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## PREFACE

We are very appreciative of the many positive comments made about our eleventh edition. In this, the twelfth edition, we have refined many of the innovations introduced in the eleventh edition. We also have added material that reflects changing accounting standards and the movement toward integration in many accounting curricula. The Brigham Young University AECC-sponsored curriculum change is now entering its fourth year of full implementation. Students who entered the program in its first class are now graduated and working in their chosen jobs. The enthusiasm of recruiters, graduating students, and incoming students continues to convince the BYU faculty of the effectiveness of the integrated curriculum. We encourage you at your schools to take advantage of the pioneering work done at many universities to examine your curriculum, including Intermediate Accounting, and adapt ideas to your specific needs. We attest to the excitement that comes from this approach. We continue to keep these varied approaches to accounting education in mind as we revise our text and make it as timely and flexible as we can. We welcome your ideas.

# SIGNIFICANT CHANGES IN THE TWELFTH EDITION

As is true with every edition of INTERMEDIATE ACCOUNTING, many changes are made because of new accounting standards issued by the Financial Accounting Standards Board. This is certainly true of this edition. The following topics have been substantially revised to reflect relevant new standards and proposals for new standards.

- 1. Debt and equity investments, FASB Statement Nos. 114 and 115 (Chapter 17)
- 2. Accounting for income taxes, FASB Statement No. 109 (Chapter 20)
- 3. Proposed changes in accounting for stock-based compensation plans (Chapter 16)
- 4. Proposed changes in reporting earnings per share (Chapter 23)

Other major changes include extensive revision of material covering pension accounting in Chapter 21, integration of ratio analysis throughout the text, and many new end-of-chapter cases, exercises, and problems.

### New Chapter on Investments

Since the last edition of the text was published, the FASB has been busy in the area of accounting for investments. The Board made a significant step away from historical cost and toward market value with the issuance of FASB Statement No. 115. As a result of this new standard, many debt and equity securities purchased as investments are adjusted to market value at the end of each accounting period. Depending on the classification of the security, the change in value is disclosed on the income statement or directly in a stockholders' equity account. Chapter 17 has been updated to address the issues presented by this new standard.

### Accounting for Income Taxes

Chapter 20 on income taxes has been completely revised to reflect the provisions mandated in FASB Statement No. 109. The chapter begins with a basic illustration that outlines the important aspects of accounting for deferred tax assets and liabilities. The chapter continues with a number of more complex examples that highlight the sticky conceptual issues underlying the controversy that has surrounded the accounting for income taxes in recent years.

### Stock-Based Compensation Plans

The issue of how to account for stock-based compensation plans exploded on the scene in 1993. The FASB has proposed greatly expanding the circumstances in which stock-based compensation awards would be considered an expense. The proposal has prompted a cry of alarm from many in the business community. One Congress person accused the FASB of trying to "change reality"

and of causing suffering among growth companies. As this book goes to press, the FASB has not yet issued a final pronouncement. Chapter 15 compares the FASB's Exposure Draft to existing standards and illustrates the conceptual issues and practical difficulties underlying this important topic.

### Accounting for Pensions

Chapter 21 now includes a simple example that allows students to get inside the black box of pension computations and actually see how different factors, such as employee turnover and expected future salary growth, impact a company's pension obligation. This simple example is followed by a multi-year illustration using a spreadsheet framework that introduces and explains the infamous intricacies of pension accounting.

### Earnings Per Share

In 1994 the topic of earnings per share was added to the FASB's agenda. Anticipated changes will make EPS reporting by U. S. companies more comparable to companies in other countries. In effect, the primary earnings per share computation would be replaced by basic earnings per share. Chapter 23 has been revised and reorganized to reflect the expected changes.

## Integration of Ratio Analysis Throughout the Text

In this edition, we have moved much of the ratio analysis from the back of the text to appropriate places in various chapters. For example, in Chapter 4 on the income statement, we present and discuss the uses of gross profit percentage and net profit percentage; in Chapter 9, we discuss inventory turnover and days' sales in inventory; and in Chapter 14, we introduce students to the debt-to-equity ratio and its uses. In the last chapter of the text, all the ratios are tied together in a summary, but students do not have to wait until the end of the text to get a feel for the uses of accounting information.

# Additional Cases, Exercises, and Problems in Each Chapter

Many new cases, exercises, and problems have been added to the text. Many of these new end-of-chapter materials require students to review the Microsoft annual report that is featured at the end of the text. In addition, numerous cases involving real-world examples have been included in this edition. The emphasis of many of these new end-of-chapter materials is to focus on a student's developing the analytical tools necessary to succeed in his or her chosen profession.

