment of missions:

Religion . . . . .	\$114.90 billion
Education . . . . .	54.62 billion
Human services . . . . .	42.10 billion
Foundations . . . . .	41.62 billion
Health . . . . .	30.37 billion
Public-society benefit . . . . .	26.29 billion
Arts, culture, and humanities . . . . .	17.23 billion
International affairs . . . . .	15.10 billion
Environment and animals . . . . .	10.50 billion
Other . . . . .	6.42 billion

### LO 18-1

Understand the basic composition of financial statements produced for a private not-for-profit entity.

## The Structure of Financial Reporting

With so much money at stake, the need for not-for-profit entities to provide adequate, fairly presented financial information is understandable. Current and potential contributors as well as other interested parties want to evaluate the financial stability of these operations. They want to judge how well resources are used, especially those received from donations. Future gifts and grants are often based, at least in part, on an entity's ability to convince donors that available funds are spent wisely to accomplish the stated mission. Financial statements are

<sup>5</sup> <http://givingusa.org/giving-usa-2015-press-release-giving-usa-americans-donated-an-estimated-358-38-billion-to-charity-in-2014-highest-total-in-reports-60-year-history/>

vital for the dissemination of this information because they report the resources generated and reflect the operating decisions made by the entity's management.

In the United States, the Financial Accounting Standards Board (FASB) sets the accounting standards used by both for-profit businesses and private not-for-profit entities. As discussed in the previous two chapters, the Governmental Accounting Standards Board (GASB) has the authority to establish accounting standards for state and local governments and governmental not-for-profit organizations. Some of these accounting principles overlap while others are quite different.

At one time, private not-for-profit entities utilized a wide array of financial reporting practices. The format of these statements often varied significantly depending on the type of organization. A fund accounting approach was common because of the restrictions often attached to gifts and grants. FASB standardized much of the reporting for private not-for-profit entities with the issuance of two authoritative standards. FASB *Statement 116 (SFAS 116)*, "Accounting for Contributions Received and Contributions Made," created guidelines for determining when and how donations should be recognized and reported. FASB *Statement 117*, "Financial Statements of Not-for-Profit Organizations," specified the required content and format for financial statements distributed by these organizations.<sup>6</sup>

Basic goals have evolved that form the framework for the generally accepted accounting principles used by private not-for-profit entities, including

1. Financial statements should focus on the entity as a whole.
2. Reporting requirements for private not-for-profit entities should be similar to those applied by for-profit businesses unless critical differences exist in the nature of the transactions or the informational needs of financial statement users.

The first of these goals is important because it establishes that the entity's financial statements should not be structured to highlight the individual funds often used by these organizations for internal record-keeping. Although separate funds help monitor and secure restricted assets, the operations and financial position of the entire organization should be emphasized in external reporting.

The second goal is significant because it allows these organizations to apply many of the accounting techniques already used by for-profit businesses. Consequently, authoritative literature for capital leases, pensions, contingent liabilities, and similar issues has not yet been rewritten specifically for private not-for-profit entities.

In August 2016, Accounting Standards Update No. 2016-14, *Presentation of Financial Statements of Not-for-Profit Entities*, was released by FASB. This standard becomes effective for fiscal years beginning after December 15, 2017. At relevant points in this chapter, these new rules are described. The biggest change is a reduction in the net asset classes to be reported. For decades, not-for-profit entities classified net assets as unrestricted, temporarily restricted, or permanently restricted. With the new rules, this classification system narrows to two: net assets with donor restrictions and net assets without donor restrictions. However, ASC 958-205-05-6B states: "an NFP may wish to disaggregate net assets with donor restrictions between those expected to be maintained in perpetuity and those expected to be spent over time or for a particular purpose." Time will show how this new rule is applied in practice.

### LO 18-2

Describe the differences in assets that are unrestricted, temporarily restricted, or permanently restricted and explain the method of reporting these categories.

## Financial Statements for Private Not-for-Profit Entities

Although private not-for-profit entities have much in common with for-profit businesses, at least three critical differences impact the financial reporting:

1. First, the donations that many private not-for-profit entities receive have no counterparts in commercial businesses. Millions of dollars can be received purely as a gift. Businesses do not face that reporting challenge.

<sup>6</sup> The American Institute of Certified Public Accountants (AICPA) issues an audit and accounting guide, *Not-for-Profit Entities*, to provide additional guidance in preparing and auditing financial statements by focusing on procedures that are unique or significant to these organizations. This is not part of the FASB *Accounting Standards Codification (ASC)*.

2. Second, contributions often have donor-imposed restrictions that require the proceeds to be used for a designated purpose or to be used only after a specified point in time.
3. Third, no single figure can describe performance as effectively as reported net income does for commercial entities. Thus, other indicators are necessary.

These differences suggest the need for a somewhat unique set of financial statements. Consequently, three financial statements are presented by not-for-profit entities:

1. A *statement of financial position* reports the assets and liabilities of private not-for-profits. Until the new rules are applied, the remaining section of this statement, net assets, replaces the reporting of owners' equity or fund balances. The total net asset figure is separated into three classifications: unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets. This distinction is significant because it discloses the discretion that the entity's management has for spending the net assets being held. Because of difficulties in separating temporarily restricted net assets from permanently restricted net assets, new FASB standard narrows these reporting designations from three categories down to two: (1) net assets without donor restrictions and (2) net assets with donor restrictions.
2. A *statement of activities* reports revenues and expenses as well as other changes occurring in net assets during the period. Revenues and expenses are recognized using the accrual basis of accounting. Therefore, long-lived assets are depreciated if they have a finite life. This statement is structured to present the changes in each category of net assets during the period. In the current FASB project, this statement will likely be restructured to provide an operating activity subtotal that separates operating activities (such as contribution revenue and program expenses) from activities that are not directly tied to primary operations (such as investment earnings). FASB hopes to present an operating number that focuses on the mission of the organization and the availability of funds to help meet that mission.
3. A *statement of cash flows* currently presents the standard classification system: cash flows from operating activities, cash flows from investing activities, and cash flows from financing activities. As with for-profit enterprises, cash flows from operating activities may be presented by either the direct or indirect method. The new Accounting Standards Update makes one interesting change in the reporting of the statement of cash flows. For entities that choose to use the direct method, the new rule eliminates the requirement that a reconciliation must be presented between the direct and indirect methods. This added work has sometimes been blamed for the reluctance that some entities have for adopting the direct method. The future impact on the decision of using the direct or indirect method will be interesting to observe.

In addition to these three statements, voluntary health and welfare entities have long been required to prepare a *statement of functional expenses* (see Exhibit 18.3). Voluntary health and welfare entities are ones that promote humanitarian activities, such as public health clinics, homeless shelters, the cure of a particular disease, and the like. Although they might receive revenues from their programs, most rely heavily on monetary support from individuals, foundations, government grants, United Way allocations, and similar sources.

Voluntary health and welfare entities are different from other organizations such as private universities or hospitals that generate a considerable amount of revenue from services provided (such as academic classes or surgery). Because voluntary health and welfare entities rely primarily on donations rather than membership fees, tuition, or the like, wise utilization of financial resources is of special importance to the readers of the financial statements. The statement of functional expenses provides a detailed schedule of expenses by function (such as various programs and administrative activities) and by nature (salaries, supplies, depreciation, etc.). The new accounting rules will soon require all not-for-profit entities to report expenses by function and nature. Most of these entities will likely meet this requirement by preparing a statement of functional expenses.

The inclusion of this fourth statement allows a critical evaluation to be made of a charity's efficient use of funds: "The cost of badly managed cancer charities isn't just wasted money. People are dying while these outfits mishandle funds that could go toward care."<sup>7</sup>

<sup>7</sup> Bill Shapiro, "Check Your Charity!" *Time*, June 13, 2011, p. 81.

## Statement of Financial Position

Exhibit 18.1 presents the 2015 statement of financial position for ChildFund International, USA.<sup>8</sup> The asset and liability sections resemble those of for-profit enterprises. However, unlike a business, individuals and organizations provide resources to not-for-profit entities without expecting to earn a financial return on their investments. As a result, the traditional concept of owners' equity does not apply. In place of paid-in-capital and retained earnings, the final section of this statement presents a total "net asset" figure which is simply the excess of reported assets over liabilities (see Point A).

As mentioned previously, net asset totals are presented within three categories—*unrestricted*, *temporarily restricted*, and *permanently restricted*—although these last two will soon be combined by FASB to arrive at a single amount for "net assets with donor restrictions."

Before a net asset amount is classified as restricted, an outside party must impose a specific requirement on the use of the gift or grant. In contrast, internally restricted net assets (often referred to as "board designated") continue to be identified as unrestricted for reporting purposes. Although these resources were designated for a specific use, the restriction does not come from an external source. Control over the use of this amount of the net assets still lies within the organization. Thus, a board designation is not categorized as a restriction on net assets in the financial statements.

The statement of financial position for ChildFund International, USA, shows total unrestricted net assets of \$32,558,979 (Point B). This amount can be spent at the discretion of the organization's officials. A note to the financial statements further discloses that

### EXHIBIT 18.1

<b>CHILDFUND INTERNATIONAL, USA</b>		
<b>Consolidated Statement of Financial Position</b>		
<b>June 30, 2015</b>		
<b>(with comparative financial information as of June 30, 2014)</b>		
<b>Assets</b>	<b>2015</b>	<b>2014</b>
Cash and cash equivalents (note 3) . . . . .	\$ 18,701,139	\$ 15,630,049
Receivable from affiliates (note 11) . . . . .	1,845,632	2,295,283
Grants receivable . . . . .	4,645,272	3,430,682
Accounts receivable and other assets . . . . .	9,700,998	12,930,910
Investments (notes 4 and 5) . . . . .	52,092,075	51,298,645
Beneficial interests in trusts (notes 4 and 5) . . . . .	9,251,106	12,798,674
Property, plant and equipment, net (note 6) . . . . .	19,949,064	18,717,203
Total assets . . . . .	<u>\$ 116,185,286</u>	<u>\$ 117,101,446</u>
<b>Liabilities and Net Assets</b>		
Liabilities:		
Accounts payable and accrued expenses (note 5) . . . . .	\$ 18,581,967	\$ 16,530,802
Accrued pension benefit liability (note 7) . . . . .	7,023,267	6,330,100
Debt (note 8) . . . . .	4,000,000	3,700,000
Total liabilities . . . . .	<u>\$ 29,605,234</u>	<u>\$ 26,560,902</u>
Net assets: <sup>Ⓐ</sup>		
Unrestricted (note 16) . . . . .	\$ 32,558,979 <sup>Ⓔ</sup>	\$ 31,462,252
Temporarily restricted (notes 9 and 16) . . . . .	36,721,856 <sup>Ⓒ</sup>	41,439,898
Permanently restricted (notes 5, 10 and 16) . . . . .	17,299,217 <sup>Ⓒ</sup>	17,638,394
Total net assets . . . . .	<u>\$ 86,580,052</u>	<u>\$ 90,540,544</u>
Contingencies (notes 8 and 15) . . . . .		
Total liabilities and net assets . . . . .	<u>\$ 116,185,286</u>	<u>\$ 117,101,446</u>

See accompanying notes to consolidated financial statements.

<sup>8</sup>With an attitude that seems appropriate for a charity that operates primarily on donations, the website makes the following statement. "We strive to be transparent, trustworthy and above reproach in every aspect of our finances.." <http://www.childfund.org/accountability/>.

\$3,686,220 of these unrestricted net assets have been set aside within a board-designated endowment fund. This restriction is internal rather than being created by an outside party.

Temporarily restricted net assets are designated by an outsider for either (a) a particular purpose or (b) use in a future time period. For example, a private college could receive a grant to fund medical research. Until spent for the intended purpose, this amount is reported as temporarily restricted. The college could also receive another donation but this one is to be used over the subsequent three years. Because of the time designation, the future portion of this balance is also reported as temporarily restricted. That money is not available for current spending.

The statement of financial position prepared by ChildFund International, USA, discloses temporarily restricted net assets of \$36,721,856 as of June 30, 2015. Outside donors have restricted that money for a particular purpose or until a specific point in time (Point C). A note to the financial statements indicates that only \$386,016 of this amount had a time restriction. Most donor restrictions are for a specified purpose.

In not-for-profit entities, donor restrictions are common. The June 30, 2015, statement of financial position for the University of Notre Dame indicates temporarily restricted net assets of \$4.17 billion.

As the title implies, permanently restricted net assets are those that are expected to remain restricted for as long as the organization exists. However, some or all of the subsequent income will be available for either general or specified use. A note to the 2015 financial statements of Yale University explains its permanently restricted net assets total of \$3.49 billion: “The University records as permanently restricted net assets the original amount of gifts which donors have given to be maintained in perpetuity (‘donor restricted endowment funds’).” In the same manner, a note to the financial statements of ChildFund International indicates that the \$17,299,217 total shown for permanently restricted net assets (Point D) reflects “net assets that generally represent contributions and other inflows of assets whose use by ChildFund is permanently limited by donor-imposed restrictions that neither expire by passage of time nor can be fulfilled or otherwise removed by actions of ChildFund.”

## Statement of Activities

Exhibit 18.2 presents the statement of activities for ChildFund International, USA, for the year ended June 30, 2015. Note the format. A separate column is used to present the increases and decreases in each of the three categories of net assets: unrestricted, temporarily restricted, and permanently restricted. As mentioned, the new Accounting Standards Update will eventually require the two restricted columns to be combined although disaggregated reporting is allowed.

The final totals agree with the net asset balances presented previously on the statement of financial position.

As stated, many private not-for-profit organizations receive a significant portion of their financial resources from contributions. The statement of activities provides a clear picture of those donations and any restrictions that have been attached. In Exhibit 18.2, public support (from sponsorships, contributions, and grants) is reported separately from revenue such as service fees and investment income for which an earning process exists. For the year ended June 30, 2015, ChildFund International, USA, reports (Point E) that it received \$72.8 million in public support that was unrestricted, \$173.7 million that was temporarily restricted, and a mere \$48,576 that was permanently restricted.

ChildFund reports total revenues generated by programs and investments for the year of \$2.3 million (Point F). This charity actually obtains the vast majority of its resources from donations and grants but that is not always the case. For the year ended September 30, 2014, the Girl Scouts of the United States of America reported membership dues of \$40.5 million and a gross profit of \$21.5 million on Girl Scout merchandise, but unrestricted gifts, grants, and bequests of just \$2.9 million. Different charities seek support in different ways.

### *Expenses and the Release of Temporarily Restricted Net Assets*

All expenses are reported in a statement of activities within the Unrestricted Net Assets column (Point G). In that way, this first column can be viewed as a reflection of operating activities. FASB has discussed alternative ways of showing operating activities separately from nonoperating (such as investment revenues and transfers).

#### LO 18-2

Describe the differences in assets that are unrestricted, temporarily restricted, or permanently restricted and explain the method of reporting these categories.

## EXHIBIT 18.2

<b>CHILDFUND INTERNATIONAL, USA</b>					
<b>Consolidated Statement of Activities</b>					
<b>Year ended June 30, 2015</b>					
<b>(with summarized financial information for the year ended June 30, 2014)</b>					
	<b>Unrestricted</b>	<b>Temporarily Restricted</b>	<b>Permanently Restricted</b>	<b>Total</b>	
				<b>2015</b>	<b>2014</b>
Public support (note 12):					
Sponsorships (note 11):					
U.S. sponsors . . . . .	\$ —	78,519,240	—	78,519,240	80,142,071
International sponsors . . . . .	—	56,310,877	—	56,310,877	60,677,599
Special gifts from sponsors for children . . . . .	—	13,516,271	—	13,516,271	14,679,948
Total sponsorships . . . . .	<u>—</u>	<u>148,346,388</u>	<u>—</u>	<u>148,346,388</u>	<u>155,499,618</u>
Contributions:					
General contributions (note 5 and 11) . . . . .	10,601,237	8,675,346	48,576	19,325,159	18,130,719
Major gifts and bequests . . . . .	3,422,928	—	—	3,422,928	4,597,804
Gifts in kind . . . . .	17,887,098	16,713,142	—	34,600,240	32,712,124
Total contributions ⊕ . . . . .	<u>31,911,263</u>	<u>25,388,488</u>	<u>48,576</u>	<u>57,348,327</u>	<u>55,440,647</u>
Grants:					
Grants and contracts . . . . .	40,840,551	—	—	40,840,551	35,341,265
Total public support . . . . .	<u>72,751,814</u>	<u>173,734,876</u>	<u>48,576</u>	<u>246,535,266</u>	<u>246,281,530</u>
Revenue:					
Investment income and currency transactions, net (note 4) . . . . .	686,092	21,518	—	707,610	453,341
Service fees and other (note 11) . . . . .	1,643,961	—	—	1,643,961	1,720,961
Total revenue ⊕ . . . . .	<u>2,330,053</u>	<u>21,518</u>	<u>—</u>	<u>2,351,571</u>	<u>2,174,302</u>
Net assets released from restrictions: ⊖					
Satisfaction of program and time restrictions . . . . .	178,428,402	(178,428,402)	—	—	—
Total public support and revenue . . . . .	<u>253,510,269</u>	<u>(4,672,008)</u>	<u>48,576</u>	<u>248,886,837</u>	<u>248,455,832</u>
Expenses ⊕ (notes 6, 7 and 8):					
Program: ①					
Basic education . . . . .	84,281,868	—	—	84,281,868	77,144,692
Health and sanitation . . . . .	38,974,187	—	—	38,974,187	39,313,479
Nutrition . . . . .	17,752,953	—	—	17,752,953	18,141,134
Early childhood development . .	24,733,801	—	—	24,733,801	32,357,909
Micro enterprise . . . . .	22,636,836	—	—	22,636,836	22,991,114
Emergencies . . . . .	23,035,509	—	—	23,035,509	13,097,713
Total program . . . . .	<u>211,415,154</u>	<u>—</u>	<u>—</u>	<u>211,415,154</u>	<u>203,046,041</u>
Supporting services: ②					
Fund raising . . . . .	21,547,935	—	—	21,547,935	22,305,657
Management and general . . . . .	16,919,082	—	—	16,919,082	17,859,285
Total supporting services . . . . .	<u>38,467,017</u>	<u>—</u>	<u>—</u>	<u>38,467,017</u>	<u>40,164,942</u>
Total expenses for operations . . . . .	<u>249,882,171</u>	<u>—</u>	<u>—</u>	<u>249,882,171</u>	<u>243,210,983</u>
Change in net assets from operations . . . . .	<u>3,628,098</u>	<u>(4,672,008)</u>	<u>48,576</u>	<u>(995,334)</u>	<u>5,244,849</u>

(continued)

## EXHIBIT 18.2 Continued

<b>CHILDFUND INTERNATIONAL, USA</b>					
<b>Consolidated Statement of Activities</b>					
<b>Year ended June 30, 2015</b>					
<b>(with summarized financial information for the year ended June 30, 2014)</b>					
	<b>Unrestricted</b>	<b>Temporarily Restricted</b>	<b>Permanently Restricted</b>	<b>Total</b>	
				<b>2015</b>	<b>2014</b>
Nonoperating gains (losses):					
Realized gains on investments, net (note 4) . . . . .	932,689	4,318	—	937,007	1,084,879
Unrealized (losses) gains on investments, net (note 4) . . . . .	(1,743,642)	(7,881)	—	(1,751,523)	2,885,787
Change in value of trusts (note 5) . . . . .	—	(42,471)	(387,753)	(430,224)	(307,762)
Change in accrued pension benefit liability other than net periodic costs (note 7) . . . . .	(1,720,418)	—	—	(1,720,418)	(335,820)
Total nonoperating (losses) gains . . . . .	(2,531,371)	(46,034)	(387,753)	(2,965,158)	3,327,084
Change in net assets . . . . .	1,096,727	(4,718,042)	(339,177)	(3,960,492)	8,571,933
Net assets at beginning of year . .	31,462,252	41,439,898	17,638,394	90,540,544	81,968,611
Net assets at end of year . . . . .	<u>\$ 32,558,979</u>	<u>\$ 36,721,856</u>	<u>\$ 17,299,217</u>	<u>\$ 86,580,052</u>	<u>\$ 90,540,544</u>

See accompanying notes to consolidated financial statements.

For ChildFund International, USA, unrestricted public support and revenues totaled \$253.5 million while the organization's total expenses for operations amounted to \$249.9 million. A decision-maker can see that a \$3.6 million increase took place during the period in the net assets from operations.

Recording all expenses solely within unrestricted net assets causes a practical problem. Some expenses are incurred in connection with temporarily restricted net assets. A cash gift, for example, could be designated by the donor to support the salaries of the organization's employees. If the contribution is reported as temporarily restricted, how can the eventual salary expense be presented as unrestricted?

If a temporary restriction (either time or usage) is fulfilled, that amount of net assets is reclassified as unrestricted. Therefore, when an expense is incurred that meets a donor stipulation, both the expense and the related contribution revenue appear simultaneously in the unrestricted net assets column of the statement of activities. As shown in Exhibit 18.2, this reclassification is reflected by a line at the bottom of the Public Support and Revenue section. It increases unrestricted net assets while decreasing temporarily restricted net assets. Because the appropriate expenditure has been made, these temporarily restricted net assets are no longer restricted.

ChildFund International, USA, shows approximately \$178.4 million (Point H) as "Net assets released from restrictions—Satisfaction of program and time restriction." This amount of temporarily restricted net assets has been reclassified to unrestricted because of one or more of the following:

1. Money was appropriately expended for an expense as designated by the donor.
2. Money was appropriately expended for an asset as designated by the donor.
3. A donor restriction based on time was satisfied.

To illustrate, assume that during Year 1, a private not-for-profit entity receives three cash gifts of \$10,000 each. The donor has specified that the first gift be used for employee salaries. The second gift is designated for the purchase of equipment. The third gift is to be held until Year 2 before being expended. All three are classified as temporarily restricted. In Year 1, the statement

of activities will show a \$30,000 increase in Temporarily Restricted Net Assets. The first two were given for a particular purpose. The third was to be used at a designated future time.

Assume that the first two gifts are properly spent during Year 2 and the time restriction on the third gift is fulfilled although the money has not yet been used:

- For the first gift, cash is decreased and salary expense is recorded in the Unrestricted Net Assets column. At the same time, \$10,000 is reclassified on the statement of activities from the Temporarily Restricted column to the Unrestricted column as was done for the \$178.4 million in Exhibit 18.2. The money was spent as the donor had specified. It is no longer restricted.
- For the second gift, equipment (an asset) is increased and cash is decreased. In addition, the same \$10,000 reclassification as above is made on the statement of activities to indicate that the restriction has been met. The money was spent as designated.
- A \$10,000 reclassification must also be made for the third gift even though it has not yet been spent. It was restricted only as to time, and the required period has passed.

In Year 2, because all restrictions have been met the statement of activities will show a total of \$30,000 in Net Assets Released from Restriction as an increase in unrestricted net assets with an equal decrease in temporarily restricted net assets.

One alternative in the above accounting is allowed for a long-lived asset bought with a restricted gift. As shown above, the entire amount can be reclassified from temporarily restricted to unrestricted at the time of appropriate expenditure. Or, a time restriction can be specified by the donor (or assumed by the organization) for the use of the acquired asset. The donor might require the not-for-profit entity to hold this equipment for its entire life or for a specified number of years. In that case, no reclassification is made from temporarily restricted net assets to unrestricted net assets at the time of purchase. Use of the asset is not completely at the discretion of the organization. Instead, a gradual reclassification is made each year for an amount equal to the depreciation of the asset.

Assume, for example, that \$10,000 is spent as instructed by the donor on equipment. The Equipment account is increased while cash is decreased. If this asset must be held, the entity is not required to make a separate reclassification from temporarily restricted net assets to unrestricted net assets. It is allowed but not required. Assume that the reclassification was not made and, at the end of the first year, depreciation of \$2,000 is recorded on this equipment. After recording the expense, temporarily restricted net assets are reduced by \$2,000 and unrestricted net assets are increased by the same amount. The reclassification parallels the expense recognition.

### ***Program Services and Supporting Services***

Detailed information about the expenses incurred by a private not-for-profit entity is important to most current and potential contributors. A primary concern is the extent to which a charity is using financial resources to fulfill its stated mission. Is money spent, for example, to cure disease or wasted on bloated fund-raising campaigns or executive salaries? That is a question that virtually all not-for-profit entities face.

For this reason, expenses are presented in two broad categories: program services and supporting services. Voluntary health and welfare organizations normally use these categories on the statement of activities with further explanation in the statement of functional expenses. Other types of not-for-profit entities might provide this information in the notes to the financial statements.

- *Program services* encompass the entity's activities that relate to its mission. Several distinct programs can be reported or only one. ChildFund International, USA, (Point I) discloses six program categories: basic education, health and sanitation, nutrition, early childhood development, micro enterprise, and emergencies.
- *Supporting services* costs (Point J) consist of administrative costs (management and general) and fund-raising expenses. This second category might be associated with certain program services but it is not viewed as an actual cost of providing that service.



Analysts frequently calculate the ratio of program service expenses to total expenses as one way to evaluate the efficiency of not-for-profits. The Better Business Bureau has suggested that ratios of less than 65 percent are not desirable.<sup>9</sup> ChildFund International, USA, reports a ratio of 84.6 percent (\$211.4 million/\$249.9 million) for the year ended June 30, 2015.

Not everyone agrees with the wisdom that charities should keep administrative and fund-raising costs at a bare minimum. “We tend to think that policing salaries of charitable groups is an ethical imperative, but for would-be leaders, it results in a mutually exclusive choice between doing well for yourself and doing good for the world—and it causes many of the brightest kids coming out of college to march directly into the corporate world. A second area of discrimination is advertising and marketing. We tell the for-profit sector to spend on advertising until the last dollar no longer produces a penny of value, but we don’t like to see charitable donations spent on ads. We want our money to go directly to the needy—even though money spent on advertising dramatically increases the money available for the needy.”<sup>10</sup>

Beneath the Expenses section in Exhibit 18.2, ChildFund International, USA, reports “Nonoperating gains (losses).” This section includes both realized and unrealized investment gains and losses and other nonoperating items. Investments in equity securities and debt investments must be adjusted to fair value. Not-for-profit entities report all gains and losses on investments, along with dividend and interest income, as increases or decreases in unrestricted net assets unless the donor explicitly restricted the use of this income.

### LO 18-3

Explain the purpose and construction of a statement of functional expenses.

## Statement of Functional Expenses

Exhibit 18.3 presents the statement of functional expenses for ChildFund International, USA. Because contributors are concerned with how their gifts are used, this statement provides a detailed analysis of expenses by both function and object. The columns represent functions and include the six previously identified program services followed by the supporting services of fund-raising and management and general expenses. These categories are the same as reported on the statement of activities. Thus, the column totals agree with the operating expenses reported on that statement. For example, both statements show that this charity spent \$84,281,868 to promote basic education. The statement of functional expenses breaks that figure down into more detail by providing amounts incurred for subsidies for children, program grants, supplies, occupancy, and the like.

As a result of the scrutiny that is sometimes placed on the amount that a private not-for-profit entity spends on fund-raising, the allocation of costs is quite important. At one time, the costs of monetary appeals that also contained educational literature were routinely divided evenly between fund-raising and program services to make the operations look more effective. Direct mail solicitations were almost always accompanied by informational pamphlets and the like so that a significant portion of the printing and mailing costs could be reflected as a program service expense such as educating the public.

Rules are now in place that specify that a portion of the costs of fund-raising campaigns can only be assigned to program service costs if several criteria are met.<sup>11</sup> Literature that is mailed or otherwise distributed must include a specific call for action that would have been made even without the fund-raising request. This appeal cannot be directed purely at potential contributors, and the desired action must be specific and help accomplish the entity’s overall mission. If these criteria are met, a logical percentage of the costs associated with this call for action campaign is reported as program services rather than as purely fund-raising.

<sup>9</sup> The Better Business Bureau provides excellent guidance at <http://give.org/for-charities/How-We-Accredit-Charities/?id=236646#FINANCES> to aid interested parties in assessing the efficiency and organizational structure of a charity. The 65 percent recommendation can be found in Standard 8.

<sup>10</sup> Dan Pallotta, “Why Can’t We Sell Charity Like We Sell Perfume?” *The Wall Street Journal*, September 15–16, 2012, p. C1.

<sup>11</sup> For more information on the reporting of expenses by not-for-profit entities, see FASB ASC 958-720-45.

