# Introduction to Financial Accounting

**ELEVENTH EDITION** 

Horngren | Sundem | Elliott | Philbrick

# **ELEVENTH EDITION**

Introduction to

# FINANCIAL Accounting

Charles T. Horngren Stanford University

Gary L. Sundem University of Washington

John A. Elliott University of Connecticut

Donna R. Philbrick Portland State University



Boston Columbus Indianapolis New York San Francisco Upper Saddle River Amsterdam Cape Town Dubai London Madrid Milan Munich Paris Montréal Toronto Delhi Mexico City São Paulo Sydney Hong Kong Seoul Singapore Taipei Tokyo

# To Chuck Horngren whose contributions over many years have made this textbook what it is.

Editor in Chief: Donna Battista Acquisitions Editor: Lacey Vitetta Director of Editorial Services: Ashley Santora Senior Editorial Project Manager: Karen Kirincich Marketing Manager: Alison Haskins Marketing Assistant: Kimberly Lovato Senior Production Project Manager: Roberta Sherman Manufacturing Buyer: Carol Melville Art Director: Anthony Gemmellaro Interior Design: Lisa Delgado/Emily Friel, Integra Cover Design: Anthony Gemmellaro Cover Photos: Ryan McVay/Stone/Getty Images; Mary Rice/Shutterstock Art Studio: GEX Publishing Services Compositor: GEX Publishing Services

Credits and acknowledgments borrowed from other sources and reproduced, with permission, in this textbook appear on appropriate page within text (or on page PC1).

**Copyright** © **2014 by Pearson Education, Inc.** All rights reserved. Manufactured in the United States of America. This publication is protected by Copyright, and permission should be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or likewise. To obtain permission(s) to use material from this work, please submit a written request to Pearson Education, Inc., Permissions Department, One Lake Street, Upper Saddle River, New Jersey 07458, or you may fax your request to 201-236-3290.

Many of the designations by manufacturers and sellers to distinguish their products are claimed as trademarks. Where those designations appear in this book, and the publisher was aware of a trademark claim, the designations have been printed in initial caps or all caps.

#### Library of Congress Cataloging-in-Publication Data

Horngren, Charles T.
Introduction to financial accounting / Charles T. Horngren, Gary L. Sundem, John A. Elliott,
Donna R. Philbrick. -- Eleventh edition.
pages cm
Includes index.
ISBN 978-0-13-325103-6 (casebound)
1. Accounting. I. Title.
HF5635.H813 2014
657--dc23
2012047453

10 9 8 7 6 5 4 3 2 1



# About the Authors

**Charles T. Horngren** passed away in the midst of this current revision of *Introduction to Financial Accounting*. He was the Edmund W. Littlefield professor of accounting emeritus at Stanford University. A graduate of Marquette University, he received his MBA from Harvard University and his PhD from the University of Chicago. He also received honorary doctorates from Marquette University and DePaul University.

A certified public accountant, Horngren served on the Accounting Principles Board, the Financial Accounting Standards Board Advisory Council, and the Council of the American Institute of Certified Public Accountants. In addition, he served as a trustee of the Financial Accounting Foundation, which oversees the Financial Accounting Standards Board and the Government Accounting Standards Board. He is a member of the Accounting Hall of Fame.

Horngren served the American Accounting Association as its president and its director of research. He received the association's first annual Outstanding Accounting Educator Award and also received its Lifetime Contribution to Management Accounting Award.

The California Certified Public Accountants Foundation gave Horngren its Faculty Excellence Award and its Distinguished Professor Award. He is the first person to have received both awards. The American Institute of Certified Public Accountants presented him with its first Outstanding Educator Award. He was also named Accountant of the Year, Education, by the national professional accounting fraternity, Beta Alpha Psi.

Professor Horngren was also a member of the Institute of Management Accountants, where he received its Distinguished Service Award. He was a member of the Institute's Board of Regents, which administers the Certified Management Accountant examinations.

Horngren is the author of other accounting books published by Pearson Education: *Cost Accounting: A Managerial Emphasis, Introduction to Management Accounting, Accounting, and Financial Accounting.* He was also the Consulting Editor for the Charles T. Horngren Series in Accounting.

**Gary L. Sundem** is professor of accounting emeritus at the Foster School of Business at the University of Washington, Seattle. He received his BA from Carleton College and his MBA and PhD from Stanford University.

Professor Sundem has served as President of the American Accounting Association, Executive Director of the Accounting Education Change Commission, and Editor of *The Accounting Review*. He is currently president of the International Association for Accounting Education and Research.

Sundem is a past president of the Seattle chapter of the IMA (formerly the Institute of Management Accountants). He has served on IMA's national board of directors and chaired its Academic Relations and Professional Development committees. He has chaired the AACSB's Accounting Accreditation Committee and currently serves on the Board of Trustees of Rainier Mutual Funds and the Board of Trustees of Carleton College, where he chairs the Audit Committee. He received the Carleton College Outstanding Alumni award in 2002.

Professor Sundem has numerous publications in accounting and finance journals including *Issues in Accounting Education, The Accounting Review, Journal of Accounting Research,* and *Journal of Finance.* He was selected as the Outstanding Accounting Educator by the American Accounting Association in 1998 and by the Washington Society of CPAs in 1987.







**John A. Elliott** is the dean of the School of Business at the University of Connecticut and the Auran J. Fox Chair in Business. Prior to joining the University of Connecticut, he served for 10 years as dean of the Zicklin School of Business at Baruch College, part of the City University of New York (CUNY). He was the Irwin and Arlene Ettinger professor of accountancy. He received his BS and MBA from the University of Maryland and his PhD from Cornell University. Prior to accepting the deanship at the Zicklin School, he spent 20 years on the faculty at Cornell University's Johnson Graduate School of Management, most recently as associate dean for academic affairs.

Dean Elliott is a certified public accountant with professional experience as an auditor and consultant for Arthur Andersen & Co. and in the controller's office of the Westinghouse Defense and Space Center. During his career he has taught at seven different institutions. His responsibilities have included financial accounting, intermediate accounting, financial statement analysis, taxation, and extensive executive teaching.

In 2004 his paper on earnings management (with Nelson and Tarpley) received the award from the American Accounting Association for Notable Contributions to Accounting Literature. His research is concentrated on the role of accounting information in financial analysis and contracts.