#### OTHER IMPORTANT FEATURES

Several changes made in the eleventh edition made our text distinctive. We have been encouraged by the response to these changes, and have retained them in this edition with some revisions to make them even more valuable.

# New Opening Scenarios and Boxed Items

Each chapter of the text has a real-world opening scenario that suggests why the topics covered in the chapter are relevant to what the students will be doing when they graduate. Each chapter of the text also includes at least one boxed item, derived from current literature, that describes recent events and asks the student to consider various policy and conceptual issues related to the material. Students can consider these "asides" as they read the text material, and instructors can use this material in class discussion to broaden the student's understanding. Suggested solutions to the questions in the boxed items are included in the Solutions Manual. A sampling of opening scenarios and boxed items is given below.

### Opening Scenarios:

IBM: Its Rise, Its Fall, and Its Creative Accounting (Chapter 1)

The Balance Sheet of the Boston Celtics (Chapter 5)

Blockbuster Video: Garbage, Videos, and

Depreciation Policy (Chapter 12)

Net Assets in the U.S. Federal Government—Negative \$3.1 Trillion (Chapter 21)

#### Boxed Items:

Russian Accounting (Chapter 3)

Phar-Mor and the World Basketball League (Chapter 4)

Asset Revaluations: Daimler-Benz and Grand

Metropolitan (Chapter 11)

BASF Aktiengesellschaft: German Liabilities

(Chapter 13)

# Early Cash Flow Chapter With More Complex Items Covered in Later Chapters

We feel that the movement of the cash flows chapter from the back of the text to the front is very significant. For several years, especially since the FASB adopted its conceptual framework, the importance of reporting cash flows has been stressed. No longer can the state-

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ment of cash flows be looked upon as a "supplemental statement." It reports information that is vital for many decisions, and the usefulness of this information was enhanced significantly by the revised format prescribed by FASB Statement No. 95. We feel that placement of the statement of cash flows with the income statement and the balance sheet conveys this importance to students and assists them in gaining a broader understanding of the impact of business events, not only on net income and the balance sheet, but also on cash flows.

Recognizing that students would have difficulty understanding some complex transactions at this early stage of their study of intermediate accounting, we omit unnecessary complexities from Chapter 6. We include discussion of their impact on cash flows as appropriate throughout the text. Thus, the treatment of the allowance for doubtful accounts is covered in Chapter 8, the cash effects of bond premium and discount amortization are discussed in Chapter 14, and the complexities of cash flows for lease arrangements are explained in Chapter 19. With these complexities removed from Chapter 6, we feel that the format for the statement of cash flows, which is more understandable than the old funds statement, makes it possible to teach both the indirect and direct methods at this earlier time. We have elected to stress the T-account approach in the chapter because it is less complicated than the work sheet approach. The latter approach is retained, however, in an appendix to Chapter 6 for those who wish to use it. A comprehensive cash flow review problem is included as an appendix to Chapter 25.

We recognize that some users of our text will want to continue teaching the statement of cash flows later in the course. As users of the eleventh edition have pointed out, the text provides flexibility that allows individual instructors to determine when their students should study the statement of cash flows. The Instructor's Resource Manual that accompanies the text explains how the cash flow material in Chapter 6 and subsequent chapters can be used by those who prefer later coverage.

## International Topics and Illustrations Integrated Throughout the Text

Accounting and business students need more exposure to international issues. This conclusion is stressed by all groups that have been studying accounting and business education. In the past, international issues have been taught mainly in the advanced accounting course. Because many accounting graduates do not take an advanced course, we feel it is important that some inter-

national issues be covered in an intermediate text. We have carefully added many examples and topics to achieve this goal.

The movement to coordinate the establishment of accounting standards internationally is presented in Chapter 1. Throughout the text, examples of international variations in the treatment of business events are presented. For example, look at the international items included in the sampling of boxed items presented earlier. Chapter 11 includes a section dealing with the accounting for sales and purchases of goods in foreign markets, and the foreign exchange adjustments necessary at the time of sale or purchase, subsequent reporting, and settlement of the transaction. In Chapter 24, we cover the process of adjusting financial statements with different currencies, a process that is similar to that for constant-dollar adjustments.

### Annotated Instructor's Edition

The introduction of our annotated instructor's edition was well-received by adopters of the eleventh edition, and annotations are again included in the twelfth edition. Four types of annotated notes are included throughout the text: (1) enrichment examples, (2) points to stress, (3) teaching tips, and (4) historical notes. We have included these annotations to provide instructors with additional information that should prove useful and interesting.