**EXHIBIT 18.3**

**CHILDFUND INTERNATIONAL, USA**  
**Consolidated Statement of Functional Expenses**  
**Year ended June 30, 2015**  
 (with summarized financial information for the year ended June 30, 2014)

	Program Services										Supporting Services			Program and Supporting Services	
	Basic Education	Health and Sanitation		Nutrition	Early Childhood Development		Micro Enterprise	Emergencies	Total Program Services	Fund Raising	Management and General	Total Supporting Services	2015	2014	
		Sanitation	Health		Childhood	Development									
Subsidies for children	\$ 51,517,753	\$ 13,916,722	\$ 6,057,961	\$ 12,960,768	\$ 10,212,658	\$ 4,449,387	\$ 99,115,249	—	—	—	—	\$ 99,115,249	\$ 104,573,181		
Program grants	20,888,081	19,438,536	9,180,881	8,273,447	9,221,575	15,310,357	82,312,877	—	—	—	—	82,312,877	66,188,789		
Supplies	119,048	56,326	25,202	35,081	32,104	32,837	300,598	77,875	280,313	358,188	658,786	748,306	748,306		
Occupancy	560,635	265,254	118,684	165,206	151,186	154,640	1,415,605	160,944	216,321	377,265	1,792,870	1,835,877	1,835,877		
Professional services	127,484	60,317	26,988	37,566	34,378	35,164	321,897	23,290	341,683	364,973	686,870	830,924	830,924		
Contract services	750,966	355,306	158,977	221,292	202,513	207,139	1,896,193	3,158,130	2,678,408	5,836,538	7,732,731	6,024,948	6,024,948		
Travel	500,311	236,713	105,914	147,430	134,919	138,001	1,263,288	346,813	237,497	584,310	1,847,598	2,379,990	2,379,990		
Conferences and meetings	283,920	134,332	60,105	83,665	76,565	78,314	716,901	59,233	191,884	251,117	968,018	931,267	931,267		
Automobile and truck expense	145,279	68,736	30,755	42,810	39,177	40,072	366,829	25,404	—	25,404	392,233	439,217	439,217		
Advertising and public education	21,836	10,331	4,623	6,434	5,888	6,023	55,135	11,885,855	444,339	12,330,194	12,385,329	14,326,842	14,326,842		
Equipment purchases and rentals	156,235	73,920	33,074	46,039	42,132	43,094	394,494	61,836	190,611	252,447	646,941	697,730	697,730		
Telephone and cables	171,215	81,007	36,246	50,453	46,171	47,226	432,318	70,117	195,082	265,199	697,517	820,817	820,817		
Postage and freight	62,948	29,783	13,326	18,549	16,975	17,363	158,944	866,014	687,372	1,553,386	1,712,330	1,621,642	1,621,642		
Publication and printing costs	—	—	—	—	—	—	—	—	13,856	13,856	13,856	174,973	174,973		
Staff training	68,665	32,488	14,536	20,234	18,517	18,940	173,380	6,964	28,016	34,980	208,360	251,439	251,439		
Miscellaneous expenses	96,077	45,457	20,339	28,312	25,909	26,501	242,595	473,301	2,094,484	2,567,785	2,810,380	2,757,065	2,757,065		
Total expenses before personnel costs and other expenses	75,470,453	34,805,228	15,887,611	22,137,286	20,260,667	20,605,058	189,166,303	17,215,776	7,599,866	24,815,642	213,981,945	204,603,007	204,603,007		
Personnel costs	7,932,821	3,753,268	1,679,347	2,337,614	2,139,239	2,188,109	20,030,398	4,132,557	8,622,149	12,754,706	32,785,104	36,074,535	36,074,535		
Depreciation and interest	878,594	415,691	185,995	258,901	236,930	242,342	2,218,453	199,602	697,067	896,669	3,115,122	2,533,441	2,533,441		
Total expenses from operations	\$ 84,281,868	\$ 38,974,187	\$ 17,752,953	\$ 24,733,801	\$ 22,636,836	\$ 23,035,509	\$ 211,415,154	\$ 21,547,935	\$ 16,919,082	\$ 38,467,017	\$ 249,882,171	\$ 243,210,983	\$ 243,210,983		

See accompanying notes to consolidated financial statements.

For this reason, the June 30, 2015, financial statements of the American Heart Association, Inc., included the following note:

The Association conducts joint activities (activities benefiting multiple programs and/or supporting services) that include fundraising appeals. Those activities primarily include direct mail campaigns and special events. The costs of conducting those joint activities were allocated as follows in 2015 and 2014 (in thousands):

	2015	2014
Public health education . . . . .	\$128,094	\$118,074
Professional education and training . . . . .	2,906	1,476
Community services . . . . .	1,102	763
Management and general . . . . .	25,041	22,353
Fund-raising . . . . .	47,493	43,466
Total joint costs . . . . .	<u>\$204,636</u>	<u>\$186,132</u>

**LO 18-4**

Report the various types of contributions that a private not-for-profit entity can receive.

## Accounting for Contributions

Contributions provide a major source of support for a great many private not-for-profits. Contributions are unconditional transfers of cash or other resources to an entity in a voluntary nonreciprocal transaction. They should be recognized as support in the period received. Gifts of noncash items are recorded at the fair value on that date.

Donors sometimes restrict their contributions by specifying how donated amounts must be used. These gifts are recognized as increases in either temporarily restricted net assets or permanently restricted net assets when received. Such restrictions do not impact the timing of recognition. They only affect the method of reporting.

Pledges of support are commonly received by not-for-profit entities. A pledge is a promise to contribute money or other assets in the future. Often, the promise is received well in advance of the actual transfer. Pledges are recognized when the promise is conveyed by increasing contributions receivable and contribution revenue.

Conditional promises often sound like pledges but they are different. They identify a specific action that must occur before a donation is finalized. The action is often required of the not-for-profit entity but not always. For example, a donor could promise that money will be contributed when a certain law is passed by Congress or when the unemployment rate climbs to an established level. If no transfer has yet been made, no recording is needed. If a transfer has been made before the conditions are fulfilled, the asset is recorded along with a liability. The property might have to be returned if the conditions are never met. Conditional promises are recognized as contributions only when all conditions have been met.

To illustrate, assume that a donor makes a \$10,000 pledge to be paid in eight months with the money restricted for the purchase of library books. This gift is restricted as to how it will be spent but it is not conditional. Although the money must be used as specified, receipt of the gift is not dependent on a future action. In contrast, a promise to donate \$200,000 if a famous biology professor is hired is conditional but not restricted. Assume that the donor has specified that no money will be transferred until that action is taken. However, once received, the not-for-profit can spend the \$200,000 without restriction. Thus, the conditional promise of \$200,000 is not recorded until the professor is hired.

Contributions Receivable . . . . .	10,000	
Temporarily Restricted Net Assets—Contributions . . . . .		10,000
Unconditional pledge of monetary gift made for the purpose of buying library books.		

Because contributions are recognized at fair value, the estimated uncollectible portion of pledged amounts is deducted so that the reported balances reflect the expected cash collection. For example, a telethon to raise funds to cure a childhood disease will bring in thousands of pledges,

many of which will never be collected. An allowance account must be established to reduce the receivable amount to expected net realizable value. Furthermore, any pledges that are not expected to be collected within the following year are discounted to present value using an appropriate interest rate. Over time, the receivable is adjusted upward toward the face value of the pledge with the offsetting amortization classified as contribution support (rather than interest revenue).

For example, as of June 30, 2015, Georgetown University reported gross contributions receivable of \$484.0 million. Of this amount, receipt of approximately 70 percent was not anticipated within the next five years. Thus, this balance was reduced \$297.7 million to arrive at the present value of the expected cash flows. A note to the financial statements indicated that the annual discount rate for determining present value was 5.20 percent “in accordance with authoritative guidance on Fair Value Measurements.” The contribution receivable was further reduced by an allowance for doubtful accounts of \$18.9 million. Doubtful accounts are often quite large because not-for-profits have limited ways of forcing donors to fulfill their pledges. Thus, this university reported a net contribution receivable balance of \$167.4 million as a result of unconditional pledges.

Cash is not the only type of support provided to not-for-profits. Many organizations receive donations of materials intended either to be used by the charity itself (such as automobiles, office furniture, and computers), to be liquidated (investments or old vehicles), or to be distributed to needy groups or individuals (food, clothing, and toys). Organizations such as the Salvation Army and Goodwill Industries rely on these types of donations as essential support for the charity’s mission. As mentioned, these gifts are recorded initially at fair value.

Because donated supplies and other materials provide important resources, these contributions are reported as support unless the not-for-profit entity cannot use or sell gifts. For example, ChildFund International includes the following note to its 2015 financial statements: “Donated or contributed property, plant and equipment, investments, services and gifts-in-kind are recorded at fair value when received. The majority of gifts-in-kind consists of TOM shoes and public service announcements. The fair value of gifts-in-kind are recorded using an exit value approach. ChildFund received approximately \$12,504,600 and \$14,528,000 of gifts-in-kind shoes during the years ended June 30, 2015 and 2014, respectively.” An exit value approach records the amount that would be received for the items under current market conditions.

To illustrate, assume that a local voluntary health and welfare organization begins a drive to gather furniture and clothing for needy families living in the nearby area. It receives the following items:

Bed . . . . .	\$ 800 fair value
Tables and chairs . . . . .	420 fair value
New clothing . . . . .	960 fair value
Used clothing . . . . .	<u>190 estimated resale value</u>
Total . . . . .	<u>\$2,370</u>

In addition, one patron donates investment securities with a fair value of \$32,000 to the charity with the stipulation that these assets be held in perpetuity with all income used to support local needy families.

Assume the charity distributed the furniture and clothing almost immediately. The not-for-profit entity records the following journal entries:

Inventory of Donated Materials . . . . .	2,370	
Unrestricted Net Assets—Contributions . . . . .		2,370
To record gifts received from donor to be distributed to needy families.		
Community Service Expenses—Assistance to the Needy . . . . .	2,370	
Inventory of Donated Materials . . . . .		2,370
To record distribution of furniture and clothing to needy families.		
Investments in Equity Securities . . . . .	32,000	
Permanently Restricted Net Assets—Contributions . . . . .		32,000
To record donation of investments to be held forever with all income used to aid needy families in the local area.		



## Discussion Question

### IS THIS REALLY AN ASSET?

Mercy Hospital is located near Springfield, Missouri. A religious organization created the not-for-profit hospital more than 90 years ago to meet the needs of area residents who could not otherwise afford adequate health care. Although the hospital is open to the public, its primary mission has always been to provide medical services for the poor.

On December 23, 2017, a gentleman told the hospital's chief administrative officer the following story: "My mother has been in your hospital since October 30. The doctors just told me that she will soon be well and can go home. I cannot tell you how relieved I am. The doctors, the nurses, and your entire staff have been wonderful. My mother could not have gotten better care. She owes her life to your hospital.

"I am from Idaho. Now that my mother is on the road to recovery, I must return immediately to my business. I am in the process of finding a buyer for an enormous tract of land. When this acreage is sold, I will receive \$30 million in cash. Because of the wonderful service that Mercy Hospital has provided my mother, I want to donate \$10 million of this money." The gentleman proceeded to write this promise on a piece of his personal stationery that he dated and signed.

Obviously, the hospital's officials were overwhelmed by this generosity. This \$10 million gift was 50 times larger than any other gift ever received. However, the controller was concerned about preparing financial statements for that year. "I have a lot of problems recording this type of donation as an asset. At present, we are having serious cash flow problems. If we show a \$10 million donation in this manner, our normal donors are going to think we have become rich and don't need their support."

What problems are involved in accounting for the \$10 million pledge? How should Mercy Hospital report the amount?

In connection with the donated securities, the not-for-profit will record income, when eventually earned, as an increase in temporarily restricted net assets. That money must be held for the purpose designated by the donor. This subsequent income is reported as temporarily restricted until used in that way. At that time, it is released from restriction and reclassified on the statement of activities as unrestricted net assets.

One further issue should be mentioned about the donation of the investment securities. To take advantage of generous tax benefits, many taxpayers transfer the title of appreciated shares of stock to not-for-profit entities right before the end of each calendar year. Unless the gift is restricted by the donor, charities often have a policy in place requiring that such shares be sold immediately so that the money can be put to use. This type of conveyance is so common that a question has been raised about the reporting on the charity's statement of cash flows. Is the sale of these shares an operating cash inflow from a contribution or an investing cash inflow from the disposal of stock? U.S. GAAP holds that this cash inflow should be reported as an operating activity if unrestricted securities are converted into cash by the entity almost immediately upon receipt.

### Reporting Works of Art and Historical Treasures

Present-day accounting rules often came into being only after long periods of sometimes heated debate. An appreciation of that history can be necessary to understand the logic behind rules that are now used on a daily basis without incident.

In 1990, FASB issued an exposure draft of a proposed official pronouncement that would have required a recipient to record all contributions, including works of art and museum

#### LO 18-4

Report the various types of contributions that a private not-for-profit entity can receive.

pieces, as assets with a corresponding increase in revenues. It sounds rather innocuous but rarely has an accounting proposal created such adverse public reaction. FASB was deluged with more than 1,000 letters, virtually all in opposition to the exposure draft. The argument against recognizing additions to such collections as assets is that works of art and historical pieces do not provide the same types of financial benefits as contributions of cash or investments. Items held for research or public exhibit create little or no direct increase in cash flows. In fact, such items often require continual outflows of cash for insurance, maintenance, and other preservation costs. Thus, they are not assets in a traditional sense. Opponents of this exposure draft argued that recognizing such donations as assets and revenues would mislead potential donors into overrating the organization's financial strength. Art works and museum pieces can have enormous values that are almost impossible to determine with any degree of assurance. What is the *Mona Lisa* really worth?

This vehement opposition apparently influenced FASB because when the new principle was issued in 1993, works of art, historical treasures, and the like were handled differently from other donated property. Disclosure rather than formal recognition in financial statement accounts can be selected if these art works and museum pieces meet the following criteria:

- (1) added to a collection for public exhibition, education, or research;
- (2) protected and preserved; and
- (3) covered by an organization policy whereby any proceeds generated from a future sale will be used to acquire other collection items so that these items do not function as a type of investment property.

For this reason, a note to Georgetown University's 2015 financial statements explains the school's decision not to report art and museum pieces as assets: "The University has elected not to capitalize the cost or value of its collection of works of art, historical treasures, and similar assets on the statements of financial position. Purchases of collection items are recorded as decreases in unrestricted net assets in the year in which the items are acquired or as decreases in temporarily or permanently net assets if the assets used to purchase the items are restricted by the donors. Contributed collection items are not reflected on the financial statements."

In contrast, a note to Princeton University's financial statements for the year ended June 30, 2015, indicates a different approach to reporting: "Art objects and rare books acquired through June 30, 1973, are carried at insurable values at that date because it is not practicable to determine the historical cost or market value at the date of gift. Art objects and rare books acquired subsequent to June 30, 1973, are recorded at cost or fair value at the date of gift."

A subtle difference exists between not-for-profit accounting for donated art and historical treasures and that utilized by state and local government units. The criteria for qualifying as a work of art or historical treasure are basically the same. However, the accounting choice for private not-for-profits is between recording both the contributed support and the asset versus no reporting, only disclosure. Governments face a different option. Under governmental accounting, contributed revenue must always be recorded for such gifts. The reporting entity then has the choice of recording either an asset or an expense when the donation is a qualifying work of art or historical treasure.

If a private not-for-profit entity does record such items as assets, the question of recording depreciation is again raised. The *Mona Lisa* was painted over 500 years ago with no end in sight for its ability to thrill art lovers. Consequently, private not-for-profit entities are not required to record depreciation for such assets if the lives are viewed as extraordinarily long. The assumption is that the organization has the technological and financial ability to preserve the item and that the value is such that the entity has committed to that goal. Thus, Princeton reports \$126.8 million in "fine arts objects" but does not depreciate them.

#### LO 18-4

Report the various types of contributions that a private not-for-profit entity can receive.

### Holding Contributions for Others

Some not-for-profit entities, such as the United Way, raise donations that will be distributed to other designated charities. Or, they accept gifts that must be conveyed to specified beneficiaries. A community group might solicit contributions by allowing the donor to identify the

charity to be benefited. Independent organizations often raise money solely for the use of the athletic programs of a separate college or university. The not-for-profit entity acts as a go-between, conveying donations from one party to another.

Such conveyances raise questions as to the appropriate recording to be made by all of the parties involved: the donor, the initial recipient, and the specified beneficiary. To illustrate, assume that Donor A gives \$10,000 in cash to Not-for-Profit Entity M (NFP-M) that must be conveyed to Not-for-Profit Entity Z (NFP-Z). Questions are raised by the addition of the middle party.

- Does Donor A record an expense when it initially conveys the cash to NFP-M, or must an actual transfer to NFP-Z take place before Donor A records an expense?
- Upon receipt, does NFP-M report contributed support of \$10,000 or rather a liability to NFP-Z?
- At what point should NFP-Z recognize contributed support as a result of this gift?

For a conveyance of this type, the donor normally records an expense when the property is first conveyed (to NFP-M) because control over the asset has been relinquished. In this case, Donor A makes the following entry:

<b>Donor A (Relinquishes Control)</b>		
Expense—Charitable Contribution . . . . .	10,000	
Cash . . . . .		10,000

However, if the donor retains the right to redirect the use of the gift (the donor is said to have variance power) or if the donation can be revoked, Donor A continues to maintain control over the property and does not record an expense until that authority is surrendered. At that point, Donor A makes the following entry instead of the previous one:

<b>Donor A (Retains Variance Power)</b>		
Refundable Advance to NFP-M . . . . .	10,000	
Cash . . . . .		10,000

The initial recipient usually records a liability to the eventual beneficiary for such gifts (rather than reporting contributed support). The money is merely passing through this not-for-profit entity and does not create any direct benefit for this organization. Thus, NFP-M is likely to make the following journal entry for the money received:

<b>NFP-M (Donation Passing through to Beneficiary)</b>		
Cash . . . . .	10,000	
Liability to NFP-Z . . . . .		10,000

However, other possibilities do exist. If the donor retains the right to revoke or redirect the gift, NFP-M cannot yet be certain as to whether the money will be conveyed to the beneficiary or back to the donor. Because the donor still has control over this decision, the preceding entry is replaced with the following:

<b>NFP-M (Donor Retains Control over Gift)</b>		
Cash . . . . .	10,000	
Refundable Advance from Donor A . . . . .		10,000

There is a third possibility. For a conveyed gift of this type, NFP-M does record contributed support and a related expense in one specific situation. Assume that the donor does

not retain the right to revoke or redirect the gift but instead gives variance power to NFP-M. Thus, this first charity has the authority to change the eventual beneficiary. In this situation, NFP-M gains actual control over the asset upon receipt and records the following entry rather than either of the previous two. NFP-M views the gift as support and not a liability. Then, when the \$10,000 is conveyed to the beneficiary, NFP-M records an expense for that amount. Control is the key to recording such conveyances.

<b>NFP-M (Holds Variance Power)</b>	
Cash .....	10,000
Temporarily Restricted Net Assets—Contributions .....	10,000

The final beneficiary of such a gift must record contributed support at some point. If the donor retains the right to revoke or redirect the gift or if NFP-M is given variance power to change the recipient, the named beneficiary makes no entry until the gift is received. Too much uncertainty exists until that time. The beneficiary has no power to control the property's movement until it possesses the item.

However, if the donor does not keep the right to revoke or redirect the gift and NFP-M has not received variance power, the uncertainty is eliminated. In that circumstance, the eventual recipient records the contribution as support as soon as the donor makes the gift to the first not-for-profit entity:

<b>NFP-Z (Gift to Be Received)</b>	
Contribution Receivable .....	10,000
Unrestricted Net Assets—Contributions .....	10,000

As always, the above entry needs to indicate whether the donation was unrestricted, temporarily restricted, or permanently restricted based on the terms established by the donor.

#### LO 18-4

Report the various types of contributions that a private not-for-profit entity can receive.

## Contributed Services

Donated services are an especially significant means of support for many not-for-profits. The number of volunteers working in some organizations can reach into the thousands. Charities rely heavily on individuals to fill administrative positions and engage in fund-raising and program activities. For the year ended June 30, 2015, the American Heart Association recognized more than \$9.6 million in contributed services. Notes to the entity's financial statements disclose that 69.9 percent of this amount related to research and another 22.4 percent related to public health education.

Not-for-profits recognize contributed services but only if the work being performed meets one of two criteria:

1. Creates or enhances a nonfinancial asset.
2. Requires a specialized skill possessed by the contributor that would typically need to be purchased if not donated.

Examples of work that fulfill the first standard include donated labor by carpenters, electricians, and masons. Because the work creates or enhances a nonfinancial asset, the fair value of the service is recorded as an increase in the appropriate asset with an accompanying recognition of the contributed support.

Examples of the second type of donation include legal or accounting services that are recognized as both an expense and contributed support. It is a common practice for professionals to bill a not-for-profit entity for the fair value of services rendered and then deduct an amount (or, possibly, the entire charge) from the balance as a contribution.

Contributed services (such as volunteer servers at a soup kitchen) are not recognized if they fail to meet both of these criteria. This exclusion is not because the services have no



value, but because of the difficulty in measuring that value. For example, the American Heart Association's financial statements explain,

The Association receives services from a large number of volunteers who give significant amounts of their time to the Association's programs, fundraising campaigns, and management. No amounts have been reflected for these types of donated services, as they do not meet the criteria for recognition.

To illustrate, assume that a certified public accountant provides accounting services to a local charity that would cost \$20,000 if not donated. Assume also that a carpenter donates materials (\$40,000) and labor (\$75,000) to construct an addition to the charity's facilities. The not-for-profit entity records the following journal entries:

General and Administrative Expenses—Accounting Services . . . . .	20,000	
Unrestricted Net Assets—Contributed Services . . . . .		20,000
To record contribution of professional services.		
Buildings and Improvements . . . . .	115,000	
Unrestricted Net Assets—Contributed Services . . . . .		75,000
Unrestricted Net Assets—Contributed Materials . . . . .		40,000
To record contribution of professional services and materials.		

A great many not-for-profit entities are composed of numerous affiliated groups existing throughout the country or the world. For example, a disclosure note to the 2015 financial statements for Habitat for Humanity International, Inc., explains "Habitat's mission is fulfilled primarily through the work of affiliated organizations and resource centers in approximately 70 countries around the globe."

At busy times, employees of one affiliate might be sent to assist in the operations of another affiliate without charge. Assuming that these workers meet either of the two criteria for recognition, should the entity receiving the work record this contributed service? Although the support is received for free, the workers are being paid by their own employer—an organization that is an affiliate of the reporting entity.

U.S. GAAP holds that a not-for-profit entity receiving the benefit of these workers should record the contribution at the cost paid by the affiliated organization. However, if that cost does not reflect the legitimate value of the services rendered, the charity has the option of reporting fair value. Once again, contributed support is recognized along with either an expense or an asset depending on whether a nonfinancial asset is created or enhanced.

## Exchange Transactions

Exchange transactions are reciprocal transfers if both parties give and receive something of value. Many not-for-profit entities have regular charges. A local YMCA will assess monthly membership dues for exercise classes and locker fees, whereas ChildFund International has monthly sponsorships for designated children. The reminders that arrive in the mail each month from these two organizations look very similar, but should the accounting be the same? The YMCA is providing a service. ChildFund is receiving donations for its stated mission.

Dues and fees are frequently considered reciprocal transfers. A paying member typically receives benefits in the form of newsletters, journals, and use of the organization's facilities and services. These transactions do not meet the definition of a contribution. Thus, they follow normal accrual basis accounting. Revenue is recognized when the performance obligations are satisfied.

However, if an individual derives little or no benefit (beyond personal satisfaction) from the monthly payments, the conveyance is viewed (at least in part) as contributed support. More precisely, the not-for-profit entity reports contribution support for the amount received in excess of the value of all goods or services that were provided.

Recording membership dues and the like as either revenue or contributed support causes no net effect on the financial statements but does shift the way in which an entity appears to attain resources. For example, assume that a not-for-profit entity receives \$500,000 in dues

from its membership. These members receive a monthly publication and several other benefits valued at only \$350,000. The extra \$150,000 is viewed as contributed support. Thus, the organization reports the receipt of this money as follows:

Cash .....	500,000	
Unrestricted Net Assets—Revenue from Dues .....		350,000
Unrestricted Net Assets—Contributions .....		150,000
To record receipt of membership dues where members receive benefits valued at \$350,000.		

### LO 18-5

Understand the impact of a tax-exempt status.

## Tax-Exempt Status

Although this is not a taxation textbook, no coverage of not-for-profit entities is complete without a short overview of tax rules. A primary reason for creating an entity as a not-for-profit is to qualify for tax-exempt status. Just as there are many different types of not-for-profit entities, quite a number of tax-exempt statuses are available that establish what these entities can and cannot do. Section 501(c)(3), Section 501(c)(4), and Section 501(c)(6) are three of the most common tax-exempt statuses in the US.

A note to the 2015 financial statements for The Museum of Modern Art explains that this not-for-profit entity is “exempt from tax under Section 501(c)(3) of the Internal Revenue Code.” The same status applies to over 1 million other organizations such as Duke University and the Girl Scouts of the United States of America. Section 501(c)(3) of the tax code applies to not-for-profit entities that fall within one of several categories such as charitable, educational, literary, or scientific. Over 74 percent of tax-exempt nonprofit organizations in the US hold a Section 501(c)(3) status.<sup>12</sup> An organization requests this status by completing IRS Form 1023, *Application for Recognition of Exemption under Section 501(c)(3) of Internal Revenue Code*. (<http://www.irs.gov/pub/irs-pdf/f1023.pdf>).<sup>13</sup>

Not surprisingly, many of the best-known not-for-profit entities qualify for Section 501(c)(3) status. They are then exempt from paying federal income taxes (and likely state income taxes) on most income. However, not-for-profit entities are still subject to taxation on any unrelated business income they generate. Because of the tax consequences, the decision as to whether income is unrelated business income is of interest to these entities and their officers and can be the source of much discussion between a not-for-profit and tax officials.<sup>14</sup>

One of the primary benefits of Section 501(c)(3) status is that charitable donations to these organizations can reduce the donor’s taxable income. Many believe this tax benefit encourages more and larger charitable gifts. Any suggestion to reduce or eliminate this deduction is met with considerable resistance.

In addition, such entities qualify for the benefit of a nonprofit postal permit that reduces mailing charges considerably. However, restrictions do exist. For example, although Section 501(c)(3) organizations may participate in a small amount of lobbying, they cannot engage in political election campaign activity.

Many other types of nonprofit entities do exist for tax purposes. At the end of 2013, there were 82,197 civic leagues and social welfare organizations, 62,398 fraternal beneficiary societies, 61,980 business leagues and chambers of commerce, and thousands of others.<sup>15</sup> For example, AARP, Inc., is a not-for-profit organization, but it is tax exempt based on Section 501(c)(4) of the Internal Revenue Code. That status is reserved for organizations that function exclusively for the promotion of social welfare. They are often referred to as *advocacy groups* because they operate primarily to further the general welfare of the people in their particular community. Again, income earned by the entity is not taxed at the federal

<sup>12</sup> <http://nccsweb.urban.org/PubApps/profile1.php?state=US>

<sup>13</sup> The Form 1023 filed by the YMCA of the United States can be viewed at [http://www.ymca.net/sites/default/files/organizational-profile/form\\_1023.pdf](http://www.ymca.net/sites/default/files/organizational-profile/form_1023.pdf). The form is over 225 pages in length.

<sup>14</sup> A good discussion of these tax issues can be found in “Reporting Unrelated Business Income,” by Travis Patton and Jocelyn Bishop in the February 2009 issue of the *Journal of Accountancy*.

<sup>15</sup> [://nccsweb.urban.org/PubApps/profile1.php?state=US](http://nccsweb.urban.org/PubApps/profile1.php?state=US)

level although it often is by the states. When individuals or corporations make donations to these organizations, they are not entitled to a tax deduction on their federal income tax return. Likewise, dues or membership fees paid to these groups do not qualify as tax deductible. As advocacy groups, they are allowed to lobby and engage in political election campaign activity. They do not qualify for a nonprofit postal permit unless they are also an educational organization.

