
Cost Accounting

A Managerial Emphasis

EIGHTH EDITION

Charles T. Horngren
Stanford University

George Foster
Stanford University

Srikant M. Datar
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Prentice Hall
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Preface

Cost accounting provides data for various purposes, including planning, controlling, and the costing of products, services, and customers. We stress our major theme of "different costs for different purposes" throughout this book. The favorable reaction to previous editions is evidence that cost accounting courses can be enriched and relieved of drudgery by broadening the course from coverage of procedures alone to a full-fledged coverage of concepts, analyses, and procedures that pays more than lip service to accounting as a management tool.

STRENGTHS OF THE SEVENTH EDITION RETAINED AND ENHANCED

Reviewers of the seventh edition praised the following features, which have been retained and strengthened in the eighth edition:

- ◆ Clarity and understandability of the text
- ◆ Coverage of important topics, including current developments in actual practice
- ◆ Extensive use of real-world examples
- ◆ Excellent quantity, quality, and range of assignment material
- ◆ Helpful Problems for Self-Study for each chapter
- ◆ Flexible organization through a modular approach

The first sixteen chapters provide the essence of a one-term (quarter or semester) course. There is ample text and assignment material in the book's twenty-six chapters for a two-term course. This book can be used immediately after the student has had an introductory course in financial accounting. Alternatively, this book can build on an introductory course in managerial accounting.

Deciding on the sequence of chapters in a textbook is a challenge. Every instructor has a favorite way of organizing his or her course. Hence, we present a modular, flexible organization that permits a course to be custom-tailored. *Our loosely constrained sequence of chapters facilitates diverse approaches to teaching and learning.*

CHANGES IN CONTENT AND PEDAGOGY OF THE EIGHTH EDITION

The pace of change in organizations continues to be rapid. This edition has been revised extensively to reflect changes occurring in the role of cost accounting in organizations and in research on cost accounting. Each chapter was scrutinized by knowledgeable critics before a final draft was reached.

1. *Newly evolving management themes.* These themes guided us in choosing the topics to be given increased emphasis:

- ◆ *Focus on customers.* Chapter 1 takes a customer-driven perspective on changes in cost accounting. The customer focus is emphasized in many other chapters. For example, Chapters 4, 11, and 15 include new sections on customer costing and profitability analysis.
- ◆ *Key success factors, such as cost, quality, and time.* Chapters 8 and 12 include expanded discussion on cost planning and cost management. Chapter 23 is a new chapter: Cost Management: Quality and Time.
- ◆ *Total value-chain analysis.* The value chain is now systematically emphasized throughout the book. Chapter 1 introduces the value chain. The text in many areas (such as Chapter 2 on cost drivers, Chapter 6 on budgeting, Chapter 7 on explanations for variances, and Chapter 12 on pricing decisions) has been revised to emphasize the importance of considering all areas of the value chain.
- ◆ *Dual internal/external focus.* Topics such as benchmarking (Chapters 7 and 13) and customer satisfaction (Chapter 23) are now included to reflect the increased attention given to external factors in management control systems. Greater recognition is now given to how cost accounting is expanding its horizons to incorporate environment-related considerations (Chapters 13, 20, and 26).
- ◆ *Continuous improvement.* Topics such as *kaizen* budgeting (Chapter 6) and productivity (Chapter 22) have been added to highlight the heightened emphasis companies now give to continuous improvement.

2. *Increased coverage of the service sector.* Chapter 2 now discusses cost concepts in the service sector as well as in the merchandising and manufacturing sectors. Also, Chapters 4 and 5 have been restructured to illustrate job costing in the service sector first. The service sector is now the single largest sector in the economy, and it is the most straightforward sector to use in teaching job costing because there is no work in process to consider. A new costing method category—budgeted costing—is introduced to describe the system most companies in the service sector use.