### **SUPPLEMENTARY MATERIALS**

A comprehensive package of supplementary materials is provided with the twelfth edition to assist both instructors and students.

#### Available to Instructors

**Solutions Manual.** This manual contains independently verified answers to all end-of-chapter questions, cases, and problems, and suggested solutions to questions that accompany the boxed items in the text.

**Solutions Transparencies.** Transparencies of solutions for all end-of-chapter exercises and problems are available to adopters.

Instructor's Resource Manual, prepared by David M. Cottrell, Brigham Young University. This manual contains objectives, chapter outlines, teaching suggestions and strategies, topical overviews of end-of-chapter materials, assignment classifications

with level of difficulty and estimated completion time, suggested readings on chapter topics, and teaching transparency masters. The text of the Instructor's Resource Manual is available on diskette.

Test Bank, prepared by David M. Cottrell, Brigham Young University. The revised and expanded test bank is available in both printed and computer (MicroExam) versions. Test items include multiple choice questions and short examination problems for each chapter, accompanied by solutions.

**Template Diskette.** The diskette is used with Lotus<sup>®</sup> 1-2-3<sup>®</sup>\* for solving selected end-of-chapter exercises and problems that are identified in the textbook with the symbol at the right. The diskette may be ordered free of charge from South-Western College Publishing by instructors who have adopted the textbook for their courses.

#### Available to Students

Study Guide, prepared by Sara York Kenny, University of Utah. Each chapter of this all-new study guide includes learning objectives, a study outline, self-testing questions, and study group activities. Most chapters also include activities relating to the 1993 annual report of Campbell Soup Company, which is included in the study guide.

**Working Papers.** Forms for solving end-of-chapter exercises and problems are contained in a single bound volume and are perforated for easy removal.

Practice Set, "Bright Landscapes, Inc.," prepared by J. Gregory Bushong and Jane B. Wells, University of Kentucky. This case provides a comprehensive review of introductory financial accounting. The number of routine transactions is minimized, allowing students to concentrate more on the overall accounting process and less on the details. Students can use their social security numbers to change transaction amounts, thus creating a unique solution. The instructor's manual includes a diskette that generates each student's solution.

#### ACKNOWLEDGEMENTS

Relevant pronouncements of the Financial Accounting Standards Board and other authoritative publications are paraphrased, quoted, discussed, and referenced

throughout the text. We are indebted to the American Accounting Association, the American Institute of Certified Public Accountants, the Financial Accounting Standards Board, and the Securities and Exchange Commission for material from their publications. Also, we gratefully acknowledge the American Institute of Certified Public Accountants for permission to use questions from the Uniform CPA Examination.

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Finally, we extend our thanks to the many instructors and students who have used INTERMEDIATE ACCOUNTING and volunteered their comments and suggestions.

> Jay M. Smith K. Fred Skousen Earl K. Stice James D. Stice

## ABOUT THE AUTHORS

This edition of INTERMEDIATE ACCOUNTING marks the addition of two new authors. Earl K. Stice and James D. Stice are outstanding young faculty at Rice University and Brigham Young University, respectively. They are brothers and are realizing a long-time goal of working together professionally, combining their expertise and enthusiasm for the field of accounting. Together with senior authors, Jay M. Smith and K. Fred Skousen, they have introduced many innovative changes in the text—changes that reflect their creative approach to education. A brief educational and professional profile is presented below for each member of the author team.

Jay M. Smith is Professor of Accounting at the School of Accountancy and Information Systems, Brigham Young University. He holds a bachelor's and master's degree from BYU and a PhD from Stanford University. He has over thirty years' teaching experience at BYU, Stanford, the University of Minnesota, and the University of Hawaii. Dr. Smith has received numerous awards and recognitions in accounting including teaching excellence awards from BYU and the Utah Association of CPAs. He served as a faculty resident at Arthur Andersen & Co.'s professional education center and also as a member of the Faculty Advisory Group working with Coopers & Lybrand in their Excellence in Auditing educational project. Dr. Smith also served as project coordinator for the AECC grant received by BYU to restructure the accounting junior year curriculum. He is a member of the American Institute of CPAs and the American Accounting Association and has served on numerous committees of these organizations.