As a final example of a tax-exempt status, the website for the Internal Revenue Service indicates that

Section 501(c)(6) of the Internal Revenue Code provides for the exemption of business leagues, chambers of commerce, real estate boards, boards of trade, and professional football leagues, which are not organized for profit and no part of the net earnings of which inures to the benefit of any private shareholder or individual. (<https://www.irs.gov/Charities-&-Non-Profits/Other-Non-Profits/Business-Leagues>)

Section 501(c)(6) organizations do not pay federal income taxes but are frequently required to pay state income taxes. Membership dues paid to these organizations are tax deductible so long as they are viewed as ordinary and necessary business expenses. Within certain limits, such entities can lobby and engage in political election campaign activity. As with a Section 501(c)(4), 501(c)(6) entities are allowed a nonprofit postal permit but only if they qualify as an educational organization.

Thus, although private not-for-profits are often viewed as a single group, in reality, as these three categories indicate, the tax laws and regulations include numerous distinctions among the various types of organizations.

Most tax-exempt entities are required to submit a Form 990 (*Return of Organization Exempt from Income Tax*, <http://www.irs.gov/pub/irs-pdf/f990.pdf>) to the Internal Revenue Service each year in order to maintain their tax-exempt status. The Form 990 requires disclosure of an extensive amount of information about operations and other activities. For many interested parties, the Form 990 is a better source of information than the entity's financial statements. Individuals and groups that study and assess charities and other not-for-profits frequently do so by gathering pertinent information from these forms.<sup>16</sup>

The information disclosed in a Form 990 is extensive and available to the public even if financial statements are not issued. A few of the topics included in this document are

- Part VII—Compensation of Officers, Directors, Trustees, Key Employees, Highest Compensated Employees, and Independent Contractors.
- Part VIII—Statement of Revenue.
- Part IX—Statement of Functional Expenses.
- Part X—Balance Sheet.

#### LO 18-6

Account for both mergers and acquisitions of not-for-profit entities.

## Mergers and Acquisitions

The story is the same across the country. The once-booming nonprofit sector is in the midst of a shakeout, leaving many Americans without services and culling weak groups from the strong. Hit by a drop in donations and government funding in the wake of a deep recession, nonprofits—from arts councils to food banks—are undergoing a painful restructuring, including mergers, acquisitions, collaborations, cutbacks and closings.<sup>17</sup>

Five United Way chapters in northern New Jersey—Morris County, North Essex, Somerset County, Sussex County and Warren County—will merge Jan. 3 following a year of talks on how to increase their fund-raising, now a combined \$15 million a year, and operate more efficiently in the face of a prolonged economic slowdown that has severely hurt many charities that depend on donations from United Way.<sup>18</sup>

<sup>16</sup> The Form 990 filed by United Cerebral Palsy can be viewed at <http://ucp.org/wp-content/uploads/2013/01/FY13-990-form.pdf>. It is over 45 pages and contains a wide array of information about the charity.

<sup>17</sup> Shelly, Banjo, and Mitra Kalita, "Once-Robust Charity Sector Hit with Mergers, Closings," *The Wall Street Journal* (online), January 31, 2010.

<sup>18</sup> Beth, Fitzgerald, "It's a More United Way as Five Chapters Merge," *NJBIZ*, December 27, 2010.

Mergers and acquisitions are not limited to the world of business. In recent years, they have also become more prevalent in the world of not-for-profits. Two or more of these entities might decide to join together for a number of reasons such as more efficient use of resources to achieve common goals, cost cutting, attempts to rescue charities that are suffering financially, and expanding the scope of an organization's outreach. For example, in the spring of 2013, two theater companies in Richmond, Virginia, that both specialized in the plays of William Shakespeare decided to merge to better serve their patrons.

Accounting for such combinations utilizes many of the techniques demonstrated in early chapters of this textbook in connection with the consolidation of both for-profit companies and governmental units. However, the process here takes several unique steps in creating a single set of statements when two or more not-for-profit entities come together.

### ***Acquisitions***

In not-for-profit accounting, an acquisition occurs—as might be suspected from the title—when one organization obtains control over another. As described in previous chapters, control that leads to the consolidation of for-profit businesses is normally based on gaining ownership of a majority of the voting stock. With not-for-profit entities, the official definition of control is broader: “The direct or indirect ability to determine the direction of management and policies through ownership, contract, or otherwise.”<sup>19</sup>

In many respects, accounting for a not-for-profit acquisition parallels the process demonstrated previously in consolidating two for-profit businesses. Each of the assets and liabilities of the acquired not-for-profit entity are identified and reported by the acquirer at fair value as of the acquisition date (the date on which control is achieved). If the total acquisition value of the acquired entity is greater than the total value of all identifiable assets and liabilities, the excess is reported on the balance sheet as goodwill. Those steps follow the pattern established to consolidate for-profit companies.

One important distinction in the process is made at this point. The recognition of goodwill implies the existence of an otherwise unrecorded ability to generate especially high revenues and profits in the future, higher than expected to occur based solely on the identifiable assets and liabilities. This reporting of goodwill is appropriate for organizations such as the YMCA and the Girl Scouts with significant sources of revenue such as the sale of goods or services or the collection of membership fees. However, what about acquired entities that bring in little or no revenue from exchange transactions but rely on donations or grants? Does the excess value of the acquired entity reflect an asset that provides economic benefit if few revenues will be generated in the future?

Consequently, in not-for-profit acquisitions, the accounting for this excess depends on the type of revenue or support that is anticipated. If the future operations of the acquired entity are expected to be predominantly supported by contributions and returns on investments (rather than fees or the sale of goods or services), any unexplained excess acquisition value is reported as a reduction in unrestricted net assets on the statement of activities rather than as the intangible asset goodwill.<sup>20</sup>

### ***Mergers***

All consolidated financial statements produced by for-profit businesses are created using a single set of basic rules. However, as with governmental accounting, two methods of reporting the creation of a combination exist for not-for-profit entities. The acquisition method is not the only one that can be applied. If two or more not-for-profit entities come together to form a new not-for-profit and control is turned over to a newly created governing board, then a merger rather than an acquisition has taken place. Two organizations were merged to create a third. An acquirer did not gain control over an acquired entity. A different type of event took place.

<sup>19</sup> FASB ASC 958-810-20.

<sup>20</sup> “Predominantly supported” means that significantly more of the revenues to be generated by the acquired entity will come from contributions and investment income than from all other sources combined.

In a merger, because neither entity is acquired, identifiable assets and liabilities are not updated to fair value. Instead, the carryover method is applied. The newly formed not-for-profit reports all previously recognized assets and liabilities at their book values as of the date of the merger. Fair-value adjustments are not made. Book value is retained for the assets and liabilities of both parties.

**Example of Acquisition and Merger**

Assume that Rather Large NFP is a private not-for-profit entity that is to be joined to Small NFP, another not-for-profit. Small NFP has been struggling financially. The combination is carried out to help save this entity and the charitable work that it performs.

On the date the combination is created, Small NFP holds just one asset, a building with a net book value of \$600,000 but a fair value of \$700,000. It has no liabilities. Rather Large NFP has several buildings as well as many other assets. These buildings have a net book value of \$3 million and a fair value of \$3.9 million.

- Situation One: Assume that Rather Large NFP pays \$820,000 to acquire complete control over Small NFP.

This transaction is an acquisition. Control has been gained by one entity over the other. The building owned by Small NFP is added at fair value to the net book value of Rather Large NFP’s building account. The balance will now be \$3.7 million (\$3 million net book value of the previous buildings plus the \$700,000 fair value of the new one).

If Small NFP’s future operations will not be predominately supported by contributions and investment income, the excess acquisition value of \$120,000 (\$820,000 acquisition value less \$700,000 fair value of the identifiable assets and liabilities) is reported as the intangible asset goodwill. In contrast, if Small NFP will be predominately supported in the future by contributions and investment income rather than sales or fees, this residual \$120,000 figure is reported as a reduction in unrestricted net assets in the statement of activities rather than as goodwill.

- Situation Two: Assume that, instead of paying money to gain control, Rather Large NFP and Small NFP join together to form Huge NFP to be operated by an entirely new governing board.

This event qualifies as a merger. The carryover method is applied and book value is retained. Buildings will now be shown at \$3.6 million (\$3 million net book value from Rather Large NFP plus \$600,000 net book value from Small NFP). No goodwill or reduction in net assets is reported. No acquisition value is determined so an excess amount cannot result. In a merger, all assets and liabilities are brought together at book value.

**LO 18-2**  
Describe the difference in assets that are unrestricted, temporarily restricted, or permanently restricted and explain the method of reporting these categories.

**Transactions for a Private Not-for-Profit Entity Illustrated**

The following transactions demonstrate typical journal entries for a private not-for-profit entity. Because financial reporting for these organizations focuses on the entity as a whole, transactions need not be recorded in separate funds. However, not-for-profits can choose to use a fund format for internal management purposes, especially to help monitor restricted gifts. External reporting by funds as supplemental information is permitted provided that all interfund transactions are eliminated.

To illustrate, assume that Eastern Institute, a small private college, began the current year with unrestricted net assets of \$12,500,000 and a permanently restricted endowment of \$7,000,000. During the year, the school received support from a number of alumni and friends:

Unrestricted pledges due within 12 months. . . . .	\$130,000
Cash contributions to increase the endowment permanently. . . . .	50,000

Based on past experience, Eastern estimates that only 85 percent of these unrestricted pledges will be received. Because officials expect to collect this money within 12 months, computation of present value is not necessary.

1. Cash .....	50,000	
Contributions Receivable .....	130,000	
Allowance for Uncollectible Pledges (\$130,000 × 15%) .....		19,500
Unrestricted Net Assets—Contributions .....		110,500
Permanently Restricted Net Assets—Contributions .....		50,000
To record cash contributions and pledges received.		

Before the end of the fiscal period, the school collects \$100,000 of the amount pledged and writes off \$5,000 of the remaining pledges.

2. Cash .....	100,000	
Allowance for Uncollectible Pledges .....	5,000	
Contributions Receivable .....		105,000
To record pledges collected and written off.		

Because of the high costs involved in obtaining a college education, many schools distribute a significant amount of financial aid to students. At one time, schools reported scholarships and other monetary assistance as operating expenses separately from revenue. Now, to provide a clearer picture of the direct impact these reductions have on tuition and other fees, schools first report the amount billed which is then reduced by student aid.

With that reporting, the impact of financial assistance can be easily calculated for private colleges and universities as is shown below (for fiscal years ending during 2015). The required accounting allows for easier comparisons of the revenue actually generated.

School	Student Tuition and Fees	Scholarships and Other Assistance	Net Amount/Percentage
Notre Dame	\$543.9 million	\$246.0 million	\$297.9 million (54.8%)
Wake Forest	332.5 million	97.6 million	234.9 million (70.6%)
Colgate	141.8 million	50.1 million	91.7 million (64.7%)
Georgetown	713.8 million	159.2 million	554.6 million (77.7%)
Princeton	336.8 million	224.8 million	112.0 million (33.3%)

Thus, students at these five schools paid an average of 33.3 to 77.7 percent of the normal tuition and fees that their schools charged.

Returning to the current example, assume that Eastern charges its students \$800,000 in tuition and other fees. To help offset the financial burden, the school awards \$200,000 in scholarships and other assistance. At the same time, Eastern receives a \$20,000 cash gift that the outside donor restricts to providing support for a series of lectures by visiting scholars.

The journal entries for the tuition charges and scholarships are shown first below followed by recording of the restricted gift.

3. Tuition Receivable .....	800,000	
Unrestricted Net Assets—Tuition Revenue .....		800,000
Tuition charged for the current period.		
Financial Aid .....	200,000	
Tuition Receivable .....		200,000
To record financial aid awards for the current year, an amount that is reported as a reduction in tuition revenue.		
Cash .....	20,000	
Temporarily Restricted Net Assets—Contributions .....		20,000
Gift restricted for use in a lecture series.		

Next, assume that Eastern Institute incurs liabilities of \$640,000 (\$575,000 for operating expenses broken down as the following entry shows and \$65,000 for the acquisition of equipment). Of this total, \$625,000 is paid before year-end.

4. Instructional Expenses .....	265,000	
Student Services Expenses .....	120,000	
Maintenance Expense .....	75,000	
Administrative Expenses .....	115,000	
Accounts Payable .....		575,000
To record expenses for the year.		
5. Equipment .....	65,000	
Accounts Payable .....		65,000
To record purchases of equipment .....		
6. Accounts Payable .....	625,000	
Cash .....		625,000
To record partial payment of outstanding accounts payable.		

Depreciation on the school's buildings and equipment amounts to \$135,000 for the year, as shown in the following journal entry:

7. Depreciation Expense—Instruction .....	80,000	
Depreciation Expense—Student Services .....	20,000	
Depreciation Expense—Administration .....	35,000	
Accumulated Depreciation, Buildings, and Equipment .....		135,000
To record depreciation on fixed assets.		

### Transactions Reported on Statement of Activities

The year-end reporting for this not-for-profit entity will reflect the changes within each of the three categories of net assets. As mentioned previously, these organizations must also report any temporarily restricted resources released from restriction because the designated action is taken or the stipulated time passes. To illustrate, assume the instructional expenses recognized in entry (4) include \$15,500 relating to the series of lectures by visiting scholars established in entry (3). That portion of the restriction has now been met. On the statement of activities, this amount is reclassified by reducing temporarily restricted net assets and increasing unrestricted net assets.

The following table summarizes this year's changes in unrestricted, temporarily restricted, and permanently restricted net assets for Eastern Institute. The table does not include journal entries 2, 5, and 6 because they did not create any changes in the school's net assets. In the future, only two columns will be shown: "net assets without donor restriction" and "net assets with donor restrictions."

Calculation of Change in Net Assets			
Journal Entry	Unrestricted Net Assets	Temporarily Restricted Net Assets	Permanently Restricted Net Assets
1	\$ 110,500		\$50,000
3	800,000	\$ 20,000	
	(200,000)		
4	(575,000)		
7	(135,000)		
Net assets released from restriction	15,500	(15,500)	
Increase (decrease) in net assets	<u>\$ 16,000</u>	<u>\$ 4,500</u>	<u>\$50,000</u>



## Discussion Question

### ARE TWO SETS OF GAAP REALLY NEEDED FOR COLLEGES AND UNIVERSITIES?

As this and the previous chapter have discussed, public colleges and universities follow GASB standards. These schools have been directed to use the same reporting model as state and local governments. Such schools frequently classify themselves as special purpose governments consisting solely of business-type activities. In that way, they only need to produce fund financial statements as an enterprise fund.

In contrast, private not-for-profit colleges and universities adhere to FASB *Accounting Standards Codification*<sup>®</sup> requirements and prepare financial statements as illustrated in this chapter. U.S. GAAP for public schools comes from GASB while, for private schools, it comes from FASB.

Readers of college and university financial statements might want to compare the data presented by various institutions. This information is especially important to potential donors who are attempting to evaluate each school's efficiency and effectiveness in utilizing the funding that it receives.

Are decision makers well served by the division between the financial reporting for public colleges and universities and that utilized by private colleges and universities? Are these two types of schools so different that they require two separate sets of generally accepted accounting principles created by two official bodies? Should a single set of U.S. GAAP apply to all schools? Should only one group be in charge of developing U.S. GAAP for colleges and universities?

#### LO 18-7

Describe the unique aspects of accounting for health care entities.

## Accounting for Health Care Entities

At one time, the financial reporting process for each type of not-for-profit entity varied somewhat based on unique aspects of the different operations. Although many of those separate reporting distinctions have been removed over the years, some still remain. In colleges and universities, scholarships and other financial aid are subtracted directly from tuition revenue. The new FASB update will narrow such reporting differences even further as more standard requirements are developed for not-for-profit entities.

Probably the most distinctive version of not-for-profit accounting at the current time belongs to health care entities. Many thousands of these institutions provide a wide variety of services throughout the United States. Virtually every city and town of any size has hospitals, assisted living facilities, medical clinics, and the like. The large number of these enterprises is not surprising because health care expenditures now make up roughly 17.6 percent of the gross domestic product in this country.<sup>21</sup> Because of society's focus on the importance of adequate health care, a wide array of organizations including for-profit endeavors, governmental operations, and private not-for-profit entities provide services. These various operations often compete against each other in the same market.

From a financial reporting perspective, a private not-for-profit health care entity has no need to compute and display a net income figure. The amount of earned income is not germane to the organization's mission. However, readers of financial statements need a method to help measure the efficiency of current operations. Just because profit is not a goal does not

<sup>21</sup> Jason Kane, "Health Costs: How the U.S. Compares with Other Countries," *PBS NewsHour*, October 22, 2012. <http://www.pbs.org/newshour/rundown/health-costs-how-the-us-compares-with-other-countries/>



mean that losses should be ignored. Consequently, FASB requires the reporting of a “performance indicator” to reflect operational success or failure.

The statement of operations for not-for-profit, business-oriented health care entities shall include a performance indicator. Because of the importance of the performance indicator, it shall be clearly labeled with a descriptive term such as revenues over expenses, revenues and gains over expenses and losses, earned income, or performance earnings.<sup>22</sup>

For example, with its 2015 financial statements, Duke University provides operating indicators to reflect the success of its health system (DUHS): “The fiscal 2015 net operating income of \$355 million reported in DUHS’ separately-issued consolidated statement of operations represents an increase of \$259 million compared to fiscal 2014.”

### Accounting for Patient Service Revenues

Not surprisingly, the largest source of revenue for most health care providers is patient services. For example, the University of Virginia Medical Center reported in 2013 that \$1.17 billion of its total revenue of \$1.24 billion came from net patient service revenue. Such amounts include charges for surgery, nursing care, medicine, physical therapy, laboratory work, X-rays, blood transfusions, food, and so forth.

However, the patients themselves rarely provide much of this revenue. A major factor influencing the financial reporting of health care entities is the presence of third-party payors such as insurance companies, Medicare, and Medicaid. These organizations often pay most, if not all, of the cost of the medical services that patients receive. Because of the significant monetary amounts involved, third-party payors have historically sought reliable financial data, especially concerning the costs of patient care.

#### *Reductions in Patient Service Revenues*

For a variety of reasons, health care entities often receive much less in total payment than the amount they charge for specific patient services. Bad debts and other fee reductions can be significant. In order to provide complete financial data about current operations, these organizations initially record revenues at standard rates. Then they report each of the various reductions in a specified manner to best reflect the overall financial impact. A parallel can be seen here between health care entities and the reporting of scholarships and other financial assistance by not-for-profit schools.

Assume, as an illustration, that patient charges for the current month at a local not-for-profit medical clinic total \$750,000. Of this amount, only \$170,000 is due from patients. The remaining \$580,000 is billed to third-party payors: Medicare, Medicaid, and a number of insurance companies. Regardless of expected receipts, the clinic records these revenues through the following journal entry at the charged amounts.

Accounts Receivable—Third-Party Payors . . . . .	580,000	
Accounts Receivable—Patients . . . . .	170,000	
Patient Service Revenues . . . . .		750,000
To record accrual of patient charges for current month.		

The entire \$750,000 is reported as patient service revenue although complete collection is doubtful. This approach is considered the best method of reflecting the financial impact of the health care entity’s activities during the period.

To illustrate, assume that the clinic estimates that \$20,000 of the patient receivables will not be collected. Furthermore, some not-for-profit health care entities make no serious attempt to collect amounts that patients (especially indigent patients) owe. In many cases, these facilities were originally created to serve the poor. A note to the financial statements of St. Jude Children’s Research Hospital, Inc. clearly states its policy: “No family ever pays the Hospital

<sup>22</sup> FASB ASC 954-225-45-4.

for the care their child receives. Accordingly, net patient service revenue consists only of estimated net realizable amounts from third-party payors for services rendered.”

The financial impact of the decision to provide charity care must be disclosed to provide information about the direct and indirect costs of these services. Consequently, Duke University indicated that it provided charity care in 2015 with an estimated total cost of \$70 million.

Beyond the \$20,000 in uncollectible accounts, assume that another \$88,000 of the accounts receivable will never be collected because several specific patients earn incomes at or below the poverty level and their charges will be removed.

To mirror these anticipated reductions, the hospital records two additional entries. As the following shows, the handling of these reductions is not identical. The \$20,000 in expected bad debts are not reported as an expense as in a for-profit business but rather as a contra-revenue account to reduce those patient service revenues to a net amount. In contrast, both the revenue and receivable for the \$88,000 in charity care are removed entirely so that no financial reporting is shown. If the work was performed without any intention of seeking collection, no basis exists for recognizing a financial effect.

Provision for Bad Debts . . . . .	20,000	
Allowance for Uncollectible and Reduced Accounts . . . . .		20,000
To record estimation of receivables that will prove to be uncollectible.		
Patient Service Revenues . . . . .	88,000	
Accounts Receivable—Patients . . . . .		88,000
To remove accounts that will not be collected because patients' earned income is at the poverty level. The cost of these services must be disclosed.		

For not-for-profit health care entities, the cost of charity care can be enormous. Consequently, the direct and indirect cost of that care must be disclosed in the financial statements so that decision makers are made aware of the impact. In a disclosure note to its 2015 financial statements, Vanderbilt University reported a cost for such charity care and community benefits of \$422 million incurred by its hospital and other medical facilities.

### ***Contractual Agreements with Third-Party Payors***

The adjustments in the preceding entries reflect amounts that the health care entity will not collect from patients. Such organizations usually must make an additional revenue reduction in connection with amounts due from third-party payors. Organizations such as insurance companies and Medicare often establish contractual arrangements with health care providers stipulating set rates that will be paid for specific services. The entity agrees, in effect, to accept as payment in full an amount that the third-party payor computes as reasonable (based on the average cost within the locality in which the service was rendered). This arrangement indicates the power of third-party payors. They can pay what they believe is appropriate.

For example, a note to the 2015 financial statements for Duke University explains the relationship that its health system (DUHS) has with third-party payors.

Patient service revenue is recognized in the period in which services are rendered. DUHS has agreements with third-party payors that provide for payments to DUHS at amounts that are generally less than its established rates. Payment arrangements include prospectively determined rates per discharge, reimbursed costs, discounted charges and per diem payments. Accordingly, net patient service revenue is reported at the estimated net realizable amounts from patients, third-party payors, and others, including estimated retroactive adjustments under reimbursement agreements with third-party payors.

Thus, although a health care entity charges a patient \$30,000, for example, it might collect only \$27,000 (or some other total) from a third-party payor if the lower figure is determined to be appropriate. The entity writes off the remaining \$3,000, commonly referred to as a *contractual adjustment*. Patient service revenue is \$30,000 but net patient service revenue, after reduction for the contractual adjustment, is only \$27,000.

For matching purposes, the health care entity should estimate and recognize these reductions in the same period that it earns the patient service revenue. In the example previously presented, the clinic probably does not anticipate collecting the entire \$580,000 billed to third-party payors. The actual amount that will be received might not be known until a later period so it must be estimated. Assume that this medical facility projects receiving only \$420,000 of the \$580,000 charge. To establish a proper value for the reported revenues, the entity records another \$160,000 reduction.

Contractual Adjustments . . . . .	160,000	
Allowance for Uncollectible and Reduced Accounts. . . . .		160,000
To recognize estimated reduction in patient billings because of contractual arrangements made with third-party payors.		

## Summary

1. Financial statements for not-for-profit entities are designed to provide users, including contributors, with an overall view of the organization's financial position, results of operations, and cash flows.
2. The required financial statements for private not-for-profit entities include a statement of financial position, statement of cash flows, and statement of activities. Voluntary health and welfare entities are also required to issue a statement of functional expenses. All not-for-profit entities will soon have the same requirement.
3. The financial statements must distinguish among assets that are permanently restricted, temporarily restricted, and unrestricted. These classification will soon change to *net assets without donor restrictions* and *net assets with donor restrictions*. Temporarily restricted assets are expected to be released from restriction after the passage of time or the performance of some act. The release causes an increase in unrestricted net assets and a decrease in temporarily restricted net assets. Permanently restricted net assets are expected to be restricted for as long as the not-for-profit exists.
4. Not-for-profit entities report expenses as reductions in unrestricted net assets. In either the statement of activities or in note disclosure, expenses are reported by their functional classification as either program services or supporting services. Program services are goods or services provided to beneficiaries or others that fulfill the organization's mission. Supporting services encompass general administration and fund-raising.
5. Reporting requirements have been established for contributions, which are unconditional transfers of cash or other resources to an entity in a voluntary nonreciprocal transaction.
6. Not-for-profit entities recognize contributions, including unconditional promises to give, as support in the period received at fair value. Pledges to be collected more than one year into the future must be reported at present value and also reduced by any expected uncollectible amounts.
7. These private entities recognize contributed services as support if they either create or enhance nonfinancial assets or require a specialized skill (for example, accounting, architecture, or nursing) that would be purchased if not provided by donation.
8. Not-for-profit entities sometimes receive donations that must be given to a different beneficiary. While the gift is held, the asset is normally recorded along with an accompanying liability. However, if the entity is given variance power to change the beneficiary, then the not-for-profit records a contribution rather than a liability.
9. Not-for-profit organizations can be brought together by creating either an acquisition or a merger. In an acquisition, one party gains control of the other. The accounting is much like that used in the consolidation of for-profit businesses with all identifiable assets and liabilities of the acquired entity reported at fair value. As one major exception, goodwill is charged off immediately (rather than capitalized) if the acquired organization is predominantly supported by gifts and investment income. In a merger, the entities come together under the control of a newly formed not-for-profit with a different governing body. When a merger occurs, the financial information is combined using the carryover method, which retains the previous book values.
10. Private educational institutions record tuition revenue at the full amount charged. Scholarships and other financial assistance are then subtracted directly from this revenue figure on the statement of activities to better reflect the reality of the amount actually received from students.
11. Health care entities frequently receive less than the full amount of patient service charges. These entities show contractual adjustments with third-party payors as deductions from revenue in reporting net patient service revenue. These entities also estimate bad debts and report them as direct reductions in the related revenue. Charity care charges are not recorded because no attempt at collection is made.

## Comprehensive Illustration

### Problem

(Estimated time: 30 to 45 minutes) Augusta Regional Health Center is a private not-for-profit hospital offering medical care to a variety of patients, including some with no ability to pay for the services received. In addition, the health center sponsors an educational and research consortium on childhood diseases with the financial support of a private foundation. Augusta also holds an endowment, the principal of which must be maintained permanently. However, the earnings are available to provide charity care.

### Required

- a. During 2017, Augusta has the following financial transactions. Prepare the journal entries for each of the following:
- The hospital renders \$950,000 in services to patients. Of this amount, it charges \$700,000 to third-party payors. The administration estimates that only \$800,000 will be collected. Of the \$150,000 difference, \$85,000 represents estimated contractual allowances with insurance and Medicare providers, \$20,000 is charity care, and \$45,000 is estimated bad debts.
  - A local business donates linens to the hospital with a \$3,000 fair value.
  - Cafeteria sales and gift shop receipts total \$76,000.
  - The hospital incurs expenses of \$12,000 in connection with the annual meeting of the childhood disease consortium. Funding for this educational and research event was received as a restricted donation in an previous year.
  - The hospital receives unrestricted, unconditional pledges of \$12,500. The administration expects to collect 80 percent of this money. In addition, securities with a fair value of \$8,000 were received. The donor requires these securities to be held forever with subsequent income available for general operating activities.
  - A computer consultant donates services to upgrade several of the hospital's computer systems. The value of these services was \$3,000 and would have been acquired if not donated.
  - The hospital incurs the following liabilities:
    - \$102,000 for purchase of supplies
    - \$699,000 for salaries
    - \$50,000 for purchase of equipment
  - End-of-year adjustment included supplies expense of \$99,000 and depreciation expense of \$72,000.
- b. Prepare a schedule showing the change in unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets.

### Solution

a. 1.

Accounts Receivable—Patients . . . . .	250,000	
Accounts Receivable—Third-Party Payors . . . . .	700,000	
Patient Service Revenues . . . . .		950,000
To accrue billings for the current period.		
Contractual Adjustments . . . . .	85,000	
Allowance for Contractual Adjustment . . . . .		85,000
To recognize estimated amounts not expected to be collected from third-party payors.		
Patient Service Revenues . . . . .	20,000	
Accounts Receivable—Patients . . . . .		20,000
To remove the amount for charity care for which no expectation to collect exists.		
Provision for Bad Debts . . . . .	45,000	
Allowance for Uncollectible Accounts . . . . .		45,000
To recognize estimated amounts not expected to be collected from patients. The provision for bad debts is reported as a contra revenue to reduce patient service revenues.		