He serves on two corporate boards, NFP and Liquidnet, and chairs their audit committees. He has previously served on and chaired the boards for the Hangar Theatre, Cayuga Medical Center, and the Graduate Management Admissions Council.

**Donna R. Philbrick** is Professor of Accounting at Portland State University. She received her BS from the University of Oregon and her MBA and PhD from Cornell University.

Professor Philbrick is a certified public accountant (inactive) and worked as an auditor for Touche Ross (now Deloitte & Touche) and Price Waterhouse (now PricewaterhouseCoopers) prior to returning for her graduate degrees. Before joining the faculty at Portland State University, she taught at the University of Oregon and Duke University.

She currently teaches at both the graduate and undergraduate levels, focusing on financial accounting, intermediate accounting, and financial statement analysis. Professor Philbrick has taught for many years in the Oregon Executive MBA program and has experience teaching in numerous corporate programs.

Professor Philbrick's research has been published in accounting journals including *The* Accounting Review, Journal of Accounting Research, and Journal of Accounting and Economics. Most recently her research has focused on corporate governance issues. She has served on the Advisory Board and as an associate editor of Accounting Horizons.



# **Brief Contents**

# Preface xiv

- Chapter 1 Accounting: The Language of Business 2
- Chapter 2 Measuring Income to Assess Performance 44
- The Portfolio P1
- Chapter 3 Recording Transactions 90
- Chapter 4 Accrual Accounting and Financial Statements 140
- Chapter 5 Statement of Cash Flows 188
- Chapter 6 Accounting for Sales 238
- Chapter 7 Inventories and Cost of Goods Sold 284
- Chapter 8 Long-Lived Assets 338
- Chapter 9 Liabilities and Interest 386
- Chapter 10 Stockholders' Equity 448
- Chapter 11 Intercorporate Investments and Consolidations 492
- Chapter 12 Financial Statement Analysis 532

Glossary G1 Index I1 Photo Credits PC1

# Contents

Preface xiv Acknowledgements xvi

# Chapter 1 Accounting: The Language of Business 2

## Starbucks Coffee 2

The Nature of Accounting 5 The Balance Sheet 9 Balance Sheet Transactions 10 Types of Ownership 17 Accounting Differences Between Proprietorships, Partnerships, and Corporations 19 Stockholders and the Board of Directors 22 Regulation of Financial Reporting 23 Credibility and the Role of Auditing 25 The Accounting Profession 25 Career Opportunities for Accountants 28

Highlights to Remember 31 • Accounting Vocabulary 32 • Assignment Material 32

#### Chapter 2 Measuring Income to Assess Performance 44

#### General Mills 44

Introduction to Income Measurement 46 Measuring Income 52 The Income Statement 56 Accounting for Dividends and Retained Earnings 61 Four Popular Financial Ratios 65 The Portfolio P1 Conceptual Framework 69 Other Basic Concepts And Conventions 72

Highlights to Remember 74 • Accounting Vocabulary 75 • Assignment Material 75

# Chapter 3 Recording Transactions 90

### Delta Air Lines 90

The Double-Entry Accounting System 92 Debits and Credits 95 The Recording Process 96 Analyzing, Journalizing, and Posting the Biwheels Transactions 99 Biwheels' Transactions in the Journal and Ledger 106 Preparing the Trial Balance 109 Effects of Errors 116 Incomplete Records 118 Data Processing and Accounting Systems 119

Highlights to Remember 121 • Accounting Vocabulary 121 • Assignment Material 122

### Chapter 4 Accrual Accounting and Financial Statements 140

Columbia Sportswear 140 Adjustments to the Accounts 142 I. Expiration or Consumption of Unexpired Costs 143 II. Earning of Revenues Received in Advance 144 III. Accrual of Unrecorded Expenses 146 IV. Accrual of Unrecorded Revenues 149 The Adjusting Process in Perspective 151 Classified Balance Sheet 156 Income Statement 161 Profitability Evaluation Ratios 165

Highlights to Remember 169 • Accounting Vocabulary 170 • Assignment Material 170

#### Chapter 5 Statement of Cash Flows 188

# Costco 188

Overview of Statement of Cash Flows 189 Preparing a Statement of Cash Flows 192 Cash Flow from Operating Activities 199 The Statement of Cash Flows and the Balance Sheet Equation 207 Examples of Statements of Cash Flows 209 The Importance of Cash Flow 211

Highlights to Remember 218 • Accounting Vocabulary 219 • Assignment Material 219

# Chapter 6 Accounting for Sales 238

#### Oracle Corporation 238

Recognition of Sales Revenue239Measurement of Sales Revenue242Credit Sales and Accounts Receivable248Measurement of Uncollectible Accounts249Assessing the Level of Accounts Receivable256Accounting for and Managing Cash258Overview of Internal Control259

Highlights to Remember263Appendix 6: Bank Reconciliations264Accounting Vocabulary266Assignment Material267

# Chapter 7 Inventories and Cost of Goods Sold 284

#### The Home Depot 284

Gross Profit and Cost of Goods Sold 285 Perpetual and Periodic Inventory Systems 286 Cost of Merchandise Acquired 289 Comparing Accounting Procedures for Periodic and Perpetual Inventory Systems 291 Principal Inventory Valuation Methods 293 Lower-of-Cost-or-Market Method 299 Effects of Inventory Errors 301

# Cutoff Errors and Inventory Valuation 303 The Importance of Gross Profits 304 Gross Profit Percentages And Accuracy of Records 308 Internal Control of Inventories 308

Highlights to Remember310Appendix 7A: Characteristics and Consequencesof LIFO311Appendix 7B: Inventory in a Manufacturing Environment315Accounting Vocabulary317Assignment Material317

# Chapter 8 Long-Lived Assets 338

# Intel Corporation 338

Overview of Long-Lived Assets 340 Contrasting Long-Lived Asset Expenditures with Expenses 342 Acquisition Cost of Tangible Assets 343 Accounting Alternatives Subsequent to Acquisition 345 Depreciation of Buildings and Equipment 345 Changes in Estimated Useful Life or Residual Value 349 Contrasting Income Tax and Shareholder Reporting 350 Depreciation and Cash Flow 350 Expenditures after Acquisition 353 Gains and Losses on Sales of Tangible Assets 354 Revaluation of Tangible Assets 358 Intangible Assets 360 Goodwill 364