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nized as the National Beta Alpha Psi Academic Accountant of the Year in 1979. Dr. Skousen is the author or coauthor of over 50 articles, research reports, and books. He has held leadership positions in the American Accounting Association, the American Institute of CPAs, and the Utah Association of CPAs. He has been a consultant to the Controller General of the United States, the Federal Trade Commission, and several large companies. He was a Faculty Resident with the Securities and Exchange Commission and a Faculty Fellow with Price Waterhouse and Co.

Earl K. Stice is Assistant Professor of Accounting at the Jones Graduate School of Administration, Rice University. He holds bachelor's and master's degrees from Brigham Young University and a PhD from Cornell University. Dr. Stice has taught at the University of Arizona and at Cornell University as well as Rice University. He has published papers in the Journal of Financial and Quantitative Analysis, The Accounting Review, and Issues in Accounting Education and is co-author of Readings and Applications in Financial Accounting, second edition. Dr. Stice has presented research papers at a number of professional meetings, including conferences in Finland, Taiwan, and Australia. He has twice served as co-chairperson of the Membership and Subscriptions Committee of the American Accounting Association.

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Overview of Accounting and Its
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## CHAPTER 1

# Financial Reporting and the Accounting Profession

#### CHAPTER TOPICS

- Financial Reporting to Users of Accounting Information
- Components of the Accounting Profession
- Role of the FASB and Various Governmental and Professional Organizations in the Development of Accounting Standards
- Conflict Between Public and Private Sectors in Establishing Accounting Standards

Analysis of the data gathered in the United States Census of 1880 took almost ten years. For the census of 1890, the U.S. government commissioned Herman Hollerith to provide data tabulation machines in an attempt to speed the process. Hollerith's machines used cards with holes punched in them to represent the census data. This system of mechanized data handling saved the census bureau \$5 million and slashed the data analysis time by two years. In 1911, Hollerith's company was merged with two firms that made scales and time clocks, forming the Computing-Tabulating-Recording Company. In 1924, this combined company changed its name to the International Business Machines Corporation (IBM). Under the leadership of Thomas J. Watson, Sr., who had come to IBM from the National Cash Register Company (NCR) in 1914, IBM became the largest office machine producer in the U.S. with sales of over \$180 million in 1949.

In 1950, resistance to the idea of electronic computers was high inside IBM. IBM's engineers were specialists in electromechanical devices and were uncomfortable working with vacuum tubes, diodes, and magnetic recording tapes.<sup>2</sup> In addition, there were many

<sup>1.</sup> Cortada, James W. Before the Computer. Princeton, NJ: Princeton University Press, 1993.

<sup>2.</sup> Fisher, Franklin M., James W. McKie, and Richard B. Mancke. IBM and the U.S. Data Processing Industry. New York, NY: Praeger, 1983.

questions about the customer demand for electronic computers. One IBM executive forecast that the size of the total worldwide market for computers was about five. Following significant internal debate, Thomas J. Watson, Jr. authorized development of IBM's first electronic computer, the 701. Through the 1960s and 70s, with its aggressive leasing program, emphasis on sales and service, and continued investment in research and development, IBM established a dominant (some claimed a monopolistic) position in the mainframe computer market.

IBM was not the first company to produce a personal computer, but when the IBM PC was released in 1981, it quickly became the industry standard. Other machines came to be described as "IBM compatible" or "clones." By 1986, IBM held 40% of the PC market.<sup>3</sup> Amid this success, IBM made what, in retrospect, was a crucial error — it chose to focus on producing and selling hardware and to leave the software, by and large, to others. In fact, IBM did not develop the operating system for its first PC, instead electing to use a system called "DOS" developed by a small, 32-person company named Microsoft. In the early 1990s, as profits of software developers like Microsoft and Novell exploded, the profits of IBM slumped badly. In 1990, IBM reported an operating profit of \$11 billion. Operating profit in 1991 fell to \$942 million, and operations showed a loss of \$45 million in 1992, IBM's first operating loss ever. As of December 31, 1992, the total market value of IBM stock was \$28.8 billion, down from \$105.8 billion in 1987 when IBM was the most valuable company in the world.

As is always the case when stockholders lose money, analysts are taking another look at IBM's financial statements to determine whether accounting techniques were used to artificially inflate IBM's reported performance. The following two examples illustrate the types of questions that have been raised about IBM's accounting.<sup>4</sup>

Revenue Recognition. In response to increased competition in the computer market, IBM's sales force devised new payment plans to spur sales. They offered stretched out payment plans, no money down "try and buy" plans, and "price protection" plans, guaranteeing refunds if prices dropped subsequent to a customer's purchase. Salespeople are certainly free to concoct any gimmicks they wish, but these creative payment plans then present the thorny accounting question of when to recognize the revenue from these sales. As explained more fully in Chapter 18 of this text, revenue should not be recorded until the earnings process is substantially complete — that is, until the seller has done essentially everything promised to the buyer. For some of its mainframe computers, IBM records the revenue when the machine is shipped, asserting that the earnings process is complete at that point. In other cases, IBM recognizes the revenue when the machine is merely transferred to IBM's own warehouse for temporary storage en route to the customer. By comparison, Amdahl, one of IBM's competitors, records no revenue until its field engineering group makes sure the machine is installed and running.