2.		
Inventory of Supplies .....	3,000	
Unrestricted Net Assets—Contribution of Materials .....		3,000
To recognize fair value of donated items.		
3.		
Cash .....	76,000	
Unrestricted Net Assets—Revenues—Cafeteria and Shops .....		76,000
To record cafeteria and gift shop revenue.		
4.		
Consortium Expenses .....	12,000	
Cash .....		12,000
To record expenses in connection with the childhood disease consortium.		
5.		
Contributions Receivable .....	12,500	
Investment .....	8,000	
Allowance for Uncollectible Pledges .....		2,500
Unrestricted Net Assets—Contributions .....		10,000
Permanently Restricted Net Assets—Contributions .....		8,000
To record pledges and investments received at estimated fair value.		
6.		
Expenses for Professional Services .....	3,000	
Unrestricted Net Assets—Contributed Services .....		3,000
To record donated services.		
7.		
Supplies Inventory .....	102,000	
Equipment .....	50,000	
Accounts Payable .....		152,000
To record goods received.		
Salaries Expense .....	699,000	
Accrued Salaries Payable .....		699,000
To record salaries payable.		
8.		
Supplies Expense .....	99,000	
Supplies Inventory .....		99,000
To record supplies expense for the period.		
Depreciation Expense .....	72,000	
Accumulated Depreciation .....		72,000
To record depreciation expense for the period.		

b.

Calculation of Change in Net Assets			
Journal Entry	Unrestricted Net Assets	Temporarily Restricted Net Assets	Permanently Restricted Net Assets
1 . . . . .	\$ 950,000		
	(85,000)		
	(20,000)		
	(45,000)		
2 . . . . .	3,000		
3 . . . . .	76,000		
4 . . . . .	(12,000)		
5 . . . . .	10,000		\$ 8,000
6 . . . . .	(3,000)		
	3,000		
7 . . . . .	(699,000)		
8 . . . . .	(99,000)		
	(72,000)		
Net assets released from restriction— childhood disease consortium . . . . .	12,000	\$(12,000)	
Increase (decrease) in net assets . . . . .	<u>\$ 19,000</u>	<u>\$(12,000)</u>	<u>\$ 8,000</u>

## Questions

- Which organization is responsible for issuing reporting standards for private not-for-profit colleges and universities?
- What information do financial statement users want to know about a not-for-profit entity?
- What financial statements are required for private not-for-profit colleges and universities?
- What are temporarily restricted net assets?
- What are permanently restricted net assets?
- In reporting the functional expenses of a not-for-profit entity, what are the two general types of expenses?
- What ratio is frequently used to assess the efficiency of not-for-profit entities?
- Why is a statement of functional expenses required of a voluntary health and welfare entity?
- A donor gives a gift to a charity that must be conveyed to a separate beneficiary. What is the normal method of reporting for each party?
- A donor gives a gift to a charity that is to be conveyed to a separate beneficiary. What is the method of reporting for each party if the donor retains the right to revoke or redirect use of the gift?
- A donor gives a gift to a charity that is to be conveyed to a separate beneficiary. What is the method of reporting for each party if the charity receives variance power enabling it to change the identity of the beneficiary?
- Under what conditions does a not-for-profit entity record donated services?
- A private not-for-profit entity sends a direct mail solicitation for monetary donations. Other information is included with the mailing. Under what conditions can the organization report part of the cost of this mailing as a program service cost rather than as purely a fund-raising cost?
- A private not-for-profit entity receives numerous pledges of financial support to be conveyed at various times over the next few years. Under what condition should these pledges be recognized as receivables and contributed support? At what amount should these pledges be reported?
- What is the difference between an unconditional promise to give and an intention to give?
- When should membership dues be considered revenue rather than contributions?
- What are the two methods that can be used to account for the combination of two or more private not-for-profit entities into a single entity?

18. Sunshine NFP, a not-for-profit entity, gains control over Dancing Bears NFP, another not-for-profit. The acquisition value of Dancing Bears is \$2.3 million, but all of its identifiable assets and liabilities have a total fair value of only \$2.1 million. What recording is made of the \$200,000 difference?
19. Helping Hand NFP is a private not-for-profit entity that has equipment with a net book value of \$1.1 million but a fair value of \$1.4 million. Fancy Fingers is a private not-for-profit entity that has equipment with a net book value of \$1 million and a fair value of \$1.2 million. If these two entities combine, what are the possible amounts that can be reported for this equipment?
20. What is a third-party payor, and how does the presence of such payors affect the financial accounting of a health care entity?
21. What is a contractual adjustment? How does a health care organization account for a contractual adjustment?

## Problems

### LO 18-7

1. A private not-for-profit health care entity has the following account balances:

Revenue from newsstand .....	\$ 50,000
Amounts charged to patients .....	800,000
Interest income .....	30,000
Salary expense—nurses .....	100,000
Provision for bad debts .....	10,000
Undesignated gifts .....	80,000
Contractual adjustments .....	110,000

What is reported as the organization's net patient service revenue?

- a. \$880,000
- b. \$800,000
- c. \$690,000
- d. \$680,000

### LO 18-1

2. A large private not-for-profit entity's statement of activities should report the net change for net assets that are

	Unrestricted	Permanently Restricted
a.	Yes	Yes
b.	Yes	No
c.	No	No
d.	No	Yes

### LO 18-1

3. Which of the following statements is true?
  - I. Private not-for-profit universities must report depreciation expense.
  - II. Public universities must report depreciation expense.
  - a. Neither I nor II is true.
  - b. Both I and II are true.
  - c. Only I is true.
  - d. Only II is true.

### LO 18-2

4. A private not-for-profit entity receives three large cash donations:
  - One gift of \$70,000 is unrestricted.
  - One gift of \$90,000 is restricted to pay the salary of the organization's workers.
  - One gift of \$120,000 is restricted forever with the income to be used to provide food for needy families.
 Which of the following statements is *not* true?
  - a. Temporarily restricted net assets have increased by \$90,000.
  - b. Permanently restricted net assets have increased by \$210,000.
  - c. When the donated money is spent for salaries, unrestricted net assets will increase and decrease by the same amount.
  - d. When the donated money is spent for salaries, temporarily restricted net assets will decrease.

LO 18-4

5. A donor gives Charity 1 \$50,000 in cash that it must convey to Charity 2. However, the donor can reconsider and revoke the gift at any time prior to its conveyance to Charity 2. Which of the following statements is true?
- Charity 1 should report a contribution revenue.
  - The donor continues to report an asset even after it is given to Charity 1.
  - As soon as the gift is made to Charity 1, Charity 2 should recognize a contribution revenue.
  - As soon as the gift is made to Charity 1, Charity 2 should recognize an asset.

LO 18-2

6. A private not-for-profit university charges its students tuition of \$1 million. However, financial aid grants total \$220,000. In addition, the school receives a \$100,000 grant restricted for faculty salaries. Of this amount, \$30,000 is spent appropriately this year. On the statement of activities, the school reports three categories: (1) revenues and support, (2) net assets reclassified, and (3) expenses. Which of the following is *not* true?
- Unrestricted net assets should show an increase of \$30,000 for net assets reclassified.
  - In the unrestricted net assets, the revenues and support should total \$1 million.
  - Unrestricted net assets should recognize expenses of \$30,000.
  - Unrestricted net assets shows the \$220,000 as a direct reduction to the tuition revenue balance.

LO 18-4

7. A private not-for-profit entity has the following activities performed by volunteers who work at no charge. In which case should *no* contribution be reported?
- A carpenter builds a porch on the back of one building so that patients can sit outside.
  - An accountant does the organization's financial reporting.
  - A local librarian comes each day to read to the patients.
  - A computer expert repairs the organization's computer.

LO 18-3

8. To send a mailing, a private not-for-profit charity spends \$100,000. The mailing solicits donations and provides educational and other information about the charity. Which of the following is true?
- No part of the \$100,000 can be reported as a program service expense.
  - Some part of the \$100,000 must be reported as a program service expense.
  - No authoritative guidance exists, so the organization can allocate the cost as it believes best.
  - Under certain specified circumstances, the organization should allocate a portion of the \$100,000 to program service expenses.

LO 18-1

9. The financial reporting for private not-for-profit entities primarily focuses on
- Basic information for the organization as a whole.
  - Standardization of fund information reported.
  - Inherent differences of various not-for-profit entities that impact reporting presentations.
  - Distinctions between current fund and noncurrent fund presentations.

LO 18-2

10. On December 30, 2017, Leigh Museum, a not-for-profit entity, received a \$7,000,000 donation of Day Co. common stock shares with donor-stipulated requirements as follows:

The museum is to sell shares valued at \$5,000,000 and use the proceeds to erect a public viewing building.

The museum is to retain shares valued at \$2,000,000 and use the dividends to support current operations.

As a consequence of its receipt of the Day Co. shares, how much should Leigh report as temporarily restricted net assets on its 2017 statement of financial position?

- \$-0-
- \$2,000,000
- \$5,000,000
- \$7,000,000

LO 18-1

11. On December 25, 2017, Mr. Jones gives Charity A 1,000 shares of stock that he bought originally for \$9,000. No restrictions were placed on this donation. The governing board does not want to speculate on investments. Thus, it has a policy to sell all donated investments as soon as received. These 1,000 shares are sold on December 26, 2017, for their fair value of \$28,000. How does the charity report these events on a statement of cash flows?

- As a \$28,000 cash inflow from an investing activity.
- As a \$9,000 cash inflow from an operating activity and a \$19,000 cash inflow from an investing activity.



- c. As a \$28,000 cash inflow from an operating activity.
- d. As a \$9,000 cash inflow from a financing activity and a \$19,000 cash inflow from an investing activity.

## LO 18-4

12. Charity A and Charity B are affiliated entities. An accountant for Charity B is paid \$10,000 per month, which is equal to the fair value of the services rendered. Charity A loses its accountant and the accountant from Charity B is sent to work with Charity A for two months. Charity A pays nothing for this service. What entry should Charity A record for this work?
- a. No entry is made.
  - b. An asset is debited for \$20,000 and contributed support is credited for the same amount.
  - c. An expense is debited for \$20,000 and contributed support is credited for the same amount.
  - d. An asset is debited for \$20,000 and an inter-equity account is credited for the same amount.

## LO 18-7

13. A not-for-profit medical center performs services in the current year at a charge of \$1 million. Officials expect bad debts to be \$94,000. Another \$200,000 is viewed as charity care services because no collection was expected at the time of the work. What should the medical center report as net patient service revenues?
- a. \$706,000
  - b. \$800,000
  - c. \$906,000.
  - d. \$1,000,000

## LO 18-7

14. A not-for-profit medical center performs services in the current year at a charge of \$1 million. Of this amount, \$200,000 is viewed as charity services because no collection was expected at the time of the work. The direct costs of that work were \$80,000 and the indirect costs were \$50,000. What amount of these costs has to be disclosed?
- a. \$50,000
  - b. \$80,000
  - c. \$130,000
  - d. \$280,000

## LO 18-4

15. The Jones family lost its home in a fire. On December 25, 2017, a philanthropist sent money to the Amer Benevolent Society, a private not-for-profit entity, specifically to purchase furniture for the Jones family. During January 2018, Amer purchased furniture for the Jones family. How should Amer report the receipt of the money in its 2017 financial statements?
- a. As an unrestricted contribution.
  - b. As a temporarily restricted contribution.
  - c. As a permanently restricted contribution.
  - d. As a liability.

## LO 18-4

16. Pel Museum is a private not-for-profit entity. If it receives a contribution of historical artifacts, it need not recognize the contribution if the artifacts are to be sold and it will use the proceeds to
- a. Support general museum activities.
  - b. Acquire other items for collections.
  - c. Repair existing collections.
  - d. Purchase buildings to house collections.

## LO 18-2

17. A private not-for-profit entity receives two gifts. One is \$80,000 and is restricted for paying salaries of teachers who help children learn to read. The other is \$110,000, which is restricted for purchasing playground equipment. Both amounts are properly spent by the end of this year. Because the purchase of the playground equipment was made at the end of the year, the organization records no depreciation this period. It has elected to view the equipment as having a time restriction. On the statement of activities, what is reported for unrestricted net assets?
- a. An increase of \$80,000 and a decrease of \$80,000.
  - b. An increase of \$190,000 and a decrease of \$190,000.
  - c. An increase of \$190,000 and a decrease of \$80,000.
  - d. An increase of \$80,000 and no decrease.

## LO 18-6

18. AB is a private not-for-profit entity. It acquires YZ, another private not-for-profit entity. The acquisition value is \$1 million. YZ has net assets with a book value of \$600,000 but a fair value of \$700,000. Officials for AB expect that YZ will be predominantly supported by contributions

in the future. After the acquisition, what amount of goodwill will be reported on the combined balance sheet?

- a. \$-0-
- b. \$100,000
- c. \$300,000
- d. \$400,000

LO 18-6

19. BC and OP are both private not-for-profit entities. They are combined to create MN, a private not-for-profit with an entirely new board of directors. BC has land with a book value of \$300,000 and a fair value of \$400,000. OP has land with a book value of \$500,000 and a fair value of \$550,000. After MN has been formed, what is reported for land?

- a. \$800,000
- b. \$850,000
- c. \$900,000
- d. \$950,000

LO 18-6

20. Southwest is a private not-for-profit entity. It acquires Northeast, another private not-for-profit. The acquisition value is \$980,000. Northeast has two assets (and no liabilities): equipment with a net book value of \$120,000 but a fair value of \$150,000 and a building with a net book value of \$500,000 but a fair value of \$800,000. Northeast expects to receive some support through donations and contributions. However, it is not expected to be predominantly supported by contributions and investment income. After the combination, what should be reported for goodwill?

- a. \$-0-
- b. \$30,000
- c. \$60,000
- d. \$360,000

LO 18-7

21. In the accounting for health care providers, what are third-party payors?

- a. Doctors who reduce fees for indigent patients.
- b. Charities that supply medicines to hospitals and other health care providers.
- c. Friends and relatives who pay the medical costs of a patient.
- d. Insurance companies and other groups that pay a significant portion of the medical fees in the United States.

LO 18-7

22. Mercy for America, a private not-for-profit health care facility located in Durham, North Carolina, charged a patient \$8,600 for services. It actually billed this amount to the patient's third-party payor. The third-party payor submitted a check for \$7,900 with a note stating that "the reasonable amount is paid in full per contract." Which of the following statements is true?

- a. The patient is responsible for paying the remaining \$700.
- b. The health care facility will rebill the third-party payor for the remaining \$700.
- c. The health care facility recorded the \$700 as a contractual adjustment that it will not collect.
- d. The third-party payor retained the \$700 and will convey it to the health care facility at the start of the next fiscal period.

LO 18-7

23. What is a *contractual adjustment*?

- a. An increase in a patient's charges caused by revisions in the billing process utilized by a health care entity.
- b. A year-end journal entry to recognize all of a health care entity's remaining receivables.
- c. A reduction in patient service revenues caused by agreements with third-party payors that allows them to pay a health care entity based on their determination of reasonable costs.
- d. The results of a cost allocation system that allows a health care entity to determine a patient's cost by department.

LO 18-7

24. A private not-for-profit health care entity provides its patients with services that would normally be charged at \$1 million. However, it estimates a \$200,000 reduction because of contractual adjustments. It expects another \$100,000 reduction because of bad debts. Finally, the organization does not expect to collect \$400,000 because this amount is deemed to be charity care. Which of the following is correct?

- a. Patient service revenues = \$1 million; net patient service revenues = \$300,000.
- b. Patient service revenues = \$1 million; net patient service revenues = \$400,000.

- c. Patient service revenues = \$600,000; net patient service revenues = \$300,000.
- d. Patient service revenues = \$600,000, net patient service revenues = \$400,000.

## LO 18-2

25. A local citizen gives a not-for-profit entity a cash donation that is restricted for research activities. The money should be recorded in
- a. Unrestricted Net Assets.
  - b. Temporarily Restricted Net Assets.
  - c. Permanently Restricted Net Assets.
  - d. Deferred Revenue.

## LO 18-4

26. Theresa Johnson does volunteer work for a local not-for-profit entity as a community service. She replaces without charge an administrator who would have otherwise been paid \$31,000. Which of the following statements is true?
- a. The charity should recognize a restricted gain of \$31,000.
  - b. The charity should recognize a contribution of \$31,000 as an increase in unrestricted net assets as well as salary expense of \$31,000.
  - c. The charity should recognize a reduction in expenses of \$31,000.
  - d. The charity should make no entry.

## LO 18-5

27. Which of these forms must most tax-exempt organizations file annually with the Internal Revenue Service?
- a. 990
  - b. 1203
  - c. 501
  - d. 501(c)(3)

## LO 18-5

28. Belwood University is a private not-for-profit school that has tax-exempt status. Which of the following is most likely to be the type of tax-exempt status that Belwood holds?
- a. 501(c)(3)
  - b. 501(c)(4)
  - c. 501(c)(5)
  - d. 501(c)(6)

## LO 18-4

29. A group of high school seniors performs volunteer services for patients at a nearby nursing home. The nursing home would not otherwise provide these services, such as wheeling patients in the park and reading to them. At the minimum wage rate, these services amount to \$21,320, but their actual value is estimated to be \$27,400. In the nursing home's statement of activities, what amount should be reported as public support?
- a. \$27,400
  - b. \$21,320
  - c. \$6,080
  - d. \$-0-

## LO 18-4

30. A voluntary health and welfare entity receives a gift of new furniture having a fair value of \$2,100. The group then gives the furniture to needy families following a flood. How should the charity record receipt and distribution of this donation?
- a. Make no entry.
  - b. Record contributed support of \$2,100 and community assistance expense of \$2,100.
  - c. Recognize revenue of \$2,100.
  - d. Recognize contributed support of \$2,100 and community expenditures of \$2,100.

## LO 18-4

31. George H. Ruth takes a leave of absence from his job to work full time for a voluntary health and welfare entity for six months. Ruth fills the position of finance director, a position that normally pays \$88,000 per year. Ruth accepts no remuneration for his work. How should this donated service be recorded?
- a. As contributed support of \$44,000 and an expense of \$44,000.
  - b. As earned revenue of \$44,000.
  - c. As an expense of \$44,000.
  - d. No entries should be made.

## LO 18-3

32. A voluntary health and welfare entity produces a statement of functional expenses. What is the purpose of this statement?
- a. Separates current unrestricted and current restricted funds.
  - b. Separates program service expenses from supporting service expenses.

- c. Separates cash expenses from noncash expenses.
- d. Separates fixed expenses from variable expenses.

## LO 18-3

33. A voluntary health and welfare entity has the following expenditures:

Research to cure disease . . . . .	\$60,000
Fund-raising costs . . . . .	70,000
Work to help disabled . . . . .	40,000
Administrative salaries . . . . .	90,000

How should the charity report these items?

- a. Program service expenses of \$100,000 and supporting service expenses of \$160,000.
- b. Program service expenses of \$160,000 and supporting service expenses of \$100,000.
- c. Program service expenses of \$170,000 and supporting service expenses of \$90,000.
- d. Program service expenses of \$190,000 and supporting service expenses of \$70,000.

## LO 18-3

34. A voluntary health and welfare entity sends a mailing to all of its members including those who have donated in the past and others who have never donated. The mailing, which had a total cost of \$22,000, asks for monetary contributions to help achieve the charity's stated mission. In addition, 80 percent of the material included in the mailing is educational in nature, providing data about the entity's goals. Which of the following is true?

- a. Some part of the \$22,000 should be reported as a program service cost because of the educational materials included.
- b. No part of the \$22,000 should be reported as a program service cost because there is no specific call to action.
- c. No part of the \$22,000 should be reported as a program service cost because the mailing was sent to both previous donors and individuals who have not made donations.
- d. Some part of the \$22,000 should be reported as a program service cost because more than 50 percent of the material was educational in nature.

## LO 18-4

35. A voluntary health and welfare entity receives \$32,000 in cash from solicitations made in the local community. The charity receives an additional \$1,500 from members in payment of annual dues. Members are assumed to receive benefits approximately equal in value to the amount of dues paid. How should this money be recorded?

- a. Revenues of \$33,500.
- b. Public support of \$33,500.
- c. Public support of \$32,000 and a \$1,500 increase in the fund balance.
- d. Public support of \$32,000 and revenue of \$1,500.

## LO 18-7

36. During the year ended December 31, 2017, Anderson Hospital (operated as a private not-for-profit entity) received and incurred the following:

Fair value of donated medicines . . . . .	\$ 54,000
Fair value of donated services (replaced salaried workers) . . . . .	38,000
Fair value of additional donated services (did not replace salaried workers) . . . . .	11,000
Interest income . . . . .	23,000
Regular charges to patients . . . . .	176,000
Charity care . . . . .	210,000
Provision for bad debts . . . . .	66,000

How should this hospital report each of these items?

## LO 18-7

37. The following questions concern the appropriate accounting for a private not-for-profit health care entity. Write complete answers for each question.

- a. What is a third-party payor, and how have third-party payors affected the development of accounting principles for health care entities?
- b. What is a contractual adjustment, and how does a health care entity record this figure?
- c. How does a not-for-profit health care entity account for donated materials and services?

## LO 18-7

38. Under Lennon Hospital's rate structure, it earned patient service revenue of \$9 million for the year ended December 31, 2017. However, Lennon did not expect to collect this entire amount because it deemed \$1.4 million to be charity care and estimated contractual adjustments to be \$800,000.

During 2017, Lennon purchased medical supplies from Harrison Medical Supply Company at a cost of \$4,000. Harrison notified Lennon that it was donating the supplies to the hospital.

Lennon is a private not-for-profit entity. How much should Lennon record as patient service revenue and how much as net patient service revenue? How should Lennon record the donation of the supplies?

## LO 18-2, 18-4

39. Wilson Center is a private not-for-profit voluntary health and welfare entity. During 2017, it received unrestricted pledges of \$600,000, 60 percent of which were payable in 2017, with the remainder payable in 2018 (for use in 2018). Officials estimate that 15 percent of all pledges will be uncollectible.
- How much should Wilson Center report as contribution revenue for 2017?
  - In addition, a local social worker, earning \$20 per hour working for the state government, contributed 600 hours of time to Wilson Center at no charge. Without these donated services, the organization would have hired an additional staff person. How should Wilson Center record the contributed service?

## LO 18-1, 18-2

40. A private not-for-profit entity is working to create a cure for a deadly disease. The charity starts the year with cash of \$700,000. Of this amount, unrestricted net assets total \$400,000, temporarily restricted net assets total \$200,000, and permanently restricted net assets total \$100,000. Within the temporarily restricted net assets, the entity must use 80 percent for equipment and the rest for salaries. No implied time restriction has been designated for the equipment when purchased. For the permanently restricted net assets, 70 percent of resulting income must be used to cover the purchase of advertising for fund-raising purposes and the rest is unrestricted.

During the current year, the organization has the following transactions:

- Received unrestricted cash gifts of \$210,000.
  - Paid salaries of \$80,000 with \$20,000 of that amount coming from restricted funds. Of the total salaries, 40 percent is for administrative personnel and the remainder is evenly divided among individuals working on research to cure the designated disease and individuals employed for fund-raising purposes.
  - Bought equipment for \$300,000 with a long-term note signed for \$250,000 and restricted funds used for the remainder. Of this equipment, 80 percent is used in research, 10 percent is used in administration, and the remainder is used for fund-raising.
  - Collected membership dues of \$30,000. The members receive a reasonable amount of value in exchange for these dues including a monthly newsletter describing research activities.
  - Received \$10,000 from a donor that must be conveyed to another charity doing work on a related disease.
  - Received investment income of \$13,000 generated by the permanently restricted net assets. As mentioned above, the donor has stipulated that 70 percent of the income is to be used for advertising, and the remainder may be used at the entity's discretion.
  - Paid advertising of \$2,000.
  - Received an unrestricted pledge of \$100,000 that will be collected in three years. The entity expects to collect the entire amount. The pledge has a present value of \$78,000 and related interest (additional contributed support) of \$3,000 in the year.
  - Computed depreciation on the equipment acquired as \$20,000.
  - Spent \$93,000 on research supplies that it utilized during the year.
  - Owed salaries of \$5,000 at the end of the year. Half of this amount is for individuals doing fund-raising and half for individuals doing research.
  - Received a donated painting that qualifies as a museum piece. It has a value of \$800,000. Officials do not want to record this gift if possible.
- Prepare a statement of activities for this not-for-profit entity for this year.
  - Prepare a statement of financial position for this not-for-profit entity for this year.
41. A local private not-for-profit health care entity incurred the following transactions during the current year. Record each of these transactions in appropriate journal entry form. Prepare a schedule calculating the change in unrestricted, permanently restricted, and temporarily restricted net assets.
- The entity's governing board announced that \$160,000 in previously unrestricted cash will be used in the future to acquire equipment. The funds are invested until the purchase eventually occurs.
  - Received a donation of \$80,000 with the stipulation that all income derived from this money be used to supplement nursing salaries.

## LO 18-2, 18-4



- c. Expended \$25,000 for medicines. The entity received the money the previous year as a restricted gift for this purpose.
- d. Charged patients \$600,000, 80 percent of which is expected to be covered by third-party payors.
- e. Calculated depreciation expense of \$38,000.
- f. Received interest income of \$15,000 on the investments the board acquired in transaction (a).
- g. Estimated that \$20,000 of current accounts receivable from patients will not be collected and that third-party payors will reduce the amounts owed by \$30,000 because of contractual adjustments.
- h. Consumed the medicines acquired in (c).
- i. Sold the investments acquired in (a) for \$172,000. Spent all restricted cash (including [f] above) and \$25,000 that previously had been given to the entity (with the stipulation that the money be used to acquire plant assets) for new equipment. No time restriction was assumed on this equipment.
- j. Received pledges for \$126,000 in unrestricted donations. Of the pledges, 10 percent are collected immediately with 90 percent to be received and used in future years. Officials estimate that \$9,000 of this money will never be collected. Present value of the receivable is \$98,000.

## LO 18-1, 18-2



42. The University of Danville is a private not-for-profit university that starts the current year with \$700,000 in net assets: \$400,000 unrestricted, \$200,000 temporarily restricted, and \$100,000 permanently restricted. The following transactions occur during the year.

Prepare journal entries for each transaction. Then determine the end-of-year balances for unrestricted net assets, temporarily restricted net assets, and permanently restricted net assets by creating a statement of activities.

- a. Charged students \$1.2 million in tuition.
- b. Received a donation of investments that had cost the owner \$100,000 but was worth \$300,000 at the time of the gift. According to the gift's terms, the university must hold the investments forever but can spend the dividends for any purpose. Any changes in the value of these securities must be held forever and cannot be spent.
- c. Received a cash donation of \$700,000 that must be used to acquire laboratory equipment.
- d. Gave scholarships in the amount of \$100,000 to students.
- e. Paid salary expenses of \$310,000 in cash.
- f. Learned that a tenured faculty member is contributing his services in teaching for this year and will not accept his \$80,000 salary.
- g. Spent \$200,000 of the money in (c) on laboratory equipment (no time restriction is assumed on this equipment).
- h. Learned that at the end of the year, the investments in (b) are worth \$330,000.
- i. Received dividends of \$9,000 cash on the investments in (b).
- j. Computed depreciation expense for the period of \$32,000.
- k. The school's board of trustees decides to set aside \$100,000 of previously unrestricted cash for the future purchase of library books.
- l. Received an unconditional promise of \$10,000, which the school fully expects to collect in three years although its present value is only \$7,000. The school assumes that the money cannot be used until the school receives it.
- m. Received an art object as a gift that is worth \$70,000 and that qualifies as a work of art. The school prefers not to record this gift.
- n. Paid utilities and other general expenses of \$212,000.
- o. Received free services from alumni who come to campus each week and put books on the shelves in the library. Over the course of the year, the school would have paid \$103,000 to have this work done.

## LO 18-2, 18-3, 18-4

43. The following questions concern the accounting principles and procedures applicable to a private not-for-profit entity. Write answers to *each* question.

- a. What is the difference between revenue and public support?
- b. What is the significance of the statement of functional expenses?
- c. What accounting process does a private charity use in connection with donated materials?

- d. What is the difference in the two types of restricted net assets found in the financial records of a private not-for-profit organization?
- e. Under what conditions should the entity record donated services?
- f. What is the proper handling of costs associated with direct mail and other solicitations for money that also contain educational materials?
- g. A not-for-profit receives a painting. Under what conditions can this painting be judged as a work of art? If it meets the criteria for a work of art, how is the financial reporting of the entity affected?