# Depletion of Natural Resources 366

Highlights to Remember 366 • Accounting Vocabulary 368 • Assignment Material 368

# Chapter 9 Liabilities and Interest 386

# Jack in the Box 386

Liabilities in Perspective 387 Accounting for Current Liabilities 389 Long-Term Liabilities 394 Bond Accounting 399 Accounting for Leases 408 Other Long-Term Liabilities, Including Pensions and Deferred Taxes 413 Debt Ratios and Interest-Coverage Ratios 420

Highlights to Remember421Appendix 9: Compound Interest, Future Value, andPresent Value422Accounting Vocabulary429Assignment Material430

# Chapter 10 Stockholders' Equity 448

# United Parcel Service (UPS) 448

Background on Stockholders' Equity 451 Accounting For Common Stock in Publicly Held Corporations 452 Preferred Stock 456 Stock Options and Restricted Stock 460 Stock Splits and Stock Dividends 462 Repurchase of Shares 467 Other Issuances of Common Stock 472 Retained Earnings Restrictions 473 Other Components of Stockholders' Equity 474 Financial Ratios Related to Stockholders' Equity 474

Highlights to Remember 476 • Accounting Vocabulary 477 • Assignment Material 477

# Chapter 11 Intercorporate Investments and Consolidations 492

Coca-Cola Company 492

An Overview of Corporate Investments 493 Short-Term Investments 494 Long-Term Investments in Bonds 499 The Market and Equity Methods for Intercorporate Equity Investments 501 Consolidated Financial Statements 504 Purchase Price not Equal to Book Value 515 Summary of Accounting for Equity Securities 516

Highlights to Remember 517 • Accounting Vocabulary 518 • Assignment Material 519

# Chapter 12 Financial Statement Analysis 532

#### Nike 532

Sources of Information About Companies 534 Objectives of Financial Statement Analysis 535 Evaluating Trends and Components of the Business 537 Financial Ratios 548 Operating Performance and Financing Decisions 555 Prominence of Earnings Per Share 561 Disclosure of Irregular Items 563 International Issues 567 Valuation Issues 567 Relating Cash Flow and Net Income 570

Highlights to Remember 574 • Accounting Vocabulary 575 • Assignment Material 575

Glossary G1 Index I1 Photo Credits PC1

# Preface

#### "You have to know what something is before you know how to use it."

*Introduction to Financial Accounting*, 11/E, describes the most widely accepted accounting theory and practice with an emphasis on using and analyzing the information in financial statements. It compares U.S. generally accepted accounting principles (U.S. GAAP) to International Financial Reporting Standards (IFRS) where appropriate.

*IFA*, 11/E, takes the view that business is an exciting process and that accounting is the perfect window through which to see how economic events affect businesses. Because we believe that accounting aids the understanding of economic events and that accounting builds on simple principles, this book introduces a number of concepts earlier than many other textbooks. We cover these early concepts at the most accessible level and illustrate them with carefully chosen examples from real companies. Our coverage addresses the choices that management makes when preparing financial statements and how these choices affect the way users interpret the information. We also discuss ethical issues throughout the book and in the assignment materials.

This is the eleventh edition of this text, and that is a testimonial to its effectiveness. But it also is a testimonial to our former colleagues, students, and adopters who, in each prior edition, have shared their thoughts and suggestions and driven us to change and adapt it to better meet the needs of today's students and adopting faculty.

Continuing strengths of this edition:

- Text coverage and problem material based on classic issues arising in the last 30 years
- Integration of ethics coverage throughout
- Coverage of U.S. GAAP and IFRS requirements where material differences exist
- Use of international-company examples, especially to illustrate differences in U.S. GAAP and IFRS

New to this edition:

- · Totally updated text to include current examples from real companies
- Extensive revisions for clarity
- Revision of problem material to include examples from corporate outcomes in the last two years
- Coverage of the current status of FASB and IASB regulatory action
- Highlights of likely upcoming changes in accounting standards, including revenue recognition and leases
- Updated Business First Boxes

# **Our Philosophy**

Introduce the simple concepts early, revisit concepts at more complex levels as students gain understanding, and provide appropriate real-company examples at every stage—that's our philosophy. Our goal is for students to be able to read and interpret a real company's financial statements: balance sheet, income statement, statement of cash flows, and statement of changes in stockholders' equity.

We want students to view accounting as a tool that enhances their understanding of economic events. Students should be asking questions such as "After this transaction, are we better or worse off?" and "What do these statements tell us about the company's financial position and performance?"

Students cannot understand financial statements in isolation. Rather, they must look at all the financial statements within the context of the company's business environment. They need to understand the accrual basis of accounting that underlies the balance sheet and income statement, but they must also understand the importance of cash as presented in the statement of cash flows. We present the balance sheet, income statement, statement of changes in stockholders' equity, and statement of cash flows in the first five chapters. By presenting the statement of cash flows in Chapter 5, immediately after the presentation of the basics of accrual accounting, students learn the importance of all the statements and the unique information each statement presents before encountering details about financial reporting practices in the later chapters.

One of our former colleagues often focuses on an economic event by asking, "Are you happy or are you sad?" We believe that accounting provides a way to understand what is happening and to answer that question. You might think of the basic financial statements as scorecards in the most fundamental economic contests. Each year the financial statements help you answer the most important questions: Are you happy or sad? Did you make or lose money? Are you prospering or just surviving? Will you have the cash you need for the next big step?

# Who Should Use This Book?

*Introduction to Financial Accounting*, 11/E, presupposes no prior knowledge of accounting and is suitable for any undergraduate or MBA student enrolled in a financial accounting course. It is also appropriate for management education programs where the participants have little or no accounting background. It deals with important topics that all managers should know and all business students should study. We have aimed to present relevant subject matter and to present it clearly and accessibly.

This text is oriented to the user of financial statements but gives ample attention to the needs of potential accounting practitioners. *IFA*, 11/E, stresses underlying concepts yet makes them concrete with numerous illustrations, many taken from recent corporate annual reports. Moreover, accounting procedures such as transaction analysis, journalizing, and posting are given due consideration where appropriate. Managers and accountants can develop a better understanding of the economic consequences of a company's transactions by summarizing those transactions into journal entries and T-accounts. However, the ultimate objective is an understanding of financial position and prospects, which we achieve by a focus on the balance sheet equation.