3. *Greatly expanded global content of the text.* Our coverage of international business is highly visible in two types of boxed features, new to the eighth edition: Surveys of Company Practice and Concepts in Action. Both types of boxes, described in more detail below, draw on businesses from around the globe. In addition, company examples from many different countries are cited throughout the chapter material.

4. *Professional ethics.* The eighth edition has increased coverage of ethics. The final problem in every chapter of the book now has a component on ethics. This feature gives the instructor the flexibility to reinforce the importance of ethics in as many areas as is deemed appropriate.

5. *Cost management.* The seventh edition expanded its coverage of cost management. The eighth edition continues this expansion. Chapter 3 illustrates how decisions at the planning stage can affect the budgeted breakeven point. Chapter 12 emphasizes the designed-in cost notion as well as offering expanded coverage of target costing and value engineering.

Activity-based management principles are integrated into many chapters of the eighth edition. Chapter 2 discusses cost drivers and value-added costs. Chapters 4 and 5 illustrate how an activity-based costing approach can be used to refine either job costing or process costing systems. Chapters 10 and 15 present and illustrate cost hierarchies. Chapter 12 discusses how companies can reduce costs by re-engineering the design of products or by reducing individual activity costs. Chapter 15 examines capacity costing issues.

6. *Revised placement of material.* Several new appendices contain material that was covered in the later chapters of the seventh edition:

- ◆ Chapter 3 Appendix, "Decision Models and Uncertainty," incorporates material from Chapter 20 of the seventh edition.
- ◆ Chapter 7 Appendix, "Variance Investigation Decisions and Uncertainty," incorporates material from Chapter 26 of the seventh edition.
- ◆ Chapter 10 Appendix, "Regression Analysis," incorporates material from Chapter 25 of the seventh edition.
- ◆ Chapter 11 Appendix, "Linear Programming," incorporates materials from Chapter 24 of the seventh edition.

The material in Chapter 29 of the seventh edition has been incorporated into sections of Chapters 4 and 13 and into the new Chapter 23, Cost Management: Quality and Time.

ILLUSTRATIONS OF ACTUAL BUSINESSES

Students become more highly motivated to learn cost accounting if they can relate the subject matter to the real world. We have spent considerable time interacting with the management community, investigating new uses of cost accounting data, and gaining insight into how changes in technology are affecting the roles of cost accounting information. Real-world illustrations are found in many parts of the text.

CONCEPTS IN ACTION BOXES. Found in many chapters, these boxes discuss how cost accounting concepts are applied by individual companies. Examples are drawn from many different countries, including the United States (Harley-Davidson on p. 42, General Motors on p. 71, and Ben & Jerry's on p. 472), Australia (Johnson & Johnson Pacific on p. 9 and Smeltco on p. 250), Canada (Neptune Plastics on p. 353), Japan (Toyota on p. 201), Mexico (Crysel on p. 803), Switzerland (Sandoz on p. 472), and the United Kingdom (Allied-Signal Skelmersdale on p. 818).

SURVEYS OF COMPANY PRACTICE BOXES. Results from surveys in over 15 countries are cited in the many Surveys of Company Practice boxes found throughout the book. Examples include:

- ◆ Growing Interest in Activity-Based Costing (p. 161)—cites evidence from the United States, Canada, and the United Kingdom.
- ◆ Budgeting Practices (p. 187)—cites evidence from the United States, Australia, Netherlands, Japan, and the United Kingdom.
- ◆ Variable Costing (p. 318)—cites evidence from the United States, Australia, Canada, Japan, Sweden, and the United Kingdom.
- ◆ Pricing Practices (p. 447)—cites evidence from the United States, Australia, Ireland, Japan, and the United Kingdom.
- ◆ Purposes of Cost Allocation (p. 502)—cites evidence from the United States, Australia, Canada, and the United Kingdom.
- ◆ Capital Budgeting Methods (p. 703)—cites evidence from the United States, Australia, Canada, Ireland, Japan, Scotland, South Korea, and the United Kingdom.
- ◆ Transfer Pricing Methods (p. 872)—cites evidence from the United States, Australia, Canada, India, Japan, and the United Kingdom.