**LO 18-2, 18-4**

44. The College of Central North (a private school) has the following events and transactions:
- a. On January 1, Year 1, the board of trustees voted to restrict \$1.9 million of previously unrestricted investments to construct a new football stadium at some future time.
  - b. On April 1, Year 1, Dr. Johnson gives the school \$4 million in investments that is to be held forever, but all subsequent cash income is to be used to help pay for construction (and, later, maintenance) of the football stadium.
  - c. On December 31, Year 1, the investments in (b) generate \$500,000 in cash interest revenue. In addition, the investments went up in value by \$44,000.
  - d. On January 1, Year 2, the school builds a football stadium with the restricted \$2.4 million in funds. Cash is paid. The stadium has a 20-year life and no salvage value.
  - e. On January 2, Year 2, Dr. Johnson buys a seat for the current year on the 50-yard line of the stadium for \$30,000 in cash when this seat's fair value is actually \$12,000.
  - f. On January 3, Year 2, Dr. Johnson provides free medical services to the school. These services have a \$14,000 value and require a specialized skill that the school needed and would have bought otherwise.
  - g. On January 4, Year 2, Dr. Johnson donated a painting to be displayed in the school library. It is appraised at a value of \$30,000.

Unless otherwise noted, assume that the school does *not* have a policy that assumes a time restriction on assets bought with restricted funds.

For each of the following independent situations, indicate whether the statement is true or false and briefly state the reason for your answer.

- (1) On January 1, Year 1, unrestricted net assets reported by the school will be reduced.
  - (2) As of December 31, Year 1, temporarily restricted net assets will have increased by \$500,000 during the year.
  - (3) On December 31, Year 1, permanently restricted net assets went up by \$44,000.
  - (4) On January 1, Year 2, unrestricted net assets increased by \$500,000.
  - (5) Unless a time restriction is placed on the use of the football stadium, depreciation expense will not be recorded in Year 2.
  - (6) If a time restriction is placed on the use of the football stadium, depreciation expense will not be recorded in Year 2.
  - (7) For reporting purposes, unrestricted net assets increased by \$30,000 on January 2, Year 2.
  - (8) For reporting purposes, contribution revenues increased by \$18,000 on January 2, Year 2.
  - (9) On January 3, Year 2, unrestricted net assets were reported as going both up and down.
  - (10) On January 3, Year 2, unrestricted net assets might be reported as going both up and down.
  - (11) On January 3, Year 2, unrestricted net assets will go down and might go up.
  - (12) On January 4, Year 2, a contribution revenue of \$30,000 must be reported.
  - (13) On January 4, Year 2, a contribution revenue of \$30,000 must not be reported.
45. You are preparing a statement of activities for the University of Richland, a private not-for-profit entity. The following questions should be viewed as independent of each other.

**LO 18-1, 18-2, 18-4****Part 1**

During the current year, a donor gives \$400,000 in cash to the school and stipulates that it must hold this money forever. However, any investment income earned on this money must be used for faculty salaries. During the current year, the investment earned \$31,000 and, of that amount, the

school has expended \$22,000 appropriately to date. As a result of these events, what was the overall change in each of the following for the current year?

- a. Unrestricted net assets.
- b. Temporarily restricted net assets.
- c. Permanently restricted net assets.

### Part 2

A donor gives a large machine to the school on January 1 of the current year. It has a value of \$200,000, no salvage value, and a 10-year life. The donor requires that the school keep the machine and use it for all 10 years, and the school agrees. It cannot sell or retire the machine in the interim. As a result of these events, what was the overall change in each of the following for the current year?

- a. Unrestricted net assets.
- b. Temporarily restricted net assets.
- c. Operating expenses.

### Part 3

Several years ago, a donor gave the school \$400,000 in cash to help fund its financial aid program. This year, the school charged \$2 million in tuition but granted \$700,000 in financial aid. Collections to date from the students have totaled \$1.1 million. The donor's gift has offset \$300,000 of the financial aid. As a result of these events, what was the overall change in each of the following for the current year?

- a. Unrestricted net assets.
- b. Operating expenses.
- c. Temporarily restricted net assets.

LO 18-1, 18-2, 18-4

**excel**

46. The Watson Foundation, a private not-for-profit entity, starts 2017 with cash of \$100,000; contributions receivable (net) of \$200,000; investments of \$300,000; and land, buildings, and equipment of \$200,000. In addition, its unrestricted net assets were \$400,000, temporarily restricted net assets were \$100,000, and permanently restricted net assets were \$300,000. Of the temporarily restricted net assets, 50 percent must be used to help pay for a new building; the remainder is restricted for salaries. No implied time restriction was designated for the building when purchased. For the permanently restricted net assets, all income is unrestricted.

During the current year, the entity has the following transactions:

- Computed interest of \$20,000 on the contributions receivable.
  - Received cash of \$100,000 on the contributions and wrote off another \$4,000 as uncollectible.
  - Received unrestricted cash gifts of \$180,000.
  - Paid salaries of \$90,000 with \$15,000 of that amount coming from restricted funds.
  - Received a cash gift of \$12,000 that the entity must convey to another charity. However, Watson has the right to give the money to a different organization if it so chooses.
  - Bought a building for \$500,000 by signing a long-term note for \$450,000 and using restricted funds for the remainder.
  - Collected membership dues of \$30,000. Individuals receive substantial benefits from the memberships.
  - Received income of \$30,000 generated by the permanently restricted net assets.
  - Paid rent of \$12,000, advertising of \$15,000, and utilities of \$16,000.
  - Received an unrestricted pledge of \$200,000; it will be collected in five years. The organization expects to collect the entire amount. Present value is \$149,000. It then recognized interest of \$6,000 for the year.
  - Computed depreciation as \$40,000.
  - Paid \$15,000 in interest on the note signed to acquire the building.
- a. Prepare a statement of activities for this entity for this year.
  - b. Prepare a statement of financial position for this entity at the end of this year.



## LO 18-6

47. Help & Save is a private not-for-profit entity that operates in Kansas. Swim For Safety is a private not-for-profit entity that operates in Missouri. The leaders of these two organizations have decided to combine forces on January 1, 2017, in order to have a bigger impact from their work. They are currently discussing ways by which this combination can be created. Statements of financial position for both charities at that date appear below.

<b>HELP &amp; SAVE</b>	
<b>Statement of Financial Position</b>	
<b>January 1, 2017</b>	
<b>Assets</b>	
Cash .....	\$1,600,000
Contributions receivable (net) .....	70,000
Investments .....	300,000
Buildings & equipment (net) .....	700,000
Total assets .....	<u>\$2,670,000</u>
<b>Liabilities</b>	
Accounts payable and accrued liabilities .....	\$ 110,000
Notes payable .....	1,100,000
Total liabilities .....	<u>\$1,210,000</u>
<b>Net Assets</b>	
Unrestricted .....	\$1,100,000
Temporarily restricted .....	250,000
Permanently restricted .....	110,000
Total net assets .....	<u>\$1,460,000</u>
Total liabilities and net assets .....	<u>\$2,670,000</u>

<b>SWIM FOR SAFETY</b>	
<b>Statement of Financial Position</b>	
<b>January 1, 2017</b>	
<b>Assets</b>	
Cash .....	\$ 500,000
Contributions receivable (net) .....	210,000
Investments .....	170,000
Buildings & equipment (net) .....	590,000
Total assets .....	<u>\$1,470,000</u>
<b>Liabilities</b>	
Accounts payable and accrued liabilities .....	\$ 70,000
Notes payable .....	620,000
Total liabilities .....	<u>\$ 690,000</u>
<b>Net Assets</b>	
Unrestricted .....	\$ 420,000
Temporarily restricted .....	190,000
Permanently restricted .....	170,000
Total net assets .....	<u>\$ 780,000</u>
Total liabilities and net assets .....	<u>\$1,470,000</u>

The buildings and equipment reported by Help & Save have a fair value of \$900,000. The buildings and equipment reported by Swim For Safety have a fair value of \$730,000.

- a. Assume Help & Save pays \$1 million in cash from its unrestricted net assets to gain complete control over Swim For Safety. It is not assumed that Swim For Safety will be predominantly supported by contributions and investment income in the future. What balances will appear on the combined balance sheet immediately after control is gained?

- b. Assume Help & Save pays \$990,000 in cash from its unrestricted net assets to gain complete control over Swim For Safety. It is assumed that Swim For Safety will be predominantly supported by contributions and investment income in the future. What balances will appear on the combined balance sheet immediately after control is gained?
- c. Assume that these two organizations are combined into a new private not-for-profit entity to be known as Help–Swim–Save. A new governing body will be formed to manage and operate this new organization. What balances will appear on the combined balance sheet immediately after control is gained?

**The following information relates to Problems 48 through 53:**

For a number of years, a private not-for-profit entity has been preparing financial statements that do not necessarily follow generally accepted accounting principles. At the end of the most recent year (Year 2), those financial statements show total assets of \$900,000, total liabilities of \$100,000, total unrestricted net assets of \$400,000, total temporarily restricted net assets of \$300,000, and total permanently restricted net assets of \$100,000. In addition, total expenses for the year were \$500,000 (shown in unrestricted net assets).

LO 18-1

48. Assume that this entity is a private college that charged students \$600,000 but then provided \$140,000 in financial aid. The \$600,000 was reported as a revenue; the \$140,000 was shown as an expense. Both amounts were included in the unrestricted net assets.

- a. What was the correct amount of unrestricted net assets at the end of the year?
- b. What was the correct amount of expenses for the year?

LO 18-2, 18-4

49. During Year 1, the entity above received a gift of \$80,000. The donor specified that this money be invested in government bonds with the interest to be used to pay the salaries of the entity's employees. The gift was recorded as an increase in permanently restricted net assets. It earned interest income of \$5,000 during Year 1 and \$7,000 during Year 2. The entity reported this interest on the statement of activities as an increase in unrestricted net assets. In both cases, the money was immediately expended for salaries, amounts that were recorded as expenses within unrestricted net assets. No other entries were made in connection with these funds.

- a. What was the correct amount of unrestricted net assets at the end of Year 2?
- b. What was the correct amount of expenses in unrestricted net assets for Year 2?
- c. What was the correct amount of temporarily restricted net assets at the end of Year 2?

LO 18-1, 18-2, 18-4

50. At the beginning of Year 1, the entity above received \$50,000 in cash as a gift with the stipulation that the money be used to buy a bus. The accountant made the appropriate entry at that time. On the first day of Year 2, the entity spent the \$50,000 for the bus, an asset that will last for 10 years and will have no salvage value. Because the money came from an outside donor, entity officials decided that a time restriction on the bus should be assumed for 10 years. In Year 2, it reported \$5,000 as depreciation expense in unrestricted net assets. In addition, the organization made a \$50,000 reduction in permanently restricted net assets and a \$50,000 increase in unrestricted net assets.

- a. What was the correct amount of unrestricted net assets at the end of Year 2?
- b. What was the correct amount of expenses for Year 2?
- c. What was the correct amount of temporarily restricted net assets at the end of Year 2?

LO 18-4

51. Assume that the entity is a charity that charges its "members" monthly dues totaling \$100,000 per year (in both Year 1 and Year 2). However, the members get nothing for their dues. The organization has consistently recorded this amount as an increase in Cash along with an increase in revenues within the unrestricted net assets.

What was the correct amount of unrestricted net assets at the end of Year 2?

LO 18-2, 18-4

52. On January 1, Year 2, several supporters of the entity above spent their own money to construct a garage for its vehicles that is worth \$70,000. It should last for 10 years and will have no salvage value although no time restriction was assumed. The entity increased its contributed support within the unrestricted net assets by \$70,000 and increased its expenses within unrestricted net assets by \$70,000.

- a. What was the correct amount of unrestricted net assets at the end of Year 2?
- b. What was the correct amount of total assets at the end of Year 2?
- c. What was the correct amount of expenses for Year 2?

LO 18-4

53. On December 25 of Year 2, the entity above received a \$40,000 cash gift. The donor specified that the entity hold the money for four months. If, at the end of four months, the donor still wished to do so, the money was to be given to the local Kidney Fund (a separate not-for-profit organization).

However, during these four months, the donor could use the money for any other purpose. The reporting entity recorded the money as an increase in Cash and as contributed support within its unrestricted net assets.

- a. What was the correct amount of unrestricted net assets at the end of Year 2?
- b. What was the correct amount of total assets at the end of Year 2?

**LO 18-4, 18-6, 18-7**

54. Assume that Charity A and Charity B are alike in every way except as described below. Assume that each of these questions is independent from all other questions.
- a. Each charity suffers significant damage from a hail storm this year. Each hires a person to repair the damage. Each of these workers donates the labor to the charity. Charity A looks at the repair work and believes it required a specialized skill that it would have had to buy. Charity B looks at the repair work and decides that it did not require a specialized skill. After the recording, which entity will report the largest amount of unrestricted net assets?
  - b. Each charity receives a large investment in shares of a publicly traded company. The investment must be held forever. Charity A can spend the resulting income as it sees fit. Charity B must spend the resulting income to supplement salaries. Both charities receive the same amount of income this year. Both charities immediately spend the income to supplement salaries. After that, which entity will report the largest amount of unrestricted net assets?
  - c. At the beginning of the current year, each charity combines with another similar charity. In both cases, this similar charity has assets worth \$780,000 but with a book value of \$700,000 and no liabilities. Both Charity A and Charity B paid \$800,000 to make this acquisition. Charity A is acquiring a charity that gets its resources through exchange transactions (it sells cookies). Charity B is acquiring a charity that gets its money through donations. After that, which entity will report the largest amount of unrestricted net assets?
  - d. Assume these two charities are both not-for-profit hospitals. On the first day of the year, each does an appendectomy on one of its patients. The cost is \$76,000 but the normal charge to the patient is \$100,000. Charity A had hoped to collect this amount, but by the end of the year it was obvious that collection was impossible. Charity B realized from the beginning that collection of any amount was impossible. After that, which entity will report the largest amount of net patient service revenues?
  - e. Both Charity A and Charity B make 1,000 cakes to sell to their donors. These cakes cost \$20 each and they are sold for \$50 apiece. Charity A felt that \$50 was a reasonable fair value. Charity B felt the fair value of the cakes was actually only \$30 apiece. After that, which entity will report the largest amount of unrestricted net assets?

## Develop Your Skills

### RESEARCH CASE 1



The law firm of Hackney and Walton has decided to start supporting a worthy charity. The partners want to select an organization that makes good use of its resources to meet its stated mission.

Go to the website [www.give.org](http://www.give.org). Click on “For Donors.” Scroll to the bottom of that page and find a search box titled “Find a Charity Report.” Above the box is a link to “Our 20 Standards.” First, read those standards. Then, enter the names of two or more charities that are well known into the search box. Read the information that is available about each charity on this website.

#### Required

Write a report to the partners of Hackney and Walton. Describe the charities you selected and recommend which of these charities they should support. Give adequate justification for this recommendation.

### RESEARCH CASE 2



Go to [www.charitynavigator.org](http://www.charitynavigator.org) and click on “Methodology” near the top of the page. Read the information that is provided and write a short memo to explain how this organization rates charities.

## RESEARCH CASE 3



Go to the website [www.guidestar.org](http://www.guidestar.org) and enter the name of a private not-for-profit organization. Considerable information will be available about the entity. By registering, it should be possible to find a link to the Form 990 (Return of Organization Exempt from Income Tax) filed with the Internal Revenue Service for informational purposes. Scan through this document and answer the following questions.

### Required

1. On line I near the top of the first page, determine the organization's specific type of Section 501 (c) designation.
2. At Part VII, there is a list of officers, directors, trustees, and key employees. List the three individuals with the largest level of compensation.
3. In Part IX, there is a statement of functional expenses. For this organization, what percentage of its total expenses are labeled as program service expenses?
4. Scan the entire Form 990 for information that would not otherwise be available about this organization.

## RESEARCH CASE 4



Go to the following URL for Georgetown University: <http://financialaffairs.georgetown.edu/gta/statements.html>. Click on the link for the most recent set of financial statements for the university. Look through those statements.

Then, click on the link for the 1987 financial statements. Look through those statements also.

### Required

Prepare a list of three or four of the most obvious structural differences between the 1987 financial statements and the current financial statements.

## ANALYSIS CASE 1



Go to the website of a private voluntary health and welfare entity such as United Cerebral Palsy ([www.ucp.org](http://www.ucp.org)), the American Heart Association ([www.americanheart.org](http://www.americanheart.org)), or the American Cancer Society ([www.cancer.org](http://www.cancer.org)). Find the charity's latest financial statements, which usually can be found by clicking on a button such as "About Our Charity" and then clicking on "Financial Information" or "Audited Financial Statements." Some financial statements are easy to find while others are well hidden. Some entities simply do not include financial statements on their websites.

### Required

After examining these financial statements, answer the following questions about the private not-for-profit entities:

1. How many different program services were listed? Name each.
2. What percentage of total expenses went to supporting services?
3. Were any contributed services recognized and, if so, for how much?
4. What dollar amount was spent on fund-raising?
5. What was the year-end total for unrestricted net assets, temporarily restricted net assets, and unrestricted net assets?
6. What amount of net assets was reclassified from temporarily restricted to unrestricted net assets this past year because the external restriction had been satisfied?

## ANALYSIS CASE 2



Go to the website of a private not-for-profit college or university such as Duke ([www.duke.edu](http://www.duke.edu)), Vanderbilt ([www.vanderbilt.edu](http://www.vanderbilt.edu)), Notre Dame ([www.nd.edu](http://www.nd.edu)), or Georgetown ([www.georgetown.edu](http://www.georgetown.edu)) and locate the latest set of financial statements for the institution. You might have to enter “Audited Financial Statements” or just “Financial Statements” in a search box.

### Required

Use this report to answer the following questions and document where in the report you located the relevant information:

1. What was the percentage of financial aid to total student tuition and fees?
2. Did the school report any contributions receivable and, if so, for how much? What amount is *not* to be collected within one year?
3. Looking at the school’s expenses, what was the total amount spent on educating the students, and what was spent on research during the period? List the items you include for each category.
4. What was the total amount donated to the school during the previous year?
5. What was the total amount of temporarily restricted net assets and permanently restricted net assets?
6. What was the unrealized gain or loss on the school’s investments (caused by changes in fair value) and the realized gain or loss (caused by sales of these investments)?
7. Compare the amount earned in tuition and student fees to the amount of education expenses incurred by the school to determine whether it generated a profit or a loss this past year on educating its students. Support your answer with a schedule of items used to calculate your answer.

## COMMUNICATION CASE



Go to the website [https://www.independentsector.org/governance\\_ethics\\_resource\\_center](https://www.independentsector.org/governance_ethics_resource_center) and download the organization’s 33 Principles. Read the explanation for the six principles under the heading of Strong Financial Oversight. Write a short report on the types of policies, actions, and procedures that a private not-for-profit entity should take to help ensure proper financial transparency and accountability.

# Accounting for Estates and Trusts

**T**rillions of dollars of assets will soon pass from one generation to another as baby boomers age and pass.

Individuals labor throughout their lives in part to accumulate property that they eventually can convey for the benefit of spouses, children, relatives, friends, charities, and the like. After amassing wealth, donors typically seek to achieve two goals:

- To minimize the amount of these assets that must be surrendered to the government.
- To ensure that the ultimate disposition of all property is consistent with the donor's wishes.

Therefore, accountants (as well as attorneys and financial planners) often assist individuals who are developing estate plans or creating trust funds to accomplish these goals. At a later date, the accountant may also serve in the actual administration of the estate or trust. In either estate or trust planning, the person's intentions must be spelled out in clear detail so that no misunderstanding arises. All available techniques also should be considered to limit the impact of taxes. To carry out these varied responsibilities properly, it is of paramount importance that the persons doing so have a knowledge of the legal and reporting aspects of estates and trusts.

Although many of the complex legal rules and regulations in these areas are beyond the scope of an accounting textbook, an overview of both estates and trusts can introduce the issues that members of the accounting profession frequently encounter.

## Accounting for an Estate

While none of us want to contemplate our death, or that of our spouse, we all need an estate plan. If you need motivation to reach this decision, remember that every dollar you keep from the folks in Washington or your state capital goes to someone you like a heck of a lot better—such as your kids, your younger sister, or your alma mater.<sup>1</sup>

The term *estate* simply refers to the property (assets) owned by an individual. However, in this chapter, *estate* is more specifically defined as a separate legal entity holding title to the real and personal assets of a deceased person. Thus, *estate accounting refers to the recording and reporting of financial events from the time of a person's death until the ultimate distribution of all property the estate holds*. To ensure that this disposition is as intended and to avoid disputes, each individual should

## Learning Objectives

**After studying this chapter, you should be able to:**

- LO 19-1** Understand the proper methods of accounting for and administering an estate and the corresponding legal terminology.
- LO 19-2** Describe the types of estate distributions and identify the process of asset allocations and distributions from an estate.
- LO 19-3** Understand the federal estate tax and state inheritance tax systems, the corresponding exemptions, and tax planning opportunities.
- LO 19-4** Understand and account for the distinction between principal and income in the context of estate and trust accounting.
- LO 19-5** Describe the financial statements and journal entries utilized to account for estate and trust transactions.
- LO 19-6** Describe various trusts, their proper use, and accounting for activities.

<sup>1</sup>Ellen P. Gunn, "How to Leave the Tax Man Nothing," *Fortune*, March 18, 1996, p. 94.

## LO 19-1

Understand the proper methods of accounting for and administering an estate and the corresponding legal terminology.

prepare a *will*, “a person’s declaration of how he desires his property to be disposed of after his death.”<sup>2</sup> If an individual dies *testate* (having written a valid will), this document serves as the blueprint for settling the estate, disbursing all remaining assets, making various tax elections, and appointing fiduciaries to accomplish these tasks.

When a person dies *intestate* (without a legal will), state laws control the administration of his or her estate. Although these legal rules vary from state to state, they normally correspond with the most common patterns of distribution. When intestacy laws rather than a will apply, real property is conveyed based on the *laws of descent*, whereas personal property transfers are made according to the *laws of distribution*.

Each individual state establishes laws governing wills and estates known as *probate laws*. The *National Conference of Commissioners on Uniform State Laws* developed the Uniform Probate Code in hopes of creating consistent treatment in this area. To date, about half of the states have officially adopted the Uniform Probate Code.<sup>3</sup> In many of the other states, the rules and regulations applied are similar to those of the Uniform Probate Code. In practice, however, an accountant must become familiar with the specific laws of the state having jurisdiction over the estate of the specific decedent.

### Administration of the Estate

Regardless of the locale, probate laws generally are designed to achieve three goals:

1. Gather, preserve, and account for all of the decedent’s property.
2. Administer an orderly and fair settlement of all debts.
3. Discover and implement the decedent’s intent for the remaining property held at death.

This process usually begins by filing a will with the probate court or indicating that no will has been discovered. If a will is presented, the probate court must rule on the document’s validity. A will must meet specific legal requirements to be accepted. These requirements vary from state to state. For example, would the following signed and dated statement constitute a valid will?

“I want my children to have my money.”

Because the writer is dead, the intention of this statement cannot be verified. Was this an idle wish made without thought, or did the decedent truly intend for this one sentence to constitute a will conveying all money to these specified individuals upon death? Did the decedent mean for all noncash assets to be liquidated with the proceeds being split among the children? Or did the writer strictly mean that just the cash on hand at the time of death should be transferred to them? Obviously, in some cases, a will’s validity (and the decedent’s intention) is not easily proven.

If deemed to be both authentic and valid, a will is admitted to probate, and the decedent’s specific intentions will be carried to conclusion. All of the decedent’s property must be located, debts paid, and distributions appropriately conveyed. Whether a will is present or not, an estate administrator must be chosen to serve in a stewardship capacity. This individual serves in a fiduciary position and is responsible for (1) satisfying all applicable laws and (2) making certain that the decedent’s wishes are achieved (if known and if possible).

If a specific person is named in the will to hold this position, the individual is referred to as the *executor* (*executrix* if female; this text will generically use the term *executor*) of the estate. If the will does not designate an executor or if the named person is unwilling or unable to serve in this capacity (or if the decedent dies without a will), the courts must select a representative. A court-appointed representative is known legally as the *administrator* (female: *administratrix*) of the estate. An executor/administrator is not forced to serve in this role for free; that person is legally entitled to reasonable compensation for all services rendered.<sup>4</sup>

<sup>2</sup> *Barron’s Law Dictionary*, 4th ed. (New York: Barron’s Educational Services, Inc. 1996), p. 553.

<sup>3</sup> To see your state’s version of the Uniform Probate Code, review the following link: [www.law.cornell.edu/uniform/probate.html](http://www.law.cornell.edu/uniform/probate.html).

<sup>4</sup> To avoid using convoluted terminology, the term *executor* is generally used throughout this chapter to indicate both executors and administrators.

The executor is normally responsible for fulfilling several tasks:

- Taking possession of all of the decedent's assets and inventorying this property.
- Discovering all claims against the decedent and settling these obligations.
- Filing federal and state estate income tax returns, federal estate tax returns, and state inheritance or estate tax returns.
- Distributing property according to the provisions of the will (according to state laws if a valid will is not available) or according to court order if necessary.
- Making a full accounting to the probate court to demonstrate that the executor has properly fulfilled the fiduciary responsibility.

### Property Included in the Estate

The basis for all estate accounting is the property the decedent held at death. These assets are used to settle claims and pay taxes. Any property that remains is distributed according to the decedent's will (or applicable state intestacy laws). For estate-reporting purposes, all items are shown at fair value; except for unique situations involving decedents passing in calendar year 2010 (which we explain below), the historical cost paid by the deceased individual is no longer relevant. Fair value is especially important because the sale of some or all properties may be required to obtain enough cash to satisfy claims against the estate. If valuation problems arise, hiring an appraiser could become necessary.

Normally, an estate includes assets such as these:

- Cash.
- Investments in stocks and bonds.
- Interest accrued to the date of death.
- Dividends declared prior to death.
- Investments in businesses.
- Unpaid wages.
- Accrued rents and royalties.
- Valuables such as paintings and jewelry.

At the time of death, the decedent legally owned a certain amount of assets. The executor's task is to locate and value each item belonging to the estate as of that date.

Some state laws specify that real property such as land and buildings (and possibly certain types of personal property) be conveyed directly to the beneficiary or co-owner at the time of death, depending on the type of ownership held. Therefore, in these states, the inventory of the estate property that the executor develops for probate purposes does not include these assets. However, such items must still be listed in the filing of estate and inheritance tax returns because a legal transfer has occurred.

### Discovery of Claims against the Decedent

An adequate opportunity should be given to the decedent's creditors to allow them to file claims against the estate. Usually, a public notice must be printed in an appropriate newspaper once a week for three weeks.<sup>5</sup> In many states, all claims must be presented within four months of the first of these notices. The executor must verify the validity of these claims and place them in order of priority. If insufficient funds are available, this ordering becomes quite important in establishing which parties receive payment. Consequently, claims in category 4 of the following list, most of which are paid before a beneficiary receives any assets, have the greatest chance of remaining unpaid.

<sup>5</sup> Although many states require three weeks, *Ind. Code* §29-1-7-7(b) requires publication of notice for only two consecutive weeks. The CPA must understand the particular state's requirement(s) because this is a typical statutory variance from state to state.



### Typical Order of Priority

1. Expenses of administering the estate. Without this preferential treatment, the appointment of an acceptable executor and the hiring of lawyers, accountants, and/or appraisers could become a difficult task in estates with limited funds.
2. Funeral expenses and the medical expenses of any last illness.
3. Debts and taxes given preference under federal and state laws.
4. All other claims, such as unsecured obligations, credit card debts, and the like.

### Protection for Remaining Family Members

As indicated, a number of states have adopted the Uniform Probate Code. However, other states have passed a wide variety of individual probate laws that differ in many distinct ways. Thus, no absolute rules about probate laws can be listed. Normally, they provide some amount of protection for a surviving spouse and/or the decedent's minor and dependent children. Small monetary allowances are conveyed to these parties prior to the payment of legal claims. For example, a *homestead allowance* is provided to a surviving spouse<sup>6</sup> and/or minor and dependent children. Even an estate heavily in debt would furnish some amount of financial relief for the members of the decedent's immediate family.

In addition, these same individuals frequently receive a small *family allowance* during a limited period of time while the estate is being administered. Family members are also typically entitled to a limited amount of exempt property such as automobiles, furniture, and jewelry. All other property is included in the estate to pay claims and be distributed according to the decedent's will or state inheritance laws.

#### LO 19-2

Describe the types of estate distributions and identify the process of asset allocations and distributions from an estate.