# **Coverage of IFRS**

- We cover critical differences between U.S. generally accepted accounting principles (U.S. GAAP) and International Financial Reporting Standards (IFRS) without unnecessary details.
- We include problem materials from companies reporting under IFRS as well as U.S. GAAP.

# Emphasis on Understanding and Analyzing Financial Statements

- **Financial Statement Portfolio**, inserted in Chapter 2 and identified by a blue vertical bar on the page edges, provides a visual roadmap to financial statement analysis by high-lighting key financial ratios and how to derive them from the financial statements. The Financial Statement Portfolio also refers students to appropriate chapters in the book for in-depth coverage of these ratios. It is included in Chapter 2 to focus students on the uses of accounting information early in the course.
- Interpreting Financial Statements sections within each chapter permit students to pause and ponder how to use the information they are learning to better understand the financial position and prospects of a company.

- Analyzing and Interpreting Financial Statements problems at the end of each chapter include financial statement research, analyses of Starbucks financial statements, and analysis of other companies' financial statements using the Internet.
- Focus on Starbucks' Annual Report is used to illustrate various methods for analyzing financial statements. There is a problem based on Starbucks in each chapter, allowing students to get a more complete picture of many financial reporting issues relating to one particular company.

# **Other Features**

- Extensive treatment of ethics, with both text coverage and end-of-chapter problems focusing on this important topic in nearly every chapter.
- Critical Thinking Exercises in the assignment material of each chapter that ask students to consider conceptual issues that may have no right answer.
- **Business First Boxes** in each chapter, many new or completely revised. These boxes provide insights into operations at well-known domestic and international companies, accenting today's real-world issues.

**Teaching and Learning Support: Because Resources Should Simplify, Not Overwhelm:** A successful accounting course requires more than a well-written book. Today's classroom requires a dedicated teacher and a fully integrated teaching package. The following material supports this title.

# **Student Resources**

#### www.myaccountinglab.com

MyAccountingLab is Web-based tutorial and assessment software for accounting that gives students more "I get it!" moments. MyAccountingLab provides students with a personalized interactive learning environment where they can complete their course assignments with immediate tutorial assistance, learn at their own pace, and measure their progress.

In addition to completing assignments and reviewing tutorial help, students have access to the following resources in MyAccountingLab:

- Flash-based eText
- Study Guide
- Excel Templates
- PowerPoints

# **Student Resource Website**

www.pearsonhighered.com/horngren

Excel Templates

# **Instructor Resources**

## www.myaccountinglab.com

MyAccountingLab provides instructors the flexibility to make technology an integral part of their course. And, because practice makes perfect, MyAccountingLab offers exactly the same end-of-chapter material found in the text with algorithmic options that instructors can assign for homework. MyAccountingLab also replicates the text's exercises and problems with journal entries and financial statements so that students are familiar and comfortable working with the material.

# **Solutions Manual**

The Solutions Manual, written by the text authors, is available electronically. It contains the fully worked-through and accuracy-checked solutions for every question, exercise, and problem in the text. Special thanks to Carolyn Streuly for reviewing this material.

# **Instructor Resource Center**

# www.pearsonhighered.com/horngren

For your convenience, many of our instructor supplements are available for download from the textbook's catalog page or your MyAccountingLab account. Available resources include the following:

- **Test Item File:** The Test Item File includes multiple choice, true/false, exercises, comprehensive problems, short answer problems, critical thinking essay questions, and so on. Each test item is tied to the corresponding learning objective and has an assigned difficulty level.
- **TestGen:** This PC/MAC-compatible test generating software is powerful and easy to use. It is preloaded with all the questions from the new Test Item File and allows users to manually or randomly view test bank questions and drag and drop them to create a test. Add or modify questions using the built-in Question Editor, print up to 25 variations of a single test, and create and export tests that are compatible with commonly used course management systems.
- **Instructor's Resource Manual:** This manual contains the following elements for each chapter of the text: chapter overviews, chapter outlines organized by objectives, teaching tips, chapter quiz.
- **PowerPoint Slides:** Comprehensive slides designed to aid in presentation of key chapter concepts
- Excel Templates and Solutions
- Solutions Manual
- Image Library

Technical support is available at http://247pearsoned.custhelp.com.

# Acknowledgements

Our appreciation extends to our present and former mentors, colleagues, and students. This book and our enthusiasm for accounting grew out of their collective contributions to our knowledge and experience.

A special thanks to Norbert Tschakert, University of the Virgin Islands, for his suggestions on IFRS. Thank you to the following people who provided valuable contributions on the supplements: Carolyn Streuly; Sheila Handy, East Stroudsburg University; and Victoria Kaskey, Ashland University.

We would also like to thank those who gave valuable feedback on previous editions: John E. Armstrong, Dominican College; Frances L. Ayers, University of Oklahoma; Karthik Balakrishnan, The Wharton School; Roderick S. Barclay, University of Texas at Dallas; Ronald S. Barden, Georgia State University; Mary Barth, Stanford University; Paul E. Bayes, East Tennessee State University; Martin J. Birr, Indiana University; Robert Bowen, University of San Diego; Marianne Bradford, The University of Tennessee; Nancy Cassidy, Texas A&M University; David T. Collins, Bellarmine College; Michele J. Daley, Rice University; Ray D. Dillon, Georgia State University; Patricia A. Doherty, Boston University; Philip D. Drake, Thunderbird, The American Graduate School of International Management; Allan R. Drebin, Northwestern University; Roland "Pete" Dukes, University of Washington; Robert Dunn, Georgia Institute of Technology; Thomas R. Dyckman, Cornell University; Alan H. Falcon, Loyola Marymount University; Anita Feller, University of Illinois; Catherine Finger-Podolsky, Saint Mary's College of California; Richard Frankel, University of Michigan; John D. Gould, Western Carolina University; D. Jacque Grinnell, University of Vermont; Leon J. Hanouille, Syracuse University; Al Hartgraves, Emory University; Suzanne Hartley, Franklin University; Robert E. Holtfreter, Central Washington University; Peter Huey, Collin County Community College; Yuji Ijiri, Carnegie Mellon University; M. Zafar Iqbal, California Polytechnic State University-San Luis Obispo; Jane Jollineau, University of San Diego; Gregory D. Kane, University of Delaware; Urooj Khan, Columbia Business School; Sungsoo Kim, Rutgers University; April Klein, New York University; Robert Libby, Cornell University; Joan Luft, Michigan State University; Maureen McNichols, Stanford University; Mark J. Myring, Ball State University; Brian M. Nagle, Duquesne University; John L. Norman Jr., Keller Graduate School of Management; Mohamed Onsi, Syracuse University; David M. Perkal, NYU-Stern School of Business; Elizabeth Plummer, Southern Methodist University; Patrick M. Premo, St. Bonaventure University; Renee A. Price, University of Nebraska; Leo A. Ruggle, Mankato State University; James A. Schweikart, Rhode Island College; Chandra Seethamraju, Washington University-St. Louis; Bill Shoemaker, University of Dallas; William Smith, Xavier University; Robert Swieringa, Cornell University; Daniel Taylor, University of Pennsylvania-The Wharton School; Katherene P. Terrell, University of Central Oklahoma; Michael G. Vasilou, DeVry Institute of Technology-Chicago; Deborah Welch, Tyler Junior College; William Wells, University of Washington; Christine Wiedman, University of Western Ontario; Patrick T. Wirtz, University of Detroit Mercy; and Peter D. Woodlock, Youngstown State University.