This extensive survey evidence enables students to see that many of the concepts they are learning are widely used across the globe.

PHOTOS FROM ACTUAL COMPANIES. All chapters open with a photo that illustrates an important concept to be discussed in that chapter. These photos feature companies from many different countries, including the United States (Sun Mi-

crocosystems on p. 59, Pizza Hut on p. 181, Snapple Beverage on p. 307, Ford Motor Company on p. 427, and Home Depot on p. 465), Australia (Lindsay Brothers on p. 385), Canada (Hudson's Bay Company on p. 889), Japan (Takeda Chemical Industries, Ltd., on p. 139), Netherlands (Rugby Group on p. 631), the United Kingdom (Nestlé Rowntree on p. 225), and Venezuela (Asea Brown Boveri on p. 683).

SUPPLEMENTS TO THE EIGHTH EDITION

A complete package of supplements is available to assist students and instructors in using this book. Supplements available to students are:

- ◆ *Student Guide and Review Manual* by John K. Harris and Dudley W. Curry. This is a chapter-by-chapter learning aid for students. It reviews key terms and concepts and contains practice test questions and problems, including an average of four CPA/CMA questions per chapter. Solutions and explanations are also included for all questions and problems. We believe this *Student Guide* is a world-class study aid that will be helpful to students at all levels.
- ◆ *Student Solutions Manual* by Charles T. Horngren, George Foster, and Srikant M. Datar. Designed for student use, this supplement contains solutions for all of the even-numbered questions and problems in the textbook. This may be purchased with your instructor's permission.
- ◆ *Lotus Templates for Selected Problems* by Chitra Rajagopal. Templates are provided for two problems per chapter, designated by a computer icon in the text.
- ◆ *Applications in Cost Accounting Using Lotus 1-2-3* by David M. Buehlman and Dennis P. Curtin. Personal computer applications are keyed to selected chapters of the textbook.

Supplements available to instructors are:

- ◆ *Annotated Instructor's Edition* with annotations by Linda S. Bamber. A great teaching tool, the *Annotated Instructor's Edition* is the regular textbook enhanced through additional comments printed in the margins. Comments are presented in several categories: New in This Edition, Teaching Tips, Examples, Correcting Student Misconceptions, Points to Stress, Curriculum Linkages, and Reinforcing Problems. Check figures appear next to the exercises and problems in the assignment material. (The inside front cover of the *Annotated Instructor's Edition* offers a more detailed look at these features.)
- ◆ *Prentice Hall Course Manager*. A three-hole punched *Annotated Instructor's Edition*, packaged in a binder, provides instructors with maximum flexibility in organizing course materials. Other instructor supplements are also three-hole punched.
- ◆ *Instructor's Manual and Media Guide* by William O. Stratton. This supplement offers a chapter overview, chapter outline, additional examples, alternate means of presenting materials, chapter quiz, and suggested readings. The Media Guide section includes a write-up for each video in the *ABC News/PH Video Library for Cost Accounting*, consisting of a brief synopsis of the video and discussion questions that can be used to link material in the video to topics in the text and so stimulate class discussion. A chapter reference, a synopsis, and discussion questions are also provided for each article in the *New York Times Supplement for Management/Cost Accounting*.
- ◆ *Cases and Extended Problems in Cost Accounting* by Charles T. Horngren, George Foster, and Srikant M. Datar. This supplement contains additional, longer problems for all chapters.
- ◆ *Test Item File* by James R. Davis. This includes quiz and examination material and is available in both hard copy and diskette form. It offers 20 true/false questions, 50 multiple-choice questions, 10 problems, and 3 essay questions (which require students to use their critical-thinking skills) for each of the text's chapters.
- ◆ *Solutions Manual* by Charles T. Horngren, George Foster, and Srikant M. Datar. This offers comments on alternative teaching approaches and solutions to all assignment material.
- ◆ *Transparencies of Solutions*
- ◆ *Teaching Transparencies*. Full-color transparencies for approximately 50 key exhibits from the text enhance classroom presentation.