**Leasing.** Historically, IBM has leased, rather than sold, most of its mainframe computers. This policy goes back to Herman Hollerith who leased his tabulating machines to the Census Bureau in 1890. Accounting for leases is fascinating — it includes elements of historical controversy, subtlety and complexity, possibility for manipulation, and vast potential impact on the reported financial statements. (Note: The full story is in Chapter 19.) To prevent companies from reporting that they have sold a computer when in fact they have only rented it, the Financial Accounting Standards Board (FASB) has estab-

<sup>3.</sup> Carroll, Paul B. "Giant Missteps: How an IBM Attempt to Regain PC Lead Has Slid Into Trouble," *The Wall Street Journal*, December 2, 1991, p. Al.

<sup>4.</sup> Miller, Michael W. and Lee Berton. "As IBM's Woes Grew, Its Accounting Tactics Got Less Conservative." The Wall Street Journal, April 7, 1993, p. A1.

lished strict rules governing lease accounting. One stipulation is that a lease deal is accounted for as a sale if the value of the lease payments, plus the anticipated salvage value of the computer at the end of the lease term, are equal to at least 90% of the cash price of the computer. In its efforts to ensure it could account for computer leases as sales, IBM arranged a unique deal with Merrill Lynch, the financial services firm. Merrill Lynch sold IBM an insurance contract guaranteeing to pay a certain amount for computers returned to IBM at the end of their lease terms. These guaranteed salvage amounts were calculated to be just sufficient to allow IBM to satisfy the 90% requirement and thus be able to account for the original computer leases as outright sales. Illegal? Certainly not. Clever? Absolutely.

Arguments over appropriate accounting, like these disputes raised about IBM's accounting, are a fact of life because accounting involves judgment. Before the financial statements of a company are released, the management of the company is likely to have a host of accounting disagreements with the independent auditor. If a company falters, as IBM has in the last few years, outside analysts are sure to find accounting judgments with which, in retrospect, they disagree. If the FASB proposes a new accounting rule, it is certain that some business executives will proclaim the rule to be utterly absurd. This is not because managers are sleezy, conniving, and self serving (although such managers certainly exist); it is because the business world is a complex place filled with complex transactions and reasonable people can disagree about how to account for those transactions.

Your introductory accounting course gave you an overview of the primary financial statements and touched briefly on such topics as revenue recognition, depreciation, leases, pensions, deferred taxes, LIFO, and marketable securities. In intermediate accounting, all these topics are back, bigger and better than ever. But now, instead of getting an overview, you will actually get the nuts and bolts. Yes, some of these topics are complex — as mentioned above, they have to be complex because the business world is a complex place. When you complete your course in intermediate accounting, you will be the type of person who doesn't need to be reminded to look at the notes when evaluating a set of financial statements. You will not only be aware of the large impact that accounting assumptions can have but will also be able to quantify that impact. And you will better understand the important role accountants have in preparing the financial statements that are so vital to the smooth functioning of both the U.S. and the global economy.

#### ACCOUNTING AND FINANCIAL REPORTING

The overall objective of accounting\* is to provide information that can be used in making economic decisions.

Accounting is a service activity. Its function is to provide quantitative information, primarily financial in nature, about economic entities that is intended to be useful in making economic decisions—in making reasoned choices among alternative courses of action.<sup>5</sup>

Several key features of this definition should be noted. First, accounting provides a vital service in today's business environment. Economists and environmentalists remind us constantly that we live in a world with limited resources. We must use our natural resources, our labor, and our financial wealth wisely so as to maximize their benefits to society. The better the accounting system that measures and reports the costs of using these

<sup>\*</sup>A glossary of key terms appears in Appendix B at the end of the text. The terms included in the glossary are printed in color and are listed at the end of each chapter.

<sup>5.</sup> Statement of the Accounting Principles Board No. 4, "Basic Concepts and Accounting Principles Underlying Financial Statement of Business Enterprises" (New York: American Institute of Certified Public Accountants, 1970), par. 40.