Finally, we'd like to thank the following people at Pearson Education: Lacey Vitetta, Donna Battista, Ashley Santora, Karen Kirincich, Roberta Sherman, and Jeff Holcomb.

Comments from users are welcome.

Charles T. Horngren Gary L. Sundem John A. Elliott Donna R. Philbrick

# Introduction to

# FINANCIAL Accounting

# 1

# Accounting: The Language of Business

ACCOUNTING IS THE LANGUAGE OF business. It is the method companies use to communicate financial information to their employees and to the public. Until recently, the accounting language, like spoken languages, differed country to country. Today only two main accounting languages have survived, one used in the United States and another used in Europe and most of the rest of the world. These are actually more like dialects of a single language because they are identical in most respects and are gradually converging into a single language. In this text we focus on the U.S. perspective but discuss the significant differences between the languages when they arise.

We also use real companies to illustrate the language of accounting in practice. Consider **Starbucks Corporation**, a U.S.-based company that uses the accounting language employed by all U.S. companies. You have probably purchased a latte in, or at least walked by, one of Starbucks' 18,000 coffee stores throughout the world. Did you know that you could also buy a share of Starbucks stock, making you a part owner of Starbucks? When you buy a latte, you want to know how it tastes. When you buy a share of stock, you want to know about the financial condition and prospects of Starbucks Corporation. You would want to own part of Starbucks only if you think it will be successful in the future. To learn this, you need to understand the accounting language used in Starbucks' financial reports. By the time you finish reading this book, you will be comfortable reading the financial health of these companies.

Starbucks was founded in 1985 and first issued shares of stock to the public in 1992. If you had purchased shares at that time, as of this writing your investment would be worth more than \$60 for every \$1 you invested. Will Starbucks be a good investment in the future? No one can predict with certainty Starbucks' financial prospects. However, the company's financial statements, which are available on Starbucks' Web site, can give you clues. But you need to understand accounting to make sense of this financial information.

# **LEARNING OBJECTIVES** After studying this chapter, you should be able to:

- **1** Explain how accounting information assists in making decisions.
- **2** Describe the components of the balance sheet.
- **3** Analyze business transactions and relate them to changes in the balance sheet.
- **4** Prepare a balance sheet from transactions data.

- **5** Compare the features of sole proprietorships, partnerships, and corporations.
- 6 Identify how the owners' equity section in a corporate balance sheet differs from that in a sole proprietorship or a partnership.
- **7** Explain the regulation of financial reporting, including differences between U.S. GAAP and IFRS.
- **8** Describe auditing and how it enhances the value of financial information.
- **9** Evaluate the role of ethics in the accounting process.
- **10** Recognize career opportunities in accounting, and understand that accounting is important to both for-profit and nonprofit organizations.



Starbucks has established a worldwide reputation in a short time. It was #16 on *Fortune* magazine's list of Most Admired Companies in 2011. It has consistently been included among the Top 5 Global Brands of the Year as identified by Brandchannel.com's Readers' Choice survey and ranked among CR Magazine's 100 Best Corporate Citizens in 2011 for the 12th year in a row, one of only three companies to make the list all 12 years. It has also been on Ethisphere's list of the world's most ethical companies every year since the list started in 2007. Despite all these awards, potential investors want to know something about Starbucks' financial prospects. Let's look at a few financial facts. As you proceed through this book, you will develop a better understanding of how to interpret these facts.

In 2011, Starbucks reported total revenues—the amount the company received for all the items sold—of \$11.7 billion, compared with only \$700 million in 1996. Net income—the profit that Starbucks made—was \$1,246 million, up from \$42 million in 1996 and \$946 million in 2010. Total assets—the recorded value of the items owned by Starbucks—grew from less than \$900 million to almost \$7.4 billion from 1996 to 2011. You can see that the amount of business done by Starbucks has grown quickly. However, there is much more to be learned from the details in Starbucks' financial statements. You will learn about revenues, income, assets, and other elements of accounting as you read this book.

As we embark on our journey into the world of accounting, we explore how a company such as Starbucks reports on its financial activities and how investors use this accounting information to better understand Starbucks. Keep this in mind: The same basic accounting framework that supported a small coffee company like Starbucks in 1985 supports the larger company today, and indeed it supports businesses (big and small, old and new) worldwide.

Accounting is a process of identifying, recording, and summarizing economic information and reporting it to decision makers. You are correct if you expect to learn a set of rules and procedures about how to record and report financial information. However,

# ¥

Starbucks has more than 18,000 coffee shops throughout the world. Although a majority (71%) are in the Americas, fully 18% are in the China/Asia Pacific region.

#### accounting

The process of identifying, recording, and summarizing economic information and reporting it to decision makers. understanding accounting reports goes beyond rules and procedures. To use your financial accounting education effectively, you must also understand the underlying business transactions that give rise to the economic information and why the information is helpful in making financial decisions.

We hope that you want to know how businesses work. When you understand that Starbucks' financial reports help its management make decisions about producing and selling products, as well as helping investors assess the performance and prospects of Starbucks, you will see why being able to read and interpret these reports is important. Both outside investors and internal managers need this information.