Resources from the business world include the following:



- ◆ ABC News/PH Video Library for Cost Accounting. Video is the most dynamic of all the supplements you can use to enhance your class. But the quality of the video material and how well it relates to your course can still make all the difference. For these reasons, Prentice Hall and ABC News have decided to work together to bring you the best and most comprehensive video ancillaries available in the college market:

Through its wide variety of award-winning programs—"Nightline," "Business World," "On Business," "This Week with David Brinkley," "World News Tonight," and "The Health Show"—ABC offers a resource for feature and documentary-style videos related to text concepts and applications. The programs have extremely high production quality, present substantial content, and are hosted by well-versed, well-known anchors. Prentice Hall, its authors, and its editors provide the benefit of having selected videos on topics that will work well with this course and text and give the instructor teaching notes on how to use them in the classroom.

The ABC News/PH Video Library for Cost Accounting offers video material for almost every chapter in the text. An excellent video guide that is included in the Instructor's Manual carefully and completely integrates the videos into your lecture.

- ◆ The New York Times and Prentice Hall are sponsoring "Themes of the Times," a program designed to enhance student access to current information of relevance in the classroom.

Through this program, the core subject matter provided in the text is supplemented by a collection of time-sensitive articles from one of the world's most distinguished newspapers, *The New York Times*. These articles demonstrate the vital, ongoing connection between what is learned in the classroom and what is happening in the world around us.

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We are indebted to many for their ideas and assistance. Our primary thanks is to the many academics and practitioners who have advanced our knowledge of cost accounting.

The package of teaching materials we present is the work of many skillful and valued team members. John K. Harris aided us immensely at all stages in the development and production of this book. He critiqued the seventh edition, gave a detailed review of the manuscript of this edition, and assisted in the essential task of proofing. Linda S. Bamber and William O. Stratton gave extensive reviews of the manuscript and suggestions for improvement in addition to working on their supplements. Professor James R. Davis has integrated the new text material into the Test Item File. Computer-related supplements have been skillfully prepared by David M. Buehlmann, Dennis P. Curtin, and Chitra Rajagopal.

Professors and students providing us detailed written reviews of the previous edition or comments on our drafts of this edition include Michael Alles, David Bell, Donald Bedell, Charles Betts, Donald Bostrom, Lisa Brown, Eric Carlsen, Greg Cermignano, Michael Cornick, John Cruickshank, James Emig, Ellen Engel, Zhilong Fang, Sally Foster, Scott Foster, Monojit Ghosal, David Green, Mahendra Gupta, Rachel Hayes, Hal Hoverland, Ze-Kai Hsiau, Zafar Iqbal, Rohit Jain, Diane Janvrin, Sunder Kekre, Steve Kovzan, Alan Larris, Yow-Min Lee, Elizabeth MacLean, Steve Manske, Richard Mayer, Tony Mongkolkeha, V.G. Narayanan, Brian O'Doherty, August Petersen, Chitra Rajagopal, Ratna Sarkar, Michi Sakurai, William Sanders, Michael Schiff, Arnold Schneider, Emanuel Schwarz, Larry Singleton, Leif Sjoblom, Andy Spero, Takao Tanaka, Debbie Then, Howard Toole, Sandra Weber, James Westbrook, Harry Wolk, Tsing Wu, and Ziaofang Zhao. The faculty participating in the

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Debbie Then managed the collection of photos and the selection of videos. Her enormous energy level and care with detail greatly improved these areas of the eighth edition.

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We are grateful to the professors who contributed assignment material for this edition. Their name are indicated in parentheses at the start of their specific problems.

Comments from users are welcome.

CHARLES T. HORNGREN
GEORGE FOSTER
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