### Estate Distributions

If a will has been located and probated, property remaining after all claims are settled is conveyed according to that document's specifications.<sup>7</sup> A gift of real property such as land or a building is referred to as a *devise*; a gift of personal property such as stocks or furniture is a *legacy* or a *bequest*. A devise is frequently specific: "I leave 3 acres of land in Henrico County to my son," or "I leave the apartment building on Monument Avenue to my niece." Unless the estate is unable to pay all claims, a devise is simply conveyed to the intended party. However, if claims cannot be otherwise satisfied, the executor could be forced to sell or otherwise encumber the property despite the will's intention.

In contrast, a legacy may take one of several forms. The identification of the type of legacy becomes especially important if the estate has insufficient resources to meet the specifications of the will.

A *specific legacy* is a gift of personal property that is directly identified. "I leave my collection of pocket watches to my son" is an example of a specific legacy because the property is named.

A *demonstrative legacy* is a cash gift made from a particular source. The statement "I leave \$10,000 from my savings account in the First National Bank to my sister" is a demonstrative legacy because the source is identified. If the savings account does not hold \$10,000 at the time of death, the beneficiary will receive the amount available. In addition, the decedent may specify alternative sources if sufficient funds are not available. Ultimately, any shortfall usually is considered a general legacy.

A *general legacy* is a cash gift whose source is undesignated. "I leave \$8,000 in cash to my nephew" is a gift viewed as a general legacy.

A *residual legacy* is a gift of any remaining estate property. Thus, it includes assets left after all claims, taxes, and other distributions are conveyed according to the residual provisions of the will. "The balance of my estate is to be divided evenly between my brother and the University of Notre Dame" is an example of a residual legacy.

<sup>6</sup> Many states provide a \$25,000 protective allowance for a surviving spouse. See *Ind. Code* §29-1-4-1.

<sup>7</sup> An exception, however, is that property legally held in joint tenancy with one or more individuals will pass to the surviving joint tenants at death and not be subject to the provisions of a will or intestate distribution.

An obvious problem arises if there are not enough assets in the estate to satisfy all legacies the will specified. The necessary reduction of the various gifts is referred to as the *process of abatement*. For illustration purposes, assume that a will lists the following provisions:

I leave 1,000 shares of AT&T to my brother (a specific legacy).

I leave my savings account at Chase Bank of \$20,000 to my sister (a demonstrative legacy).

I leave \$40,000 cash to my son (a general legacy).

I leave all remaining property to my daughter (a residual legacy).

### **Example 1**

*Assume that after paying all claims, the estate holds the shares of AT&T stock, the \$20,000 Chase Bank savings account, and \$75,000 in other cash.* The first three parties (the brother, sister, and son) receive the specific assets stated in the will, and the residual legacy (to the daughter) would be the \$35,000 cash balance left after the \$40,000 general legacy is paid.

### **Example 2**

*Assume that after paying all claims, the estate holds the shares of AT&T stock, the Chase Bank savings account, and only \$35,000 in other cash.* The first two individuals (the brother and sister) receive the specified assets, but the son can claim only the remaining \$35,000 cash rather than the promised \$40,000. Based on the process of abatement, the daughter receives nothing; no amount is left as a residual legacy after the other legacies have been distributed.

### **Example 3**

*Assume that after paying all claims, the estate holds the shares of AT&T stock, but the Chase Bank savings account has a balance of only \$12,000 rather than the promised \$20,000. Other cash held by the estate totals \$51,000.* The stock is distributed to the brother, but the sister gets just the \$12,000 cash in the Chase Bank savings account. In most states, the remaining \$8,000 is treated as a general legacy. Consequently, in those states the sister receives the additional \$8,000 in this manner and the son receives the specified \$40,000. The daughter is then left with only the \$3,000 in cash that remains. If the decedent resided in a state that did not treat the \$8,000 shortfall as a general legacy, then the sister would receive only the \$12,000 in the Chase Bank account, and the daughter would receive the \$11,000 in cash that remains. Remember that general legacies are paid prior to residual legacies.

### **Example 4**

*Assume that the decedent sold the shares of AT&T stock before death and that after paying all claims, the Chase Bank savings account holds \$23,000. Other cash amounts to \$30,000.* The brother receives nothing from the estate because the specific legacy did not exist at death.<sup>8</sup> The sister collects the promised \$20,000 from the Chase Bank savings account, and the remaining \$3,000 is added to the general legacy. Therefore, the son receives a total of \$33,000 from the two cash sources. Because the general legacy was not fulfilled, no remainder exists as a residual legacy; thus, the daughter collects nothing from the estate.

### **Insufficient Funds**

The debts and expenses of the administration are paid first in settling an estate. If the estate has insufficient available resources to satisfy these claims, the process of abatement is again

<sup>8</sup> The legal term *ademption* refers to a situation in which a specific bequest or devise fails because the property is not available for distribution. As a different possibility, a bequest or devise is said to *lapse* if the beneficiary cannot be located or dies before the decedent. This property then becomes part of the residual estate. For instance, if the singer Prince's last will and testament leaves his purple motorcycle to his sister, Apollonia, but his sister predeceased Prince, his attempted transfer to Apollonia likely lapses.

utilized. Each of the following categories is exhausted completely to pay all debts and expenses before money is taken from the next category:

Residual legacies (first to suffer abatement is the last to receive inheritance).

General legacies.

Demonstrative legacies.

Specific legacies and devises (last to suffer abatement).

### LO 19-3

Understand the federal estate tax and state inheritance tax systems, the corresponding exemptions, and tax planning opportunities.

## Estate and Inheritance Taxes

Taxes incurred after death can be quite costly. For example, Helen Walton received \$5.1 billion in stock at the death of her husband Sam Walton (founder of Wal-Mart Stores, Inc.). At this value, these shares could eventually have cost her heirs as much as \$2.8 billion in taxes at her death: \$2.2 billion to the U.S. government and \$640 million to the State of Arkansas.<sup>9</sup>

Historically, estate taxes have been used as a method for redistributing wealth and raising revenues. According to tax experts, in 2014 estate taxes raised approximately \$17.4 billion in net revenue.<sup>10</sup> This total amounted to less than 1 percent of all tax money generated by the federal government in that year.

The budget surpluses that appeared in the latter part of the 1990s began to cast doubts on the continued need for a federal estate tax. Many arguments can be made both for this tax (to some there is a perceived limit to the amount that a beneficiary should receive without work or effort) and against it (income that has been taxed once when earned should not be taxed again when the resulting assets are conveyed at death).

In 1999 (and again in 2000), the U.S. Congress voted a phased-in repeal of the estate tax, a measure that then-President Bill Clinton vetoed as being too costly. However, in 2001, Congress passed the Economic Growth and Tax Relief Reconciliation Act of 2001, which included provisions to gradually reduce and then abolish this tax by 2010. President George W. Bush signed the measure into law.

Incredibly, Congress failed to reinstate any estate tax for calendar year 2010 until December 2010. The result of this inaction was that taxpayers passing during 2010 did so potentially without the burden of the federal estate tax. Several extremely wealthy individuals managed to transfer hundreds of millions of dollars of additional inheritance to loved ones rather than paying Uncle Sam.<sup>11</sup> Without the federal estate tax scheme, the blanket basis increase at death was also limited—the result being that many wealthy beneficiaries will encounter a sizeable capital gain tax, albeit at a lower rate.

Congress enacted a significant revision to the estate tax in December 2010 that provided limited certitude for planning 2011 and 2012.<sup>12</sup> The provisions were to sunset at the end of 2012, leaving the potential for reversion to the exemption and rates in effect in 2001. However, on January 2, 2013, Congress passed and President Obama signed the American Taxpayer Relief Act (ATRA), which provided long-term answers for estate planners, CPAs, and attorneys.

### *Federal Estate Taxes*

The federal estate tax is an excise tax assessed on the right to convey property. The computation begins by determining the fair value of all property held at death. Therefore, even if real

<sup>9</sup> Warren Midgett, "Mrs. Walton's Options," *Forbes*, October 19, 1992, pp. 22–23. Helen Walton passed away in April 2007 with a fortune estimated to exceed \$16 billion. This dramatic increase in Mrs. Walton's net worth reflects the need for, and value of, estate planning. Walmart stock has continued to appreciate over the past decade, thus resulting in Mrs. Walton's beneficiaries receiving the economic benefit of her insightful estate planning.

<sup>10</sup> *IRS Data Book*, 2014, [www.irs.gov/pub/irs-soi/14datbk.pdf](http://www.irs.gov/pub/irs-soi/14datbk.pdf).

<sup>11</sup> The Probate Lawyer, July 14, 2010, at <http://www.probatelawyerblog.com/2010/07/george-steinbrenners-heirs-avoid-estate-tax-or-do-they.html>.

<sup>12</sup> Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, P.L. 111–312, December 17, 2010.

property is transferred immediately to the beneficiary and is not subject to probate, the value must still be included for federal estate tax purposes.<sup>13</sup> In establishing fair value, the executor may choose an alternate valuation date if that tax election will reduce the amount of estate taxes to be paid. This date is six months after death (or the date of disposition for any property disposed of within six months after death). Thus, the federal estate tax process starts by determining all asset values at death or this alternate date. Note that a piecemeal valuation cannot be made; one of these dates must be used for all properties.

Several items then reduce the gross estate figure to arrive at the taxable value of the estate:

- Funeral expenses.
- Estate administration expenses (including fees paid to accountants and attorneys).
- Liabilities.
- Casualties and thefts during the administration of estate.
- Charitable bequests.
- Marital deduction for property conveyed to spouse.
- State inheritance taxes.

Individuals are allowed to deduct a specified amount from the value of the estate in arriving at the federal estate tax. Recent tax legislation has escalated the portion of an estate that is exempted. Any remaining amount is taxed at graduated rates based on the year of death. However, the tax legislation that provided escalating exemptions expired at the end of 2010,<sup>14</sup> as shown in the following chart. The new 2010 legislation renewed an increased exemption, and the 2013 legislation indexed the exemption while raising the tax rate.

Date of Death	Estate Tax Exemption at Death	Highest Estate Tax Rate
2009	\$ 3.5 million	45%
2010	Tax is repealed	N/A
2011	5.0 million	35%
2012	5.12 million	35%
2013	5.25 million	40%
2014	5.34 million	40%
2015	5.43 million	40%
2016	5.45 million	40%
Beyond 2017	Indexed for inflation	40%

In the past, individuals have often sought to decrease the size of their estates to reduce estate taxes by making gifts during their lifetimes. Annual gifts of \$14,000 per person (an amount that is indexed to change with inflation) can be made tax-free to an unlimited number of donees.<sup>15</sup> The federal gift tax has not been eliminated by tax legislation, but a \$5.45 (2016) million lifetime tax-free exclusion (also indexed at the same rate as the estate tax exemption) has been established over and above the \$14,000 exclusion per person per year. Furthermore, instead of having a separate tax rate schedule as in the past, the maximum gift tax rate eventually will be the same as the maximum individual income tax rate.

<sup>13</sup> Life insurance policies with named beneficiaries are also included in the value of the estate as long as the decedent had the right to change the beneficiary. This rule may result in decedents of modest means having taxable estates. This rule is also one that all estate planning and administration professionals must understand and consider.

<sup>14</sup> 26 U.S.C. §2001 (c), as amended. The 2010 Tax Relief Act permitted estates to elect to apply the “new” provisions to estates for decedents passing in 2010. The 2010 Tax Relief Act also provided “portability” for a spouse’s exemption, permitting a surviving spouse to increase her \$5.0 million (\$5.12 million for 2012) exemption by her deceased husband’s remaining or unused exemption up to a total combined amount of \$10.0 million.

<sup>15</sup> This amount increased from \$11,000 to \$12,000 in 2006 and to \$13,000 in 2009 due to the indexing; Rev. Proc. 2008–66. An IRS announcement, Rev. Proc. 2012–41 increased the annual exemption to \$14,000.

What is the impact of all these changes? Prognosticators more than a decade ago were correct.

The death of the estate tax is at best premature, and any planner thinking of abandoning an estate planning practice is missing a large opportunity. In fact, the estate planning provisions within the Economic Growth and Tax Relief Reconciliation Act of 2001 should be a boon for most planners, not a death toll.<sup>16</sup>

### ***Federal Estate Taxes—Example 1***

The determination of the taxable estate is obviously an important step in calculating estate taxes. Assume for illustration purposes that a person dies holding assets valued at \$14 million and has total debts of \$500,000 at death. Funeral expenses cost \$100,000, and estate administration expenses amount to \$200,000. This person's will left \$5,200,000 to charitable organizations, and the remaining \$8,000,000 (after debts and expenses) goes to the surviving spouse.<sup>17</sup> Under this set of circumstances, no taxable estate exists:

Gross estate (fair value) . . . . .		\$ 14,000,000
Funeral expenses . . . . .	\$ 100,000	
Administration expenses . . . . .	200,000	
Debts . . . . .	500,000	
Charity bequests . . . . .	5,200,000	
Marital deduction . . . . .	<u>8,000,000</u>	<u>(14,000,000)</u>
Taxable estate . . . . .		<u>\$ -0-</u>
Estate tax . . . . .		<u>\$ -0-</u>

### ***Federal Estate Taxes—Example 2***

Because of the current exemptions, estate property (\$5.45 million in 2016) can be conveyed tax-free to a beneficiary other than a spouse. The ability to shelter this amount of assets from tax has an important impact on estate planning. For example, in the preceding case, if the couple has already identified the recipient of the estate at the eventual death of the second spouse (their children, for example) and the first spouse does not use the exemption, then the portability election of the unused estate tax exemption allows for conveyance to the surviving spouse. The American Taxpayer Relief Act also provides this “portability” thus permitting the unused portion of a decedent's exemption to be utilized by the surviving spouse. The second estate will then be smaller for subsequent taxation purposes if it exceeds the then-applicable exemption amount. Frequently, individuals establish a trust fund for the exemption amount, ensuring its proper distribution at the surviving spouse's eventual passing.

To illustrate, assume that the first spouse died in 2016. Assume also that the will that is written is identical to the preceding example except that only \$2,550,000 is conveyed to the surviving spouse and the remaining \$5.45 million is placed in a trust fund for the couple's children (a nondeductible amount for estate tax purposes). The estate tax return must now be adjusted to appear as follows:

Gross estate . . . . .		\$14,000,000
Funeral expenses . . . . .	\$ 100,000	
Administration expenses . . . . .	200,000	
Debts . . . . .	500,000	
Charity bequests . . . . .	5,200,000	
Marital deduction . . . . .	<u>2,550,000</u>	<u>(8,550,000)</u>
Taxable estate (conveyed to trust for surviving spouse) . . . .		5,450,000
Tax-free amount (\$5,450,000 exemption) . . . . .		<u>(5,450,000)</u>
Taxable estate . . . . .		<u>\$ -0-</u>

<sup>16</sup> Thomas J. Brzezinski, “New Era for Estate Planning,” *Financial Planning*, July 1, 2001. The “death” was indeed short-lived as Congress acted in December 2010.

<sup>17</sup> Although not applicable in this case, surviving spouses have the right in many states to renounce the provisions of a will and take an established percentage (normally one-third or one-half) of the decedent's estate. Such laws protect surviving spouses from being disinherited and are referred to as *elective forced share provisions*.

Again, the estate pays no taxes, but only \$2,550,000 is added to the surviving spouse's taxable estate rather than \$8,000,000 as in the previous example. Thus, an eventual decrease in the couple's *total* estate has been accomplished. This is a particularly important consideration because, while the first spouse's exemption amount of \$5.45 million is portable to the surviving spouse, such planning options are subject to the legislative whims of Congress.

To facilitate the necessity of planning, accountants and estate planners must understand the implications of how assets are titled as well. Legally, if a couple holds property as joint tenants or tenants by the entirety, the property passes automatically to the survivor at the death of the other party. Thus, if all property were held in one of these ways, the decedent would have no estate. However, if property is held by the couple as tenants in common, the portion the decedent owned is included in that person's estate and, up to the set limit, can be conveyed tax-free to a nonspouse beneficiary.

### ***Other Approaches to Reducing Estate Taxes***

One technique previously used by families with large fortunes to reduce estate taxes was to transfer assets to grandchildren and even great-grandchildren. This manner reduced the number of separate conveyances (each of which would have been subject to taxation at the top rate) from parent to child to grandchild. However, the government effectively eliminated the appeal of this option by establishing a generation-skipping transfer tax. Under this law, after an exemption, a flat tax was assessed on transfers by gift, bequest, or trust distribution to individuals two or more generations younger than the donors or decedents. (However, the exemption was unlimited for a transfer to a grandchild when the grandchild's parent was deceased and she was a lineal descendent of the transferor.)

With its passage of the Tax Relief, Unemployment Insurance Reauthorization, and Jobs Creation Act of 2010, Congress implemented a \$5 million exemption per donor from the generation-skipping transfer tax (increased to \$5.12 million for 2012 and \$5.25 million for 2013). The American Taxpayer Relief Act of 2012 further indexed this amount to track the gift tax exemption prospectively. The exemption is \$5.45 million for 2016.

### ***State Inheritance Taxes***

States assess inheritance taxes on the right to receive property with the levy and all other regulations varying, as discussed earlier, based on state laws. However, the specifications of a will determine the actual impact on the individual beneficiaries. Many wills dictate that all inheritance tax payments are to be made from any residual cash amounts that the estate holds. Consequently, individuals receiving residual legacies are forced to bear the entire burden of this tax—although, presumably, that was the testator's desire.

If the will makes no provisions for state inheritance taxes (or if the decedent dies intestate), the amounts conveyed to each party must be reduced proportionately based on the fair value received. Thus, the recipient of land valued at \$200,000 would have to contribute twice as much for inheritance taxes as a beneficiary collecting cash of \$100,000. Decreasing a cash legacy to cover the cost of inheritance taxes creates little problem for the executor. However, a direct reduction of an estate asset such as land, buildings, or corporate stocks might be virtually impossible. Normally, the beneficiary in such cases is required to pay enough cash to satisfy the applicable inheritance tax. The estate planning process often establishes life insurance policies to provide cash for such payments. However, the ownership of such insurance may in turn result in the proceeds being subjected to the federal estate tax. Thus, the need for estate professionals such as CPAs is essential for planning.

### ***Estate and Trust Income Taxes***

Although all estates require time to be settled, the period can become quite lengthy if complex matters arise. From the date of death until ultimate resolution, an estate is viewed legally as a taxable entity and must file a federal tax return if gross income is \$600 or more. The return is due by the 15th day of the fourth month following the close of the estate's taxable year. The calendar year or any other fiscal year may be chosen as the taxable year. In 2014, the Internal Revenue Service collected \$29.4 billion of income taxes from estates and trusts.<sup>18</sup>

<sup>18</sup> *IRS Data Book*, 2014, p. 15.

Applicable income tax rules for estates and trusts are generally the same as for individual taxpayers. Therefore, dividend, rental, interest, and other income earned by an estate in the period following death is taxable to the estate unless the income is of a type that is specifically nontaxable (such as municipal bond interest).

A \$600 personal exemption is provided as a decrease to the taxable balance. In addition, a reduction is allowed for (1) any taxable income donated to charity and (2) any taxable income for the year distributed to a beneficiary. In 2016, federal tax rates are 15 percent on the first \$2,550 of taxable income per year with various rates levied on any excess income earned up to \$12,400. At a taxable income level more than \$12,400, a 39.6 percent rate is incurred.

As an illustration, assume that in 2016 an estate earned net rental income of \$30,000 and dividend income of \$10,000. The dividend income was distributed immediately to a beneficiary and was taxable income for that individual, and \$7,400 of the rental income was given to charity. Estate income taxes for the year would be computed as follows:<sup>19</sup>

Rental income . . . . .	\$ 30,000
Dividend income . . . . .	10,000
Total revenue . . . . .	40,000
Exemption . . . . .	(600)
Gift to charity . . . . .	(7,400)
Distributed to beneficiary . . . . .	(10,000)
Taxable income . . . . .	<u>\$ 22,000</u>
Income tax:	
15% of first \$2,550 . . . . .	\$ 382.50
25% of next \$3,400 (\$5,950 – \$2,550) . . . . .	850.00
28% of next \$3,100 (\$9,050 – \$5,950) . . . . .	868.00
33% of next \$3,350 (\$12,400 – \$9,050) . . . . .	1,105.50
39.6% of excess over \$12,400 (\$22,000 – \$12,400) . . . . .	3,801.60
	<u>\$ 7,007.60</u>

#### LO 19-4

Understand and account for the distinction between principal and income in the context of estate and trust accounting.

### The Distinction between Income and Principal

In many estates, the executor faces the problem of differentiating between income and principal transactions. For example, a will might state “all income earned on my estate for five years after death is to go to my sister, with the estate then being conveyed to my children.” The recipient of the income is known as an *income beneficiary*, whereas the party who ultimately receives the principal (also known as the *corpus*) is called a *remainderman*. As the fiduciary for the estate, the executor must ensure that all parties are treated fairly. Thus, if amounts are distributed incorrectly, the court can hold the executor legally liable.

The definitional difference between principal and income appears to pose little problem. The *estate* principal encompasses all of the decedent’s assets at death; *income* is the earnings on these assets after death. However, some transactions are not easily categorized as either principal or income. As examples, consider these:

- Are funeral expenses charged to principal or income?
- Is the executor’s fee charged to principal or income?
- Are dividends that are declared before death but received after death viewed as principal or income?
- If stocks are sold for a gain, is this gain viewed as income or an increase in principal?
- Are repairs to rental property considered a reduction of principal or of income?

<sup>19</sup> As fiduciary entities, estates and trusts are taxed at the same income tax rates. Note that their top rate of 39.6 percent becomes applicable at a taxable income level of only \$12,400. In comparison, for 2016, this same top income tax rate of 39.6 percent was not assessed for a single taxpayer, head of household, or married filing joint return until taxable income reached a much greater threshold (\$466,950 for joint returns).

Clearly, the distinction between principal and income is not always obvious. For this reason, in writing a will, an individual may choose (and should be advised) to spell out the procedure by which principal and income are to be calculated. If defined in this manner, the executor merely has to follow these instructions.

In certain cases, the decedent will have provided no guidance as to the method by which transactions are to be classified. The executor must apply state laws to determine these principal and income figures. Many states have adopted the Revised Uniform Principal and Income Act as a standard for this purpose. However, some states have adopted modified versions of the Revised Uniform Principal and Income Act, and still others have created their own distinct laws. Generally accepted accounting principles are not applicable; the distinction between principal and income is defined solely by the decedent's intentions or by state laws.

Although differences exist because of unique state laws or the provisions of a will, the following transactions are normally viewed as adjustments (either increases or decreases) to the *principal of the estate*:

- Life insurance proceeds if the estate is named as the beneficiary.
- Dividends declared prior to death and any other income earned prior to death.
- Liquidating dividends even if declared after death.
- Debts incurred prior to death.
- Gains and losses on the sale of corporate securities or rental property.
- Major repairs (improvements) to rental property.
- Investment commissions and other costs.
- Funeral expenses.
- Homestead and family allowances.

The *income of the estate* includes all revenues and expenses recognized after the date of death. Within this calculation, the following items are normally included as reductions to income:

- Recurring taxes such as real and personal property taxes.
- Ordinary repair expenses.
- Water and other utility expenses.
- Insurance expenses.
- Other ordinary expenses necessary for the management and preservation of the estate.

Several costs such as the executor's fee, court costs, and attorneys' and accountants' charges must be apportioned between principal and interest as required by state law or in some fair manner, if such allocation has not been specified in the decedent's last will and testament.

## Recording of the Transactions of an Estate

The accounting process that the executor of an estate uses is quite unique. *Because the probate court has given this individual responsibility over the assets of the estate, the accounting system is designed to demonstrate the proper management and distribution of these properties.* Thus, several features of estate accounting should be noted:

- All estate assets are recorded at fair value to indicate the amount and extent of the executor's accountability. Any assets subsequently discovered are disclosed separately so that these adjustments to the original estate value can be noted when reporting to the probate court. The ultimate disposition of all properties must be recorded to provide evidence that the executor's fiduciary responsibility has been fulfilled.
- Debts, taxes, and other obligations are recorded only at the date of payment. In effect, the system is designed to monitor the disposition of assets. Thus, claims are relevant to the accounting process only at the time that the assets are disbursed. Likewise, distributions of legacies are not entered into the records until actually conveyed. As mentioned earlier, devises of real property are often transferred by operation of law at death so that no accounting is necessary.



- Because of the importance of separately identifying income and principal transactions in many estates, the accounting system must always note whether income or principal is being affected. Quite frequently, the executor maintains two cash balances to assist in this process.

To illustrate, assume that James T. Wilson dies on April 1, 2016. The following valid will has these provisions:

- I name Tim Hernly as executor of my estate.
- I leave my house, furnishings, and artwork to my aunt, Ann Wilson.
- I leave my investments in stocks to my uncle, Jack E. Wilson.
- I leave my automobile and personal effects to my grandmother, Nancy Wilson.
- I leave \$38,000 in cash to my brother, Brian Wilson.
- I leave any income earned on my estate to my niece, Karen Wilson.
- All remaining property is to be placed in trust for my children.

Tim Hernly must (1) perform a search to discover all estate assets and (2) allow an adequate opportunity for every possible claim to be filed. The assets should be recorded immediately at fair value with the creation of the Estate Principal account. This total represents the amount of assets for which the executor is initially accountable. The following journal entry establishes the values for the assets owned by James T. Wilson at his death that have been found to date:

Cash—Principal. . . . .	11,000	
Interest Receivable on Bonds . . . . .	3,000	
Dividends Receivable on Stocks. . . . .	4,000	
Life Insurance—Payable to Estate. . . . .	40,000	
Residence . . . . .	90,000	
Household Furnishings and Artwork . . . . .	24,000	
Automobile . . . . .	4,000	
Personal Effects . . . . .	2,000	
Investment in Bonds . . . . .	240,000	
Investment in Stocks . . . . .	50,000	
Estate Principal. . . . .		468,000

Following is a list of subsequent transactions incurred by this estate with each appropriate journal entry. Because estate income is to be conveyed to one party (Karen Wilson) but the remaining principal is to be placed in trust, careful distinction between these two elements is necessary.

**Transaction 1**

The executor paid funeral expenses of \$4,000.

Funeral and Administrative Expenses . . . . .	4,000	
Cash—Principal . . . . .		4,000

**Transaction 2**

The life insurance policy payable to the estate (shown in the initial entry) is collected.

Cash—Principal. . . . .	40,000	
Life Insurance—Payable to Estate . . . . .		40,000

**Transaction 3**

The title to 4.0 acres of land is discovered in a safe deposit box. This asset was not included in the original inventory of estate property. An appraiser sets the value of the land at \$22,000.

Land .....	22,000	
Assets Subsequently Discovered (Estate Principal) .....		22,000

**Transaction 4**

The executor receives claims totaling \$24,000 for debts the decedent incurred *prior to death*. This amount includes medical expenses covering the decedent's last illness (\$11,000), property taxes (\$4,000), utilities (\$1,000), personal income taxes (\$5,000), and other miscellaneous expenses (\$3,000). The executor pays all of these claims.

Debts of the Decedent .....	24,000	
Cash—Principal .....		24,000

**Transaction 5**

Interest of \$8,000 is collected on the bonds held by the estate. Of this amount, \$3,000 was earned prior to the decedent's death and was included as a receivable in the initial recording of the estate assets.

Cash—Principal .....	3,000	
Cash—Income .....	5,000	
Interest Receivable on Bonds .....		3,000
Estate Income .....		5,000

**Transaction 6**

Dividends of \$6,000 are collected from the stocks held by the estate. Of this amount, \$4,000 was declared prior to the decedent's death and was included as a receivable in the initial recording of the estate assets.

Cash—Principal .....	4,000	
Cash—Income .....	2,000	
Dividends Receivable on Stocks .....		4,000
Estate Income .....		2,000

**Transaction 7**

The executor now has a problem. The Cash—Principal balance is currently \$30,000:

Beginning balance .....	\$ 11,000
Funeral expenses .....	(4,000)
Life insurance .....	40,000
Payment of debts .....	(24,000)
Interest income .....	3,000
Dividends .....	4,000
Current balance .....	<u>\$ 30,000</u>

However, the decedent bequeathed his brother, Brian Wilson, \$38,000 in cash. This general legacy cannot be fulfilled without selling some property. Most assets have been promised as specific legacies and cannot, therefore, be used to satisfy a general legacy.