Our goal is to help you understand business transactions—to know how accounting information describes such transactions and how decision makers both inside the company (managers) and outside the company (investors) use that information in deciding how, when, and what to buy or sell. In the process, you will learn about some of the world's premier companies. You may wonder what it costs to open a new Starbucks store. Are new stores worth such a major investment? How many people visit each Starbucks store every year? Can Starbucks keep track of them all, and are there enough customers to make the stores profitable? If investors consider purchasing Starbucks stock, what do they need to know to decide whether the current price is a reasonable one? Accounting information cannot completely answer every such question, but it provides important insights into many of them. To illustrate how to use accounting information, we will often explore issues that arise in real companies.

In pursuing actual business examples, we consider details about many of the 30 companies in the Dow Jones Industrial Average (the DJIA), the most commonly reported stock market index in the world. Well-known companies, such as **Coca-Cola**, **Microsoft**, and **McDonald's**, are among these 30 companies, along with many other large but less familiar companies, such as **Alcoa**, **The Travelers Companies**, and **United Technologies Corporation**. Exhibit 1-1 lists the 30 Dow companies together with their ticker symbol—the common shorthand used by stockbrokers and investors to identify these companies. The Business First box on page 5 describes the DJIA. We also consider younger and faster-growing companies such as **Starbucks**, **Amazon.com**, **Apple**, and **Google** and international companies such as **Toyota**, **Nokia**, **Nestlé**, and **Volkswagen** to illustrate various accounting issues and practices. For now, we start with the basics, most of which are the same regardless of the accounting language a company uses.

## **EXHIBIT 1-1**

**Dow Industrials** Listed by Year Added to the Index

Company	Symbol	Year Added	Company	Symbol	Year Added
General Electric	GE	1907	Walt Disney	DIS	1991
ExxonMobil	XOM	1928	Hewlett-Packard	HPQ	1997
Procter & Gamble	PG	1932	Johnson & Johnson	INI	1997
DuPont	DD	1935	Wal-Mart	WMT	1997
United Technologies Corporation	UTX	1939	AT&T	Т	1999
Alcoa	AA	1959	Home Depot	HD	1999
3M	MMM	1976	Intel	INTC	1999
IBM	IBM	1979	Microsoft	MSFT	1999
Merck	MRK	1979	Pfizer	PFE	2004
American Express	AXP	1982	Verizon Communications	VZ	2004
McDonald's	MCD	1985	Bank of America	BAC	2008
Boeing	BA	1987	Chevron Corporation	CVX	2008
Coca-Cola	KO	1987	Cisco Systems	CSCO	2009
Caterpillar	CAT	1991	The Travelers Companies	TRV	2009
JPMorgan Chase	JPM	1991	UnitedHealth Group	UNH	2012

# BUSINESS FIRST

# THE DOW JONES INDUSTRIAL AVERAGE

Why did the Dow Jones Industrial Average (DJIA) fall from over 14,000 in late 2007 to under 7,000 in 2009? Why did it rebound to over 13,000 by early 2012? What does this mean to investors? To explain this 50% drop followed by an 86% gain, you need to understand the DJIA. However, to fully understand the reasons for the drop and gain, you need to understand accounting—what the financial reports prepared by companies really tell you about their financial results and outlook.

The DJIA is one of many indices used to describe the performance of stock markets around the world. All indices provide a picture of what is happening on average to the value of securities owned by investors. The Dow began as the average value of an investment in one share of each of 12 stocks and was first published in 1896 by Charles Dow. To calculate it, he simply added the prices of the 12 stocks and divided by 12. It began at 40.94 but fell to an all-time low of 28.48 in August of that year. The calculation today is more complex, but the basic concept is unchanged. Since 1928, the number of stocks in the DJIA has been constant at 30, but there have been 41 changes in the composition of the average. These changes reflect the dynamic nature of American industry. The original DJIA had several auto and petroleum companies to capture the massive importance of these industries. Among the original 12 companies were U.S. Leather, U.S. Rubber, American Tobacco, Tennessee Coal & Iron, and Laclede Gas. Of these, only Laclede Gas, a Missouri utility, still exists-although it is not included in the Dow. Today, only General Electric remains from the original 12, and it was dropped from the index briefly in the early 1900s and reinstated in 1907. Just since 2004 there have been nine changes in the Dow. Pfizer, Verizon, and AIG replaced Eastman Kodak, AT&T, and International Paper in 2004; AT&T returned in 2005 because of its merger with SBC, which had been added in 1999; Bank of America, Chevron Corporation, and Kraft Foods replaced Altria Group, Honeywell, and AIG in 2008; and Cisco Systems and The Travelers Companies replaced Citicorp and General Motors in 2009. It is also interesting to note that the largest one-day Dow increase, 15%, was in October 1931. The largest drop was October 19, 1987, when the Dow fell 23%.

Although indices such as the DJIA give a picture of how stock prices have changed, they do not explain why those changes occurred. There is clear evidence that accounting results affect stock prices. Therefore, most financial analysts rely on companies' financial reports, along with other information, to explain movements in stock prices. For example, BusinessWorld focused on corporate earnings in a recent report: "Demand for a stock moves on the basis of changes in the market's perception of a stock's future earnings." Annual and guarterly financial reports provide much of the information investors use. They use this financial information to predict future financial positions and prospects of companies. In this way, they try to anticipate movements in stock prices. The classic advice to investors is to "buy low and sell high." Although this is never easy, accounting information can help investors approach this ideal. The DJIA falls when the economy weakens and companies' profits decline. It rebounds when companies' financial reports indicate that financial results are on the upswing.

The DJIA is not the only index that provides information on the general direction of movements in stock prices. In the United States, Standard and Poor's publishes the S&P 500, an index of 500 large companies traded in the United States, and NASDAQ publishes an index that tracks many smaller and high-tech firms. Similarly, in the international arena you will often see references to the FTSE, an index of UK companies listed on the London Stock Exchange, and the Nikkei, the most widely quoted index of stocks traded on the Tokyo Stock Exchange. Both are indices of general share-price movements in those markets. Investors worldwide closely follow all of these indices.

Sources: D. Somera, "Forces That Move Stock Prices," BusinessWorld, January 12, 2009, p. S4/2; Dow Jones Indexes (http://djaverages.com); Nikkei index (http://e.nikkei.com; FTSE index (http://www.ftse.com).

# The Nature of Accounting

Accounting organizes and summarizes economic information so decision makers can use it. Accountants present this information in reports called financial statements. To prepare these statements, accountants analyze, record, quantify, accumulate, summarize, classify, report, and interpret economic events and their financial effects on an organization.