## Discussion Question

### IS THIS REALLY AN ASSET?

Robert Sweingart died during July 2016 at the age of 101. He had outlived many of his relatives, including the person named in his will as executor of his estate. Thus, the probate court selected the decedent's nephew Timothy J. Lee, as administrator. Lee promptly began his duties including reading the will and taking an inventory of Sweingart's properties. Although the will had been written in 1979, Lee could see that most of the provisions would be easy to follow. Sweingart had made a number of specific and demonstrative legacies that could simply be conveyed to the beneficiaries. The will also included a \$20,000 general legacy to a local church with a residual legacy to a well-known charity. Unfortunately, after all other legacies were distributed, the estate would have only about \$14,000 cash.

One item in the will concerned the administrator. Sweingart had made the following specific legacy: "I leave my collection of my grandfather's letters which are priceless to me, to my cousin, William." Lee discovered the letters in a wall safe in Sweingart's home. About 40 letters existed, all in excellent condition. They were written by Sweingart's grandfather during the Civil War and described in vivid detail the Second Battle of Bull Run and the Battle of Gettysburg. Unfortunately, Lee could find no trace of a cousin named William. He apparently had died or vanished during the 35-year period since the will was written.

Lee took the letters to two different antique dealers. One stated, "A museum that maintains a Civil War collection would love to have these. They do a wonderful job of explaining history. But a museum would not pay for them. They have no real value since many letters written during this period still exist. I would recommend donating them to a museum."

The second dealer took a different position: "I think if you can find individuals who specialize in collecting Civil War memorabilia they might be willing to pay a handsome price especially if these letters help to fill out their collections. A lot of people in this country are fascinated by the Civil War. The number seems to grow each day. The letters are in great condition. It would take some investigation on your part, but they could be worth a small fortune."

Lee now has to prepare an inventory of his uncle's property for probate purposes. How should he report these letters? What should Lee do next with the letters in order to meet his fiduciary obligation(s) to the estate and the beneficiaries?

Two assets, though, are residual: the investment in bonds and the land that was discovered. The executor must sell enough of these properties to generate the remaining funding needed for the \$38,000 conveyance. In this illustration, assume that the executor chooses to dispose of the land and negotiates a price of \$24,000. Because a principal asset is being sold, the extra \$2,000 received above the recorded value is considered an adjustment to principal rather than an increase in income. Similarly, if the asset sold at an amount below the appraised value of \$22,000, this transaction would result in a reduction to principal.

Cash—Principal .....	24,000	
Land .....		22,000
Gain on Realization—Principal .....		2,000

**Transaction 8**

Fees of \$1,000 charged for administering the affairs of the estate are paid. Of this amount, we assume that \$200 is considered to be applicable to estate income.

Funeral and Administrative Expenses—Principal .....	800	
Expenses—Income .....	200	
Cash—Principal .....		800
Cash—Income .....		200

**Transaction 9**

On October 13, 2016, the house, furnishings, and artwork are given to the decedent's aunt (Ann); the stocks are transferred to the uncle (Jack); and the grandmother (Nancy) receives the decedent's automobile and personal effects.

Legacy—Ann Wilson (residence, furnishings, and artwork) .....	114,000	
Legacy—Jack E. Wilson (stocks) .....	50,000	
Legacy—Nancy Wilson (automobile and personal effects) .....	6,000	
Residence .....		90,000
Household Furnishings and Artwork .....		24,000
Investment in Stocks .....		50,000
Automobile .....		4,000
Personal Effects .....		2,000

**LO 19-5**

Describe the financial statements and journal entries utilized to account for estate and trust transactions.

**Charge and Discharge Statement**

As necessary, the executor files periodic reports with the probate court to disclose the progress being made in settling the estate. This report, which may vary from state to state, is generally referred to as a *charge and discharge statement*. If income and principal must be accounted for separately, the statement is prepared in two parts. For both principal and income, the statement should indicate the following:

1. The assets under the executor's control.
2. Disbursements made to date.
3. Any property still remaining.

Thus, the executor of James T. Wilson's estate can produce Exhibit 19.1 immediately after Transaction 9. (Transaction numbers are included in parentheses for clarification purposes.)

At this point in the illustration, only three transactions remain: distribution of the \$38,000 cash to the decedent's brother, conveyance of the \$6,800 cash generated as income since death to the niece, and establishment of the trust fund with the remaining principal. The trust fund will receive the \$240,000 in bonds and the \$15,200 in cash that is left in principal (\$53,200 total less \$38,000 paid to the brother).

Legacy—Brian Wilson .....	38,000	
Cash—Principal .....		38,000
Distribution to Income Beneficiary—Karen Wilson .....	6,800	
Cash—Income .....		6,800
Principal Assets Transferred to Trustee .....	255,200	
Cash—Principal .....		15,200
Investment in Bonds .....		240,000

The executor would then prepare a final charge and discharge statement and then closing entries to signal the conclusion of the estate as a reporting entity.

**EXHIBIT 19.1** Executor's Charge and Discharge Statement

<b>ESTATE OF JAMES T. WILSON</b>		
<b>Charge and Discharge Statement</b>		
<b>April 1, 2016-October 13, 2016</b>		
<b>Tim Hernly, Executor</b>		
<b>As to Principal</b>		
I charge myself with:		
Assets per original inventory .....		\$468,000
Assets subsequently discovered: land (Trans. 3) .....		22,000
Gain on sale of land (Trans. 7) .....		<u>2,000</u>
Total charges .....		492,000
I credit myself with:		
Debts of decedent (Trans. 4):		
Medical expenses .....	\$ 11,000	
Property taxes .....	4,000	
Utilities .....	1,000	
Personal income taxes .....	5,000	
Others .....	<u>3,000</u>	\$ 24,000
Funeral and administrative expenses (Trans. 1 and 8) .....		4,800
Legacies distributed (Trans. 9):		
Ann Wilson (house, furnishings, and artwork) .....	114,000	
Jack E. Wilson (stocks) .....	50,000	
Nancy Wilson (automobile and personal effects) .....	<u>6,000</u>	<u>170,000</u>
Total credits .....		<u>198,800</u>
Estate principal .....		<u>\$293,200</u> ←
Estate principal:		
Cash .....		\$ 53,200
Investment in bonds .....		<u>240,000</u>
Estate principal .....		<u>\$293,200</u> ←
<b>As to Income</b>		
I charge myself with:		
Interest income (Trans. 5) .....		\$ 5,000
Dividend income (Trans. 6) .....		<u>2,000</u>
Total charges .....		7,000
I credit myself with:		
Administrative expenses charged to income (Trans. 8) .....		<u>200</u>
Balance as to income .....		<u>\$ 6,800</u> ←
Balance as to income:		
Cash .....		<u>\$ 6,800</u> ←

**LO 19-6**

Describe various trusts, their proper use, and accounting for activities.

## Accounting for a Trust

A trust is created by the conveyance of assets to a fiduciary (or trustee) who manages the assets and ultimately disposes of them to one or more beneficiaries. The trustee may be an individual or an organization such as a bank or other financial institution. Over the years, trust funds have become quite popular in this country for a number of reasons. Often they are established to reduce the size of a person's taxable estate and, thus, the amount of estate taxes that must eventually be paid. As one financial adviser has stated, "Who needs to establish a trust? You do, and so does your spouse. There may be several good reasons, but start with this: If you don't set up trusts, your heirs may pay hundreds of thousands of dollars in unnecessary estate taxes."<sup>20</sup>

<sup>20</sup> Jeff Burger, "Which Trust Is Best for Your Family?" *Medical Economics*, August 1, 1988, p. 141.

Estate taxes are not the only reason for establishing a trust. People form trust funds to protect assets and ensure that the eventual use of these assets is as intended. Trusts can also result from the provisions of a will, specified by the decedent as a means of guiding the distribution of estate property. In legal terms, an *inter vivos trust* is one started by a living individual, whereas a *testamentary trust* is created by a will.

Frequently, the *trustor* or *settlor* or *grantor* (the person who funds the trust) will believe that a chosen trustee is simply better suited to manage complicated investments than is the beneficiary. A young child, for example, is not capable of directing the use of a large sum of money. The trustor may have the same opinion of an individual who possesses little business expertise. Likewise, the creation of a trust for the benefit of a person with a mental or severe physical handicap might be considered a wise decision.

During recent years, one specific type of trust, a *revocable living trust*, has become especially popular and controversial. The trustor usually manages the fund and receives most, if not all, of the income until death. After that time, future income and possibly principal payments are made to one or more previously named beneficiaries. Because the trust is revocable, the trustor can change these beneficiaries or other terms of the trust at any time.

You want to leave knowing your loved ones have the best financial breaks possible. That's why the idea of a revocable living trust may sound so promising. During your lifetime, you turn over all assets to a trust. But you act as your own trustee, so you determine how the assets will be managed and distributed. Then, happy in the knowledge that you can change the trust at any time, you have the joy of knowing you're setting up a financial plan for your life and after death.<sup>21</sup>

Revocable living trusts offer several significant advantages that appeal to certain individuals. First, this type of trust avoids the delay and expense of probate. At the trustor's death, the trust continues and makes future payments as defined in the trust agreement. In some states, this advantage can be quite important, but in others the cost of establishing the trust may be more expensive than the potential probate costs. The taxable income of the revocable living trust is included in the grantor's individual income tax return while that person remains alive. It is not taxed within a fiduciary income tax return until after the grantor's death.

Second, conveyance of assets through a trust can be made without publicity, whereas a will is a public document. Thus, anyone who values privacy may want to consider the revocable living trust. The entertainer Bing Crosby, for example, set up such a trust so that no outsider would know how his estate was distributed.<sup>22</sup>

Although the number of other types of trusts is quite large,<sup>23</sup> several of the more common trusts that have been utilized and that clients are likely to have established include:

- *Credit shelter trust* (also known as a *bypass trust* or *family trust*). This trust is designed for couples. Each spouse agrees to transfer at death an amount of up to the tax-free exclusion (\$5.45 million in 2016) to a trust fund for the benefit of the other. Thus, the income that these funds generate goes to the surviving spouse, but at the time of this second individual's subsequent death, the principal is conveyed to a different beneficiary. As discussed in the previous section, this arrangement can be used to reduce the estate of the surviving spouse and, therefore, the amount of estate taxes paid by the couple. With portability of the \$5.45 million exemption, the use of credit shelter trusts will be significantly reduced.

If your estate is large enough to be threatened by the federal estate tax, you can incorporate provisions to soften the blow. This year [2003], federal law permits each person to leave \$1 million in assets tax-free—in addition to the unlimited amount that can go to a surviving spouse. But leaving everything to a spouse can be a costly mistake if it inflates the survivor's estate to the level at which it may be hit by the tax. To avoid this, couples

<sup>21</sup> Estelle Jackson, "Living Trust May Sound Promising," *Richmond Times—Dispatch*, October 13, 1991, p. C1.

<sup>22</sup> *Ibid.*, p. C5.

<sup>23</sup> The cost of establishing and maintaining trusts can be significant. Therefore, use of these trusts may be limited to taxpayers of substantial means.

should make sure each owns enough individually to take advantage of the \$1 million tax-free allowance, even if it means splitting jointly owned assets. Then, both husband and wife could include in their wills a trust (called a bypass or credit shelter trust) to hold \$1 million, from which the survivor would get all the income and possibly some principal during his or her lifetime, with the balance going to the children upon the spouse's death. That \$1 million would go to the kids tax-free, rather than being included—and possibly taxed—in the surviving spouse's estate.<sup>24</sup>

- *Qualified terminable interest property trust* (known as a *QTIP trust*). Individuals frequently create a QTIP trust to serve as a credit shelter trust. They convey property to the trust and specify that the income, and possibly a portion of the principal, be paid to the surviving spouse (or other beneficiary). At a specified time, the trust conveys the remainder to a designated party. Such trusts are popular because they provide the spouse a steady income but the trustee can guard the principal and then convey it at a later date to the individual's children or other designated parties. However, no trust exists without some potential problems:

During the spouse's lifetime, no one else—not even the children—can benefit from the QTIP trust. However, this can mean years of potential conflict as the children wait for their inheritance. To minimize this potential problem, it often makes sense to set up another trust for the benefit of the children. This is particularly so if a new spouse (step-parent) is close in age to your children.<sup>25</sup>

- *Charitable remainder trust*. All income is paid to one or more beneficiaries identified by the trustor. After a period of time (or at the death of the beneficiaries), the principal is given to a stated charity. Thus, the trustor is guaranteeing a steady income to the intended parties while still making a gift to a charitable organization. These trusts are especially popular if a taxpayer holds property that has appreciated greatly (such as real estate or stocks) that is to be liquidated. By conveying it to the trust prior to liquidation, the sale is viewed as that of the charity and is, hence, nontaxable. Thus, tax on the gain is avoided and significantly more money remains available to generate future income for the beneficiaries (possibly the original donor). “This trust lets you leave assets to your favored charity, get a tax break, but retain income for life.”<sup>26</sup>
- *Charitable lead trust*. This trust is the reverse of a charitable remainder trust. Income from the trust fund goes to benefit a charity for a specified time with the remaining principal then going to a different beneficiary. For example, a charity might receive the income from trust assets until the donor's children reach their 21st birthdays.

Jacqueline Kennedy Onassis used this technique and ended up sheltering roughly 90 percent of the trust assets from estate taxes. Setup and operating costs, however, preclude the use of this type of trust unless the assets involved are substantial. As such this is a vehicle for the very wealthy, allowing them to keep an asset in the family but greatly reducing the cost of passing it on.<sup>27</sup>

- *Grantor retained annuity trusts* (known as *GRATs*). The trustor maintains the right to collect fixed payments from the trust fund while giving the principal to a beneficiary after a stated time or at the trustor's death. For example, the trustor might retain the right to receive an amount equal to 7 percent of the initial investment annually with any remaining balance of the trust fund to go to his or her children at death. Because the beneficiary will not receive the residual amount for years, a current value is computed for gift tax purposes. Depending on (1) the length of time before final distribution to the beneficiary, (2) the assumed rate of income, and (3) the amounts to be distributed periodically to the trustor,

<sup>24</sup> Josephine Rossi, “Your Will Be Done,” *Kiplinger's Personal Finance*, January 2003. By 2009, this \$1 million amount had grown to \$3.5 million and increased to \$5.45 million in 2016. With portability of the exemptions, this planning strategy is significant.

<sup>25</sup> Philip Maynard, “A QTIP Protects the Family,” *CreativeLiving Magazine*, Autumn 2001.

<sup>26</sup> Lynn Asinof, “Estate-Planning Techniques for the Rich,” *The Wall Street Journal*, January 11, 1995, p. C1.

<sup>27</sup> *Ibid.*, p. C15.

this value is often quite small so that the gift tax is reduced or eliminated entirely. However, GRATs can have certain risks.

When setting up a GRAT, remember that the annuity you establish at its outset could drain the trust if the expected growth doesn't materialize. Then you will have paid taxes and legal costs . . . and will have left little to your heirs. Equally important, the grantor must outlive the trust. If you die before the GRAT ends, the assets will revert to your estate.<sup>28</sup>

- *Minor's Section 2503(c) trust.* Established for a minor, this trust fund usually is designed to receive a tax-free gift of up to \$14,000 each year (\$28,000 if the transfer is made by a married couple). Over a period of time, especially if enough beneficiaries are available, this trust can remove a significant amount of assets from a person's estate. The change in the gift tax laws and the expansion of the estate exemption may make this trust less attractive.
- *Spendthrift trust.* This trust is established so that the beneficiary cannot transfer or assign any unreceived payments. The purpose of such trusts is to prevent the beneficiary from squandering the assets the trust fund is holding or the beneficiary's creditors from reaching the assets. This type of trust is particularly useful to protect irresponsible beneficiaries: for example, children, and beneficiaries whose former spouses maintain legal actions against them.
- *Irrevocable life insurance trust.* With this trust, the donor contributes money to buy life insurance on the donor. If a married couple is creating the trust, usually the life insurance policy is designed to pay the proceeds only after the second spouse dies. The proceeds are not part of the estate and the beneficiary can use the cash to pay estate and inheritance taxes.
- *Qualified personal resident trust (QPRT).* The donor gives his or her home to the trust but retains the right to live in the house for a period of time rent-free. This removes what is often an individual's most valuable asset from the estate. This type of trust has characteristics similar to a GRAT.

The term of the trust can be as short or as long as desired. The longer the term the lower the value of the gift. If the grantor dies before the term of the trust expires, however, the property will revert back to the estate of the deceased and be subject to estate taxes at its current value. Therefore, a term should be picked that the grantor believes he or she will outlive for the benefits of the QPRT to be effective.<sup>29</sup>

As these examples indicate, many trust funds generate income for one or more beneficiaries (known as *life tenants* if the income is to be conveyed until the person dies). At death or the end of a specified period, the remaining principal is transferred to a different beneficiary (a *remainderman*). Therefore, as with estates, differentiating between principal and income is ultimately important in accounting for trust funds. This distinction is especially significant because trusts frequently exist for decades and can control and generate enormous amounts of assets.

The reporting function is also important because of the trustee's legal responsibilities. This fiduciary is charged with the wise use of all funds and may be sued by the beneficiaries if actions are considered to be unnecessarily risky or in contradiction to the terms of the trust arrangement. To avoid potential legal problems, the trustee is normally called on to exercise reasonable and prudent care in managing the assets of the fund.

## Record-Keeping for a Trust Fund

Trust accounting is quite similar to the procedures demonstrated previously for an estate. However, because many different types of trusts can be created and an extended time period might be involved, the accounting process may become more complex than that for an estate.

<sup>28</sup>Pam Black, "A GRAT Can Be Great for Saving Your Kids a Bundle," *BusinessWeek*, March 1, 1999, p. 116.

<sup>29</sup>Michael Mingione, "Trust Your House," *The CPA Journal*, September 1996, p. 40.



As an example, an apartment house or a significant portion of a business could be placed in a trust for 20 years or longer. Thus, the possible range of transactions to be recorded becomes quite broad. In such cases, the fiduciary often establishes two separate sets of accounts, one for principal and one for income. As an alternative, the fiduciary could utilize a single set of records with the individual accounts identified as to income or principal.

*In the same manner as an estate, the trust agreement should specify the distinction between transactions to be recorded as income and those to be recorded as principal.* If the agreement is silent or if a transaction that is not covered by the agreement is incurred, state laws apply to delineate the accounting. Generally accepted accounting principles usually are not considered appropriate. For example, trusts utilize the cash method rather than accrual accounting in recording most transactions. Although a definitive set of rules is not possible, the following list indicates the typical division of principal and income transactions:

#### **Adjustments to the Trust's Principal**

- Investment costs and commissions.
- Income taxes on gains added to the principal.
- Costs of preparing property for rent or sale.
- Extraordinary repairs (improvements).

#### **Adjustments to the Trust's Income**

- Rent expense.
- Lease cancellation fees.
- Interest expense.
- Insurance expense.
- Income taxes on trust income.
- Property taxes.

Trustee fees and the cost of periodic reporting (accountant and legal fees) must be allocated between trust income and principal. This allocation is often based on the value of assets within each (principal/income) category.

### Accounting for the Activities of a Trust

An *inter vivos* trust reports on an annual basis (often more frequently) to all income and principal beneficiaries. However, testamentary trusts come under the jurisdiction of the courts so that additional reporting regularly becomes necessary. Normally, a statement resembling the charge and discharge statement of an estate is adequate for these purposes. Two accounts, Trust Principal and Trust Income, monitor changes that occur. For a testamentary trust, the opening principal balance is the fair value used by the executor for estate tax purposes.

To illustrate, assume that the following events occur in connection with the creation of a charitable remainder trust. The will of Samuel Statler created a trust with the income earned each year to go to his niece for 10 years and the principal then conveyed to a local university (the charity).

1. Cash of \$80,000 and stocks (that originally cost \$39,000 but are now worth \$47,000) are transferred from the estate to the First National Bank of Michigan because this organization has agreed to serve as trustee for these funds.
2. The trustee invested cash of \$76,000 in bonds paying 11 percent annual cash interest.
3. Dividends of \$6,000 on the stocks are collected, and interest of \$7,000 is received on the bonds. No receivables had been included in the estate for these amounts.
4. At the end of the year, an additional \$3,000 in interest is due on the bonds.
5. As trustee, the bank charges \$2,000 for services rendered for the year. Statler's will provided that such fees should be allocated equally between principal and income.
6. The niece is paid the appropriate amount of money from the trust fund.

As the trustee, the bank should record these transactions as follows:

1. Cash—Principal . . . . .	80,000	
Investment in Stocks . . . . .	47,000	
Trust Principal . . . . .		127,000
To record trust assets at the fair market value figure used for estate tax purposes.		
2. Investment in Bonds . . . . .	76,000	
Cash—Principal . . . . .		76,000
To record acquisition of bonds using cash in trust fund.		
3. Cash—Income . . . . .	13,000	
Trust—Income . . . . .		13,000
To record dividends and interest collected.		
4. No entry is recorded. These earnings cannot be paid to the income beneficiary until collected so that accrual provides no benefit. Therefore, the trustee uses a cash basis system rather than accrual accounting.		
5. Trustee Expense—Income . . . . .	1,000	
Trustee Expense—Principal . . . . .	1,000	
Cash—Income . . . . .		1,000
Cash—Principal . . . . .		1,000
To allocate the trustee's fees evenly between principal and income.		
6. Equity in Income: Beneficiary . . . . .	12,000	
Cash—Income . . . . .		12,000
To record yearly payment made to income beneficiary. Amount is computed as the total of the dividends and interest of \$13,000 less expenses of \$1,000.		

## Summary

1. An *estate* is the legal entity that holds title to a decedent's property until a final settlement and distribution can be made. State laws, known as *probate laws*, govern this process. These laws become particularly significant if the decedent has died intestate (without a will).
2. A decedent's will should name an executor to oversee the estate. If it does not, the probate court selects an administrator. The executor or administrator takes possession of all properties, settles valid claims, files tax returns, pays taxes due, and distributes any remaining assets according to the provisions of the decedent's will or state inheritance laws. The executor must issue a public notice so that all creditors have adequate opportunity to file a claim against the estate. Prior to paying these claims, a homestead allowance and a family allowance are provided to the members of the decedent's immediate family. Claims are then ranked in order of priority to indicate the payment schedule if existing funds prove to be insufficient. For example, administrative expenses and funeral expenses are at the top of this priority listing.
3. *Devises* are gifts of real property; *legacies* (or *bequests*) are gifts of personal property. Legacies can be classified legally as specific, demonstrative, general, or residual, depending on the type of property and the identity of the source. If available funds are insufficient to fulfill all legacies, the process of abatement is applied to determine the final allocations. After residual legacies have been reduced to zero, general legacies are decreased if necessary. Demonstrative legacies are reduced next, followed by specific legacies.
4. Federal estate taxes are assessed on the value of nonexempt estate property. Reductions in the total value of an estate are allowed for funeral and administrative expenses as well as for liabilities, charitable gifts, and all property conveyed to a spouse. For estate tax purposes, the tax code provides a tax-free exemption amount of \$5.0 million in 2011, \$5.12 million in 2012, \$5.25 million in 2013, \$5.34 million in 2014, \$5.43 million in 2015, and \$5.45 million in 2016. Any unused exemption may be utilized by a surviving spouse, thus making the exemption portable. The same exemption amount applies to the generation-skipping tax. Individuals in 2016 have a \$5.45 million lifetime gift exclusion, in addition to a \$14,000 per donee annual exclusion.
5. The distinction between income and principal for both estates and trusts is frequently an important issue. Income may be assigned to one party with the principal eventually going to a different beneficiary. Such arrangements are especially common in trust funds such as charitable remainder trusts. The decedent (for an estate) or the trustor (for a trust) should have identified the method of classification to

be used for complicated transactions. If no guidance is provided, state laws apply. For example, major repairs and investment costs usually are considered reductions in principal, whereas expenses such as property taxes and ordinary repairs are charged to income. The bookkeeping procedures for estates and trusts are designed to separate and then reflect the transactions affecting principal and income.

6. To provide evidence of the proper handling of an estate or trust, the fiduciary produces a charge and discharge statement. This statement reports the assets over which the representative has been given responsibility. The statement also indicates all disbursements of assets and the property remaining at the current time. Separate reports are prepared for income and principal.

## Comprehensive Illustration

(Estimated Time: 1 Hour)

### Problem

#### Part A

Upon her death, Marie Peterson’s will contained the following provisions:

1. I leave my home, personal effects, and stock investments to my husband, Erik.
2. I leave my savings account at State Bank, up to a total of \$20,000, to my oldest son, Zach.
3. I leave \$5,000 to my niece, Nikki.
4. I leave all remaining assets, including my valuable coin collection, to be placed in trust and managed by Kevin Leahy, if he is willing and able to do so. If not, then I request that a financial institution be engaged to manage such assets. The income from these assets shall be utilized for the benefit of my husband, Erik. At his death, the principal of this trust shall be distributed to St. Patrick’s Church, Elkhorn, Wisconsin.
5. In the event that it is necessary for a custodian or guardian to be appointed for any of my children, I request that Mary Breese be appointed in this capacity.
6. I appoint my sister Jodie to manage my estate.

Jodie has now paid all taxes and other claims, and the following assets remain; their fair value(s) follow:

Home . . . . .	\$400,000
Personal effects . . . . .	100,000
Stock investments . . . . .	50,000
Bond investments. . . . .	75,000
State Bank savings account . . . . .	10,000
Cash. . . . .	60,000
Coin collection . . . . .	Disposed of prior to death

#### Required

- a. Identify the following:
  1. Testatrix
  2. Trustor
  3. Life tenant
  4. Remainderman
  5. Beneficiaries
  6. Devise
  7. General legacy
  8. Demonstrative legacy
  9. Trustee
  10. Executrix
- b. Answer the following questions:
  1. Is this trust an *inter vivos* trust or a testamentary trust?
  2. What specific type of trust has been created?
  3. How will Marie Peterson’s assets be distributed?

**Part B**

Upon his death on July 4, 2016, Brian Ulvog's will contained the following provisions:

1. I leave my home and personal effects to my wife, Linny.
2. I leave \$20,000 cash to my son, Jake.
3. I leave all my investments to Marquette University.
4. I leave all income earned on my investments but not collected prior to death, and all income earned subsequent to death, to Marquette University.
5. I leave the remainder of my estate to Jamie O'Brien.
6. I appoint Jodie Reichel to be the executrix of my estate.

The executrix, Jodie Reichel, prepares an inventory and identifies the assets. Each asset's fair value, as determined by a qualified appraiser, follows:

Cash . . . . .	\$400,000
Home . . . . .	500,000
Personal effects . . . . .	75,000
Stock investments . . . . .	50,000
Bond investments . . . . .	70,000
Rental building . . . . .	200,000
Coin collection . . . . .	90,000
Dividends receivable . . . . .	1,000
Interest receivable . . . . .	2,000
Rent receivable . . . . .	4,000

The executrix paid the following claims against the estate:

Funeral expenses . . . . .	\$ 20,000
Appraisal expenses . . . . .	15,000
Executor fees . . . . .	25,000
Medical expenses . . . . .	10,000
Debts . . . . .	125,000

The estate received the following cash payments:

Dividends . . . . .	\$ 2,000
Interest . . . . .	3,000
Rent . . . . .	7,000
Sale of coin collection . . . . .	92,000

Assume that today is December 31, 2016, and that the executrix has completed the distributions to Linny and Jake but not to any other beneficiary.

**Required**

Prepare a charge and discharge statement for Brian's estate.

**Solution****Part A**

Prepare a charge and discharge statement for Brian's estate.

- a. 1. The testatrix, a female dying with a valid will, is Marie Peterson.
2. The trustor is also Marie Peterson, the person creating the trust.
3. The life tenant is Erik (the testatrix's husband), the person possessing an interest in assets, or their income, during a measuring life.
4. The remainderman is St. Patrick's Church, the legal person receiving the *remainder* of assets after the life tenant's interest terminates.
5. The beneficiaries include all persons receiving *benefits* from the testatrix via her testamentary documents: Erik, Zach, Nikki, and St. Patrick's Church.