#### accounting system

The series of steps an organization uses to record financial data and convert them into informative financial statements. An organization's **accounting system** is the series of steps it uses to record financial data and convert them into informative financial statements. Accountants analyze the information used by managers and other decision makers and create the accounting system that best meets their needs. Bookkeepers and computers then perform the routine tasks of collecting and compiling economic data. The real value of any accounting system lies in the information it provides to decision makers.

Consider a university's accounting system. It collects information about tuition charges and payments and tracks the status of each student. The university must be able to bill individuals with unpaid balances. It must be able to schedule courses and hire faculty to meet the course demands of students. It must ensure that tuition and other cash inflows are sufficient to pay the faculty and keep the buildings warm (or cool) and well lit. In the past, students often became frustrated with university accounting systems. Perhaps there were too many waiting lines at registration or too many complicated procedures in filing for financial aid. However, modern systems allow electronic registration for courses and electronic payments of tuition. The right information system can streamline your life.

Every business maintains an accounting system, from the store where you bought this book to the company that issued the credit card you used. **MasterCard**, **Visa**, and **American Express** maintain fast, complicated accounting systems. At any moment, thousands of credit card transactions occur around the globe, and accounting systems keep track of them all. When you use your charge card, a scanner reads it electronically and transmits the transaction amount to the card company's central computer. The computer verifies that your charges are within acceptable limits and approves or denies the transaction. At the same time, the computer also conducts security checks. For example, if stores in Chicago and London registered sales using your card within an hour of each other, the system might sense that something is wrong and require you to call a customer service representative before the credit card company approves the second charge. Without reliable accounting systems, credit cards simply could not exist.

# Accounting as an Aid to Decision Making

Accounting information is useful to anyone making decisions that have economic consequences. Such decision makers include managers, owners, investors, and politicians. Consider the following examples:

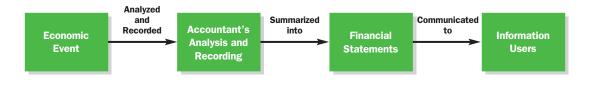
- When the engineering department of **Apple Computer** developed the iPad, accountants developed reports on the potential profitability of the product, including estimated sales and estimated production and selling costs. Managers used the reports to help decide whether to produce and market the product.
- When QBC Information Services, a small consulting firm with five employees, decides who to promote (and possibly who to fire), the managing partner produces reports on the productivity of each employee and compares productivity to the salary and other costs associated with the employee's work for the year.
- When portfolio managers at **Vanguard Group** consider buying stock in either **Ford Motor Company** or **Volkswagen Group**, they consult published accounting reports to compare the most recent financial results of the companies. They must be able to compare Ford's information reported in the accounting language of U.S. companies with that of Volkswagen reported in the accounting language of Europe. Understanding the information in the reports helps the managers decide which company would be the better investment choice.
- When **Chase Bank** considers a loan to a company that wants to expand, it examines the historical performance of the company and analyzes projections the company provides about how it will use the borrowed funds to produce new business.

Accounting helps decision making by showing where and when a company spends money and makes commitments. It also helps predict the future effects of decisions, and it helps direct attention to current problems, imperfections, and inefficiencies, as well as opportunities.

BOBJECTIVE 1

Explain how accounting information assists in making decisions.

Consider some basic relationships in the decision-making process:



Accountants analyze and record economic events. Periodically, accountants summarize the results of the events into financial statements. Users then rely on the financial statements to make decisions. Our focus includes all four boxes. All financial accounting courses cover the analysis and recording of information and the preparation of financial statements. We pay more attention to the underlying business processes creating the events and to the way in which the financial reports help decision makers to take action.

#### **Financial and Management Accounting**

The financial statements we discuss in this book are common to all areas of accounting. Accountants often distinguish "financial accounting" from "management accounting" based on who uses the information. **Financial accounting** serves external decision makers, such as stockholders, suppliers, banks, and government agencies, and is the major focus of this book. In contrast, **management accounting** serves internal decision makers, such as top executives, department heads, college deans, hospital administrators, and people at other management levels within the organization.<sup>1</sup> The two fields of accounting share many of the same procedures for analyzing and recording the effects of individual transactions.

A common source of financial information used by investors and others outside the company is the **annual report**. The annual report is a document prepared by management and distributed to current and potential investors to inform them about the company's past performance and future prospects. Firms distribute their annual reports to stockholders automatically. Potential investors may request the report by calling the investor relations department of the company or by visiting the company's Web site to access the report. In addition to the financial statements, annual reports usually include the following:

- 1. A letter from corporate management
- 2. A discussion and analysis by management of recent economic events
- 3. Footnotes that explain many elements of the financial statements in more detail
- 4. The report of the independent registered public accounting firm (auditors)
- 5. Statements by both management and auditors on the company's internal controls
- 6. Other corporate information

Some large companies also use their annual reports to promote the company, using pleasing photographs extensively to communicate their message. You can find annual reports for most companies on their Web sites, as described in the Business First box on page 8.

Although all elements of the annual report are important, we concentrate on the principal financial statements and how accountants collect and report this information. You can also find U.S. companies' financial statements in their **Form 10-K** filed annually with the **Securities and Exchange Commission (SEC)**, the government agency responsible for regulating capital markets in the United States. U.S. Companies with **publicly traded stock**, that is, companies that sell shares in their ownership to the public, must file 10-Ks and many other forms with the SEC. The 10-K contains more than the basic financial statements, including detailed financial information beyond that included in most annual reports. A growing number of U.S. companies

#### financial accounting

The field of accounting that serves external decision makers, such as stockholders, suppliers, banks, and government agencies.

#### management accounting

The field of accounting that serves internal decision makers, such as top executives, department heads, college deans, hospital administrators, and people at other management levels within an organization.

#### annual report

A document prepared by management and distributed to current and potential investors to inform them about the company's past performance and future prospects.

#### Form 10-K

A document that U.S. companies file annually with the Securities and Exchange Commission. It contains the companies' financial statements.

#### Securities and Exchange Commission (SEC)

The government agency responsible for regulating capital markets in the United States.

#### publicly traded stock

Shares in the ownership of a company that are sold to the public.

<sup>&</sup>lt;sup>1</sup>For a book-length presentation of management accounting, see C. Horngren, G. Sundem, D. Burgstahler, and

J. Schatzberg, Introduction to Management Accounting, 16th ed. (Upper Saddle River, NJ: Prentice-Hall, 2013),

the companion volume to this textbook.

# BUSINESS FIRST

# ANNUAL REPORTS AND THE INTERNET

Until the last decade, annual reports were generally glossy documents produced by companies more than 3 months after year-end. In addition to being a primary source of financial information about the company, annual reports also contained much other information (some might call it propaganda) about the company. However, the Internet has changed and continues to change the way investors get information about a company. Today, more information is available more quickly on the Web than on paper.

Most companies with publicly traded stock, and certainly the large ones, include their annual reports on their Web site. You can usually find a company's annual report in a segment of its site called *Investors* or *Investor Relations*. Often this comes under a heading Corporate Information, About the Company, or some such title included on the company's home page.

Most companies provide at least an indexed electronic version of their financial statements in PDF format. But many companies are providing files that are more flexible, mainly statements that users can download into Excel spreadsheets. This allows users to perform their own analyses of the data. There is even a competition for the best annual reports. The League of American Communications Professionals (LACP) rates annual reports based on how well they communicate their messages. The top 2010 annual reports by category, selected from more than 5,000 entries representing more than 24 countries, are as follows:

Category	Company	Country
Best Agency Report	National Savings Bank	Sri Lanka
Overall	Vossloh AG	Germany
Most Creative	RTL Group	Germany
Most Engaging	PT Adaro Energy Tbk	Indonesia
Most Improved	KOÇ Holding	Turkey
Best In-House Report	Daiwa House Industry Co., Ltd.	Japan
Best Shareholder Letter	Garanti Emeklilik	Turkey
Best Report Cover	Vossloh AG	Germany
Best Report Financials	Deufol AG	Germany
Best Report Narrative	U.S. Department of State	USA

Some executives use their company's annual report to educate investors. Warren Buffett, chairman and CEO of Berkshire Hathaway, always includes a long letter explaining his philosophies as well as his company's performance. In 2011, his letter contained 20 pages of insightful comments. For example, a few years ago he commented on the housing and credit crisis as one where "borrowers who shouldn't have borrowed [were] being financed by lenders who shouldn't have lent." One year he even compared financial reporting to his golf game.

Annual reports are venerable documents that have been useful to investors for many years. They are not

likely to go away. However, their content and format are changing. Use of the Internet opens up possibilities for presenting financial information (as well as other information) to investors that were previously impossible. This should lead to better information for those making investment decisions and therefore better functioning capital markets.

Sources: LACP 2010 Annual Report Competition Results, http://www.lacp.com/2010vision/ competition.htm; Berkshire Hathaway, 2008 and 2011 Annual Reports.

are eliminating their expensive and glossy annual reports and simply issuing the 10-K to investors and potential investors.

While decision makers are most interested in a company's future performance, the information in an annual report or 10-K is largely historical. However, past performance is an important input in predicting future success. Therefore, the annual report or 10-K enables decision makers to answer the following relevant questions:

What is the financial picture of the organization at a moment in time?

How well did the organization do during a period of time?

Accountants answer these questions with four major financial statements: the balance sheet, the income statement, the statement of cash flows, and the statement of stockholders' equity. The balance sheet focuses on the financial picture as of a given day. The income statement, cash flow statement, and statement of stockholders' equity focus on the performance over a period of time. Usually the period is a year or one quarter of the year and the balance sheet shows the company's status on the last day of the period. We discuss the balance sheet in this chapter, the income statement and statement of stockholders' equity in Chapter 2, and the statement of cash flows in Chapter 5. After introducing the balance sheet, this chapter also explores several topics that are important to understanding the environment in which a business operates.

# **The Balance Sheet**

The **balance sheet**, also called the **statement of financial position**, shows the financial status of an organization at a particular instant in time. It is essentially a snapshot of the organization at a given date. It has two counterbalancing sections. One section lists the resources of the firm (everything the firm owns and controls—from cash to buildings, etc.). The other section lists the claims against the resources. The resources and claims form the **balance sheet equation**:

Assets = Liabilities + Owners' equity

Some accountants prefer the following (equivalent) form of the balance sheet equation:

Assets – Liabilities = Owners' equity

We define the terms in this equation as follows:

**Assets** are economic resources that the company expects to help generate future cash inflows or reduce or prevent future cash outflows. Examples are cash, inventories, and equipment.

**Liabilities** are economic obligations of the organization to outsiders, or claims against its assets by outsiders. An example is a debt to a bank. When a company takes out a bank loan, it generally signs a promissory note that states the terms of repayment. Accountants use the term **notes payable** to describe the existence of promissory notes.

**Owners' equity** (or owner's equity if there is only one owner) is the owners' claims on the organization's assets. Because debt holders have first claim on the assets, the owners' claim is equal to total assets less total liabilities.

To illustrate the balance sheet, suppose Hector Lopez, a salaried employee of a local bicycle company, quits his job and opens his own bicycle shop, Biwheels Company, on January 2, 20X2. Lopez invests \$400,000 in the business. Then, acting for the business, he borrows \$100,000 from a local bank. That gives Biwheels \$500,000 in assets, all currently in the form of cash. The opening balance sheet of this new business enterprise follows:

# **Biwheels Company**

```
Balance Sheet
```

January 2, 20X2

Assets		Liabilities and Owner's Equity		
Cash	\$500,000	Liabilities (Note payable)	\$100,000	
		Lopez, capital	400,000	
Total assets	\$500,000	Total liabilities and owner's equity	\$500,000	

Because the balance sheet shows the financial status at a particular point in time, it always includes a specific date. The elements in this balance sheet show the financial status of the Biwheels Company as of January 2, 20X2. The Biwheels balance sheet lists the company's assets (\$500,000) on the left. They are balanced on the right by an equal amount of liabilities

#### **OBJECTIVE 2**

Describe the components of the balance sheet.

# balance sheet (statement of financial position)

A financial statement that shows the financial status of an organization at a particular instant in time.

balance sheet equation

Assets = Liabilities + Owners' equity

#### assets

Economic resources that a company expects to help generate future cash inflows or help reduce future cash outflows.

#### liabilities

Economic obligations of the organization to outsiders, or claims against its assets by outsiders.

#### notes payable

Promissory notes that are evidence of a debt and state the terms of payment.

#### owners' equity

The owners' claims on an organization's assets, or total assets less total liabilities.