6. The devise includes Ms. Peterson's home (real estate), which the executrix will transfer to her husband, Erik.
  7. The general legacy, the transfer not originating from a designated fund, includes the transfer of \$5,000 to Nikki.
  8. The demonstrative legacy, the testamentary transfer derived from a specific source, includes Zach's interest in his mother's savings account.
  9. The trustee, Kevin Leahy, is the person or entity managing trust assets for the benefit of the trust beneficiaries. If Kevin is unable or unwilling to serve as the trustee, a court may appoint a financial institution as an alternate or successor trustee.
  10. The executrix is Jodie, the female handling the testatrix's estate.
- b.
1. Because she created the trust through the provisions of her will, Marie Peterson's trust is a *testamentary trust*.
  2. Marie Peterson's trust is an example of a *charitable remainder trust*. This type of trust provides earnings for a specific period of time to a specific income beneficiary, the life tenant (Erik). After the specific time, the remainder is transferred to a charitable organization (St. Patrick's Church).
  3. Jodie, the executrix, should distribute the estate assets as follows:
    - Erik—Home (\$400,000); personal effects (\$100,000); and stock investments (\$50,000).
    - Zach—State Bank savings account (\$10,000). Note that because the account is not large enough to satisfy the upper limit of this demonstrative legacy, Zach will not receive the maximum amount specified by his mother.
    - Nikki—Cash (\$5,000).
    - Trustee—Bond Investments (\$75,000); and balance of cash (\$55,000).

## Part B

ESTATE OF BRIAN ULVOG			
Charge and Discharge Statement			
July 4, 2016–December 31, 2016			
Jodie Reichel, Executrix			
As to Principal			
I charge myself with:			
Assets per original inventory . . . . .			\$1,392,000
Gain on sale of coin collection . . . . .			<u>2,000</u>
Total charges . . . . .			1,394,000
I credit myself with:			
Decedent's debts:			
Medical expenses . . . . .	\$ 10,000		
Other debts . . . . .	<u>125,000</u>	\$ 135,000	
Funeral and administrative expenses			
(20,000 + 15,000 + 25,000) . . . . .			60,000
Devises and legacies distributed:			
Linny (home and personal effects) . . . . .	575,000		
Jake . . . . .	<u>20,000</u>	<u>595,000</u>	
Total credits . . . . .			<u>790,000</u>
Estate principal . . . . .			<u>\$ 604,000</u>
Estate principal:			
Cash . . . . .			\$ 284,000
Investments:			
Stocks . . . . .			50,000
Bonds . . . . .			70,000
Rental building . . . . .			<u>200,000</u>
Estate principal . . . . .			<u>\$ 604,000</u>
Cash balance analysis:			
Beginning cash . . . . .			\$ 400,000

(Continued)

(Continued)

Sale of coin collection . . . . .	92,000
Collection of interest . . . . .	2,000
Collection of dividend . . . . .	1,000
Collection of rent . . . . .	4,000
Payment of funeral expense . . . . .	(20,000)
Payment of appraisal expense . . . . .	(15,000)
Payment of executor fees . . . . .	(25,000)
Payment of medical expenses . . . . .	(10,000)
Payment of other debts . . . . .	(125,000)
Legacy distribution to Jake . . . . .	(20,000)
Cash balance . . . . .	<u>\$ 284,000</u>
<b>As to Income</b>	
I charge myself with:	
Dividend income (gross less receivable amount at date of death) . . . . .	\$ 1,000
Interest income (gross less receivable amount at date of death) . . . . .	1,000
Rent income (gross less receivable amount at date of death) . . . . .	<u>3,000</u>
Balance as to income. . . . .	<u>\$ 5,000</u>
Balance as to income	
Cash. . . . .	<u>\$ 5,000</u>

## Questions

1. Distinguish between *testate* and *intestate*.
2. If a person dies without leaving a valid will, how is the distribution of property regulated?
3. What are probate laws?
4. What are the objectives of probate laws?
5. What are the responsibilities of the executor of an estate?
6. At what value are the assets within an estate reported?
7. If an asset of an estate has no readily ascertainable fair value, how should it be presented/valued on the charge/discharge statement?
8. How does an executor discover the claims against an estate?
9. What claims against an estate have priority?
10. What are homestead and family allowances?
11. What are the differences between a devise, a legacy, and a bequest?
12. Describe the four types of legacies, and give examples of each.
13. What is the purpose of the process of abatement? How does the executor of an estate utilize this process?
14. How is the federal estate tax computed?
15. What was the impact of the American Taxpayer Relief Act of 2012 on the conveyance of property?
16. What is a taxable gift?
17. Why is the establishment of a credit shelter trust fund considered a good estate planning technique?
18. What deductions are allowed in computing estate income taxes?
19. Other than financial considerations, why should individuals consider preparing a valid will?
20. In accounting for an estate or trust, how is the distinction between principal and income determined?
21. What transactions are normally viewed as changes in the principal of an estate? What transactions are normally viewed as changes in the income of an estate?
22. What is the alternate date for valuing the assets of an estate? When should this alternate date be used?
23. In the initial accounting for an estate, why does the executor record only the assets?
24. What is the purpose of the charge and discharge statement that the executor of an estate issues?
25. What is a trust fund?
26. Why have trust funds become especially popular in recent years?

27. What is an *inter vivos* trust?
28. What is a testamentary trust?
29. What are QTIP trusts, GRATs, and charitable remainder trusts?
30. Why is the distinction between principal and income so important in accounting for most trusts?

## Problems

LO 19-1

1. Which of the following is *not* a true statement?
  - a. *Testate* refers to a person having a valid will.
  - b. The laws of descent convey personal property if an individual dies without a valid will.
  - c. *Intestate* refers to a person having no valid will.
  - d. A specific legacy is a gift of personal property that is specifically identified.

LO 19-1

2. Why might real estate be omitted from an inventory of estate property?
  - a. Real estate is subject to a separate inheritance tax.
  - b. State laws prohibit real property from being conveyed by an estate.
  - c. State laws require a separate listing of all real estate.
  - d. In some states, depending on the ownership, real estate is considered to be conveyed directly to a beneficiary at the time of death.

LO 19-1

3. What is the purpose of the laws of distribution?
  - a. To guide the distribution of personal property when an individual dies without a will.
  - b. To verify the legality of a will, especially an oral will.
  - c. To guide the distribution of real property when an individual dies without a will.
  - d. To outline the functions of the executor of an estate.

LO 19-4

4. A deceased individual owned a bond. Which of the following is included in the estate principal?
  - a. All interest collected prior to distributing the bonds to a beneficiary is considered part of the estate principal.
  - b. Only the first cash payment after death is included in the estate principal.
  - c. Interest that was not collected prior to death is excluded from the estate principal.
  - d. Interest earned prior to death is considered part of the estate principal even if received after death.

LO 19-1

5. Which of the following is *not* a goal of probate laws?
  - a. To gather and preserve all of the decedent's property.
  - b. To ensure that each individual produces a valid will.
  - c. To discover the decedent's intent for property held at death and then to follow those wishes.
  - d. To carry out an orderly and fair settlement of all debts and distribution of property.

LO 19-1

6. How are claims against a decedent's estate discovered by an executor?
  - a. Public notice must be printed in an appropriate newspaper to alert all possible claimants.
  - b. The executor waits for nine months until all possible bills have been received.
  - c. The executor directly contacts all companies that the decedent did business with.
  - d. Claims the estate is to pay are limited to all of the bills received but not paid prior to the date of death.

LO 19-1

7. Why are claims against an estate put into an order of priority?
  - a. To help the executor determine the due date for each claim.
  - b. To determine which claims are to be paid if funds are insufficient to pay all claims.
  - c. To assist in determining which specific assets are to be used to satisfy these claims.
  - d. To list the claims in order of age so that the oldest can be paid first.

LO 19-1

8. Which of the following claims against an estate does *not* have priority?
  - a. Funeral expenses because the amounts incurred are usually at the discretion of family members.
  - b. Medical expenses associated with the decedent's last illness.
  - c. The costs of administering the estate.
  - d. Unpaid rent on the decedent's home if not paid for the three months immediately prior to death.

LO 19-2

9. How does a devise differ from a legacy?
  - a. A devise is a gift of money and a legacy is a nonmonetary gift.
  - b. A devise is a gift to an individual and a legacy is a gift to a charity or other organization.

## LO 19-1

- c. A devise is a gift of real property and a legacy is a gift of personal property.
  - d. A devise is a gift made prior to death and a legacy is a gift made at death.
10. What is the homestead allowance?
- a. A reduction of \$20,000 in estate assets prior to computing the amount of federal estate taxes.
  - b. The amount of property conveyed in a will to a surviving spouse.
  - c. An allotment from an estate to a surviving spouse and/or minor and dependent children before any claims are paid.
  - d. A decrease in the value of property on which state inheritance taxes are assessed. The reduction is equal to the value of property conveyed to a surviving spouse.

## LO 19-2

11. Which of the following is a specific legacy?
- a. The gift of all remaining estate property to a charity.
  - b. The gift of \$44,000 cash from a specified source.
  - c. The gift of \$44,000 cash.
  - d. The gift of 1,000 shares of stock in IBM.

## LO 19-2

12. A will has the following statement: "I leave \$20,000 cash from my savings account in the Central Fidelity Bank to my sister, Angela." This gift is an example of
- a. A residual legacy.
  - b. A general legacy.
  - c. A demonstrative legacy.
  - d. A specific legacy.

## LO 19-2

13. What is the objective of the process of abatement?
- a. To give legal structure to the reductions that must be made if an estate has insufficient assets to satisfy all legacies.
  - b. To ensure that all property distributions take place in a timely manner.
  - c. To provide adequate compensation for the estate executor and any appraisers or other experts that must be hired.
  - d. To ensure that all legacies are distributed to the appropriate party as specified by the decedent's will or state laws.

## LO 19-3

14. For estate tax purposes, what date is used for valuation purposes?
- a. Property is always valued at the date of death.
  - b. Property is always valued at the date of distribution.
  - c. Property is valued at the date of death unless the alternate date, which is the date of distribution or six months after death, whichever comes first, is selected.
  - d. Property is valued at the date of death although a reduction is allowed if the value declines within one year of death.
15. Which of the following is true concerning the American Taxpayer Relief Act of 2012?
- a. This tax law leads to the immediate elimination of the federal estate tax.
  - b. This tax law leads to the immediate elimination of the federal gift tax.
  - c. This tax law provides for a \$5.45 million tax-free exemption, as a result of indexing, for estates created in 2016.
  - d. This tax law leads to the immediate elimination of the generation-skipping tax.

## LO 19-3

16. In computing federal estate taxes, deductions from an estate's value are allowed for all of the following *except*
- a. Charitable bequests.
  - b. Losses on the disposal of investments.
  - c. Funeral expenses.
  - d. Debts of the decedent.

## LO 19-3

17. The following unmarried individuals died in 2016. The estate of John Lexington has a taxable value of \$4,590,000. The estate of Dorothy Alexander has a taxable value of \$4.9 million. The estate of Scotty Fitzgerald has a taxable value of \$5.6 million. None of these individuals made any taxable gifts during their lifetimes. Which of the following statements is true?
- a. Only Fitzgerald's estate will have to pay federal estate taxes.
  - b. All three of the estates will have to pay federal estate taxes.



- c. None of these estates is large enough to necessitate the payment of estate taxes.
- d. Only the estates of Alexander and Fitzgerald are large enough to necessitate the payment of estate taxes.

## LO 19-3

18. Sally Anne Williams died on January 1, 2016. All of her property was conveyed to several relatives on April 1, 2016. For federal estate tax purposes, the executor chose the alternate valuation date. On what date was the value of the property determined?
- a. January 1, 2016
  - b. April 1, 2016
  - c. July 1, 2016
  - d. December 31, 2016

## LO 19-3

19. M. Wilson Waltman died on January 1, 2016. All of his property was conveyed to beneficiaries on October 1, 2016. For federal estate tax purposes, the executor chose the alternate valuation date. On what date was the value of the property determined?
- a. January 1, 2016
  - b. July 1, 2016
  - c. October 1, 2016
  - d. December 31, 2016

## LO 19-3

20. Which of the following is *not* true concerning gift taxes?
- a. Gift taxes are not abolished but a lifetime exclusion of \$5.45 million is available in 2016.
  - b. The American Taxpayer Relief Act of 2012 will eventually eliminate the federal gift tax.
  - c. Historically, gift taxes and estate taxes have been linked through a unified transfer credit.
  - d. Gift taxes are different from generation-skipping taxes.

## LO 19-6

21. A married couple have written a will that leaves part of their money to a trust fund. The income from this trust will benefit the surviving spouse until death, with the principal then going to their children. Why was the trust fund created?
- a. To reduce the estate of the surviving spouse and, thus, decrease the total amount of estate taxes to be paid by the couple.
  - b. To ensure that the surviving spouse is protected from lawsuits filed by the couple's children.
  - c. To give the surviving spouse discretion over the ultimate use of these funds.
  - d. To maximize the earning potential of the money because trust funds generate more income than other investments.

## LO 19-3

22. The executor of an estate is filing an income tax return for the current period. Revenues of \$25,000 have been earned. Which of the following is *not* a deduction allowed in computing taxable income?
- a. Income distributed to a beneficiary.
  - b. Funeral expenses.
  - c. A personal exemption.
  - d. Charitable donations.

## LO 19-4

23. What is a remainderman?
- a. A beneficiary that receives the principal left in an estate or trust after a specified time.
  - b. The beneficiary of the decedent's life insurance policy.
  - c. An executor or administrator after an estate has been completely settled.
  - d. If a legacy is given to a group of people, the remainderman is the last of the individuals to die.

## LO 19-4

24. In an estate, which of the following is charged to income rather than to principal?
- a. Funeral expenses.
  - b. Investment costs.
  - c. Property taxes.
  - d. Losses on the sale of investments.

## LO 19-5

25. In recording the transactions of an estate, when are liabilities recorded?
- a. When incurred.
  - b. At the date of death.
  - c. When the executor takes responsibility for the estate.
  - d. When paid.

## LO 19-6

26. What is the difference between a testamentary trust and an *inter vivos* trust?
- a. A testamentary trust conveys money to a charity; an *inter vivos* trust conveys money to individuals.
  - b. A testamentary trust is created by a will; an *inter vivos* trust is created by a living individual.

- c. A testamentary trust conveys income to one party and the principal to another; an *inter vivos* trust conveys all monies to the same party.
- d. A testamentary trust ceases after a specified period of time; an *inter vivos* trust is assumed to be permanent.

LO 19-6

27. Which of the following is a charitable lead trust?
- a. The income of the trust fund goes to an individual until death, at which time the principal is conveyed to a charitable organization.
  - b. Charitable gifts are placed into the trust until a certain dollar amount is achieved and is then transferred to a specified charitable organization.
  - c. The income of a trust fund goes to a charitable organization for a specified time with the principal then being conveyed to a different beneficiary.
  - d. A charity conveys money to a trust that generates income for the charity's use in its various projects.

LO 19-3

28. The estate of Nancy Hanks reports the following information:

Value of estate assets . . . . .	\$8,400,000
Conveyed to spouse . . . . .	700,000
Conveyed to children . . . . .	100,000
Conveyed to charities . . . . .	420,000
Funeral expenses . . . . .	50,000
Administrative expenses . . . . .	20,000
Debts . . . . .	110,000

What is the taxable estate value?

- a. \$7,070,000.
- b. \$7,100,000.
- c. \$7,180,000.
- d. \$7,420,000.

LO 19-3

29. An estate has the following income:

Rental income . . . . .	\$5,000
Interest income . . . . .	3,000
Dividend income . . . . .	1,000

The interest income was immediately conveyed to the appropriate beneficiary. The dividends were given to charity as per the decedent's will. What is the taxable income of the estate?

- a. \$4,400
- b. \$5,000
- c. \$8,000
- d. \$8,400

LO 19-1, 19-4, 19-6

30. Define each of the following terms:

- a. Will
- b. Estate
- c. Intestate
- d. Probate laws
- e. Trust
- f. *Inter vivos* trust
- g. Charitable remainder trust
- h. Remainderman
- i. Executor
- j. Homestead allowance

LO 19-1

31. Answer each of the following questions:

- a. What are the objectives of probate laws?
- b. What tasks does the executor of an estate perform?
- c. What assets are normally included as estate properties?
- d. What claims have priority to the distributions made by an estate?

## LO 19-1, 19-2, 19-4, 19-6

32. The will of Josh O'Brien has the following stipulations:
- Antique collection goes to Ilsa Lunn.
  - All money in the First Savings Bank goes to Richard Blaine.
  - Cash of \$9,000 goes to Nelson Tucker.
  - All remaining assets are put into a trust fund with the income going to Lucy Van Jones. At her death, the principal is to be conveyed to Howard Amadeus.

Identify the following:

- a. Remainderman
- b. Trustor
- c. Demonstrative legacy
- d. General legacy
- e. Specific legacy
- f. Life tenant
- g. Testator

## LO 19-2

33. Marie Hardy's will has the following provisions:

"I leave the cash balance deposited in the First National Bank (up to a total of \$50,000) to Jack Abrams. I leave \$18,000 cash to Suzanne Benton. I leave 1,000 shares of Coca-Cola Company stock to Cindy Cheng. I leave my house to Dennis Davis. I leave all of my other assets and properties to Wilbur N. Ed."

- a. Assume that the estate has the following assets: \$41,000 cash in the First National Bank, \$16,000 cash in the New Hampshire Savings and Loan, 800 shares of Coca-Cola stock, 1,100 shares of Xerox stock, a house, and other property valued at \$13,000. What distributions will be made from this estate?
- b. Assume that the estate has the following assets: \$55,000 cash in the First National Bank, \$6,000 cash in the New Hampshire Savings and Loan, 1,200 shares of Coca-Cola stock, 600 shares of Xerox stock, and other property valued at \$22,000. What distributions will be made from this estate?

## LO 19-3

34. Zac Peterson's estate reports the following information:

Value of estate assets . . . . .	\$2,300,000
Conveyed to spouse . . . . .	1,000,000
Conveyed to children . . . . .	230,000
Conveyed to trust fund for benefit of cousin . . . . .	500,000
Conveyed to charities . . . . .	260,000
Funeral expenses . . . . .	23,000
Administrative expenses . . . . .	41,000
Debts . . . . .	246,000

What is the taxable estate value?

## LO 19-3

35. Donna Stober's estate has the following assets (all figures approximate fair value):

Investments in stocks and bonds . . . . .	\$1,400,000
House . . . . .	700,000
Cash . . . . .	70,000
Investment land . . . . .	60,000
Automobiles (three rare vehicles) . . . . .	51,000
Other assets . . . . .	100,000

The house, cash, and other assets are left to the decedent's spouse. The investment land is contributed to a charitable organization. The automobiles are to be given to the decedent's brother. The investments in stocks and bonds are to be put into a trust fund. The income generated by this trust will go to the decedent's spouse annually until all of the couple's children have reached the age of 25. At that time, the trust will be divided evenly among the children.

The following amounts are paid prior to distribution and settlement of the estate: funeral expenses of \$20,000 and estate administration expenses of \$10,000.

What value is to be reported as the taxable estate for federal estate tax purposes?

## LO 19-3

36. During 2016, an estate generated income of \$20,000:

Rental income . . . . .	\$9,000
Interest income . . . . .	6,000
Dividend income . . . . .	5,000

The interest income is conveyed immediately to the beneficiary stated in the decedent's will. The dividends are given to the decedent's church.

What is the taxable income of the estate?

## LO 19-4, 19-5

37. The executor of Rose Shield's estate listed the following properties (at fair value):

Cash . . . . .	\$300,000
Life insurance receivable . . . . .	200,000
Investments in stocks and bonds . . . . .	100,000
Rental property . . . . .	90,000
Personal property . . . . .	130,000

a. Prepare journal entries to record the property held by Ms. Shield's estate and then each of the following transactions that occur in the months following the decedent's death:

- (1) Claims of \$80,000 are made against the estate for various debts incurred before the decedent's death.
- (2) Interest of \$12,000 is received from bonds held by the estate. Of this amount, \$5,000 had been earned prior to death.
- (3) Ordinary repairs costing \$6,000 are made to the rental property.
- (4) All debts (\$80,000) are paid.
- (5) Stocks recorded in the estate at \$16,000 are sold for \$19,000 cash.
- (6) Rental income of \$14,000 is collected. Of this amount, \$2,000 had been earned prior to the decedent's death.
- (7) Cash of \$6,000 is distributed to Jim Arness, an income beneficiary.
- (8) The proceeds from the life insurance policy are collected and the money is immediately distributed to Amanda Blake as specified in the decedent's will.
- (9) Funeral expenses of \$10,000 are paid.

b. Prepare in proper form a charge and discharge statement.

## LO 19-4, 19-5

38. The executor of Gina Purcell's estate has recorded the following information:

Assets discovered at death (at fair value):

Cash . . . . .	\$600,000
Life insurance receivable . . . . .	200,000
Investments:	
Walt Disney Company . . . . .	11,000
Polaroid Corporation . . . . .	27,000
Ford Motor Company . . . . .	34,000
Dell Inc. . . . .	32,000
Rental property . . . . .	300,000
Cash outflows:	
Funeral expenses . . . . .	\$ 21,000
Executor fees . . . . .	12,000
Ordinary repairs of rental property . . . . .	2,000
Debts . . . . .	81,000
Distribution of income to income beneficiary . . . . .	4,000
Distribution to charitable remainder trust . . . . .	300,000
Cash inflows:	
Sale of Polaroid stock . . . . .	\$ 30,000
Rental income (\$4,000 earned prior to death) . . . . .	11,000
Dividend income (\$2,000 declared prior to death) . . . . .	12,000
Life insurance proceeds . . . . .	200,000

Debts of \$17,000 still remain to be paid. The Dell shares have been conveyed to the appropriate beneficiary. Assume that Ms. Purcell's will stated that all executor fees are to be paid from principal.

Prepare an interim charge and discharge statement for this estate.

**LO 19-4, 19-5**

39. Jerry Tasch's will has the following provisions:

- \$150,000 in cash goes to Thomas Thorne.
- All shares of Coca-Cola go to Cindy Phillips.
- Residence goes to Kevin Simmons.
- All other estate assets are to be liquidated with the resulting cash going to the First Church of Freedom, Missouri.

Prepare journal entries for the following transactions:

a. Discovered the following assets (at fair value):

Cash . . . . .	\$ 80,000
Interest receivable . . . . .	6,000
Life insurance policy . . . . .	300,000
Residence . . . . .	200,000
Shares of Coca-Cola Company . . . . .	50,000
Shares of Polaroid Corporation . . . . .	110,000
Shares of Ford Motor Company . . . . .	140,000

- b. Collected interest of \$7,000.
- c. Paid funeral expenses of \$20,000.
- d. Discovered debts of \$40,000.
- e. Located an additional savings account of \$12,000.
- f. Conveyed title to the residence to Kevin Simmons.
- g. Collected life insurance policy.
- h. Discovered additional debts of \$60,000. Paid debts totaling \$100,000.
- i. Conveyed cash of \$150,000 to appropriate beneficiary.
- j. Sold the shares of Polaroid for \$112,000.
- k. Paid administrative expenses of \$10,000.

**LO 19-4, 19-5**

40. After the death of Lennie Pope, his will was read. It contained the following provisions:

- \$110,000 in cash goes to decedent's brother, Ned Pope.
- Residence and other personal property go to his sister, Sue Pope.
- Proceeds from the sale of Ford stock go to uncle, Harwood Pope.
- \$300,000 goes into a charitable remainder trust.
- All other estate assets are to be liquidated with the cash going to Victoria Jones.

a. Prepare journal entries for the following transactions that subsequently occur:

(1) Discovered the following assets (at fair value):

Cash . . . . .	\$ 19,000
Certificates of deposit . . . . .	90,000
Dividends receivable . . . . .	3,000
Life insurance policy . . . . .	450,000
Residence and personal effects . . . . .	470,000
Shares of Ford Motor Company . . . . .	72,000
Shares of Xerox Corporation . . . . .	97,000

- (2) Collected life insurance policy.
- (3) Collected dividends of \$4,000.
- (4) Discovered debts of \$71,000.
- (5) Conveyed title to the residence to Sue Pope along with the decedent's personal effects.
- (6) Discovered title to land valued at \$15,000.
- (7) Discovered additional debts of \$37,000. Paid all of the debts totaling \$108,000.
- (8) Paid funeral expenses of \$31,000.
- (9) Conveyed cash of \$110,000 to Ned Pope.

## LO 19-4, 19-5

- (10) Sold the shares of Ford for \$81,000.
- (11) Paid administrative expenses of \$16,000.
- (12) Made the appropriate payment to Harwood Pope.

b. Prepare a charge and discharge statement.

41. James Albemarle created a trust fund at the beginning of 2016. The income from this fund will go to his son Edward. When Edward reaches the age of 25, the principal of the fund will be conveyed to United Charities of Cleveland. Mr. Albemarle specified that 75 percent of trustee fees are to be paid from principal. Terry Jones, CPA, is the trustee.

Prepare all necessary journal entries for the trust to record the following transactions:

- a. James Albemarle transferred cash of \$300,000, stocks worth \$200,000, and rental property valued at \$150,000 to the trustee of this fund.
- b. Immediately invested cash of \$260,000 in bonds issued by the U.S. government. Commissions of \$3,000 are paid on this transaction.
- c. Incurred permanent repairs of \$7,000 so that the property can be rented. Payment is made immediately.
- d. Received dividends of \$4,000. Of this amount, \$1,000 had been declared prior to the creation of the trust fund.
- e. Paid insurance expense of \$2,000 on the rental property.
- f. Received rental income of \$8,000.
- g. Paid \$4,000 from the trust for trustee services rendered.
- h. Conveyed cash of \$5,000 to Edward Albemarle.

## LO 19-4, 19-5

42. Henry O'Donnell created an *inter vivos* trust fund. He owns a large department store in Higgins, Utah. He also owns a tract of land adjacent to the store used as an extra parking lot when the store is having a sale and during the Christmas season. O'Donnell expects the land to appreciate in value and eventually be sold for an office complex or additional stores.

O'Donnell places this land into a charitable lead trust, which will hold the land for 10 years until O'Donnell's son is 21. At that time, title will transfer to the son. The store will pay rent to use the land during the interim. The income generated each year from this usage will be given to a local church. The land is currently valued at \$320,000.

During the first year of this arrangement, the trustee records the following cash transactions:

Cash inflows:	
Rental income.....	\$60,000
Cash outflows:	
Insurance.....	\$ 4,000
Property taxes.....	6,000
Paving (considered an extraordinary repair).....	4,000
Maintenance.....	8,000
Distribution to income beneficiary.....	30,000

Prepare all journal entries for this trust fund including the entry to create the trust.

## Develop Your Skills

### RESEARCH CASE1



The CPA firm of Simon, Winslow, and Tate has been approached by a client who is interested in information about the possibility of establishing a minor's Section 2503(c) trust.

Go to the website <http://www.finaid.org/savings/2503ctrust.phtml>. Alternatively, use an Internet search engine to find other analyses of a Section 2503(c) trust.

#### Required

Based on the results of this search, write a memo for the client outlining the requirements, design, advantages, and disadvantages of a minor's Section 2503(c) trust so the client can make an informed decision.

## RESEARCH CASE 2



A staff employee for the CPA firm of O'Brien, Leahy, and Sweeney is currently preparing Form 1041 as an income tax return for an estate. The staff employee knows that the estate is allowed a deduction for income distributions to beneficiaries up to the amount of the estate's distributable net income (DNI) for the period. However, the employee is not certain how to compute the exact amount of this deduction.

Go to the website [www.irs.gov](http://www.irs.gov). Do a search for "Instruction 1041" to get the instruction information for estate and trust income taxes published by the IRS.

### Required

Read the information provided, and write a memo to the employee explaining (in general terms) how to calculate this deduction.

## RESEARCH CASE 3



A client, Beth Voga, asks for advice. She tells you that her grandmother, a widowed resident of Montana, has no will. She asks whether any portion of her grandmother's estate will pass to her (Beth's) cousins, whom her grandmother despises.

### Required

Use an Internet search engine to locate the Montana version of the Uniform Probate Code. Then briefly advise Ms. Voga, answering her specific question. Also advise her on the necessity of a will for her grandmother.

## ANALYSIS CASE 1



Use an Internet search engine to locate an explanation of the benefits of a grantor retained annuity trust.

### Required

Write a memo describing the circumstances that would make this type of trust most advantageous.

## ANALYSIS CASE 2



A law firm is preparing to file a federal estate tax return (Form 706). The estate's executor has elected to use the alternate valuation date. The partner in charge of filing this return is not certain about all of the ramifications of having chosen to use this alternate date.

Go to the website [www.irs.gov](http://www.irs.gov). Do a search for "Instruction 706" to get the instruction information published by the IRS for federal estate taxes.

### Required

Read the information provided, and write a memo to the partner outlining the information the IRS provides as to the significance of the alternate valuation date.

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