Seventh Edition

Accounting for Decision Making and Control

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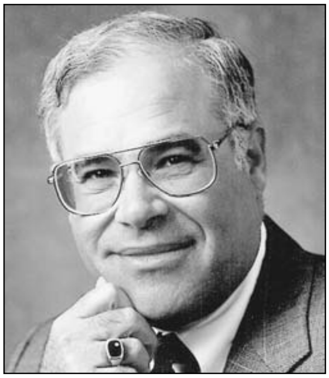
McGraw-Hill Irwin

About the Author



Jerold L. Zimmerman

Jerold Zimmerman is Ronald L. Bittner Professor at the William E. Simon Graduate School of Business, University of Rochester. He holds an undergraduate degree from the University of Colorado, Boulder, and a doctorate from the University of California, Berkeley.

While at Rochester, Dr. Zimmerman has taught a variety of courses spanning accounting, finance, and economics. Accounting courses include nonprofit accounting, intermediate accounting, accounting theory, and managerial accounting. A deeper appreciation of the challenges of managing a complex organization was acquired by spending four years as Deputy Dean of the Simon School.

Professor Zimmerman publishes widely in accounting on topics as diverse as cost allocations, Sarbanes-Oxley Act, disclosure, financial accounting theory, capital markets, and executive compensation. His paper "The Costs and Benefits of Cost Allocations" won the American Accounting Association's Competitive Manuscript Contest. He is recognized for developing Positive Accounting Theory. This work, co-authored with colleague Ross Watts, at the Massachusetts Institute of Technology, received the American Institute of Certified Public Accountants' Notable Contribution to the Accounting Literature Award for "Towards a Positive Theory of the Determination of Accounting Standards" and "The Demand for and Supply of Accounting Theories: The Market for Excuses." Both papers appeared in the *Accounting Review.* Professors Watts and Zimmerman are also co-authors of the highly cited textbook *Positive Accounting Theory* (Prentice Hall, 1986). More recently, Professors Watts and Zimmerman received the 2004 American Accounting Association Seminal Contribution to the Literature award. Professor Zimmerman's textbooks also include: *Managerial Economics and Organizational Architecture* with Clifford Smith and James Brickley, 5th ed. (McGraw-Hill/Irwin, 2009); and *Management Accounting: Analysis and Interpretation* with Cheryl McWatters and Dale Morse (Pearson Education Limited UK, 2008). He is a founding editor of the *Journal of Accounting and Economics,* published by North-Holland. This scientific journal is one of the most highly referenced accounting publications.

He and his wife Dodie have two daughters, Daneille and Amy. Jerry has been known to occasionally engage friends and colleagues in an amicable diversion on the links.

Preface

During their professional careers, managers in all organizations, profit and nonprofit, interact with their accounting systems. Sometimes managers use the accounting system to acquire information for decision making. At other times, the accounting system measures performance and thereby influences their behavior. The accounting system is both a source of information for decision making and part of the organization's control mechanisms—thus, the title of the book, *Accounting for Decision Making and Control.*

The purpose of this book is to provide students and managers with an understanding and appreciation of the strengths and limitations of an organization's accounting system, thereby allowing them to be more intelligent users of these systems. This book provides a framework for thinking about accounting systems and a basis for analyzing proposed changes to these systems. The text demonstrates that managerial accounting is an integral part of the firm's organizational architecture, not just an isolated set of computational topics.

Distinguishing Features

Conceptual Framework

This book differs from other managerial accounting texts in several ways. The most important difference is that it offers a conceptual framework for the study of managerial accounting. This book relies on **opportunity cost** and **organizational architecture** as the underlying framework to organize the analysis. Opportunity cost is the conceptual foundation underlying decision making. While accounting-based costs are not opportunity costs, in some circumstances accounting costs provide a starting point to estimate opportunity costs. Organizational architecture provides the conceptual foundation to understand how accounting is employed as part of the organization's control mechanism. These two concepts, opportunity costs and organizational architecture, provide the framework and illustrate the trade-offs created when accounting systems serve both functions: decision making and control.

Trade-Offs

This text emphasizes that there is no "free lunch"; improving an accounting system's decision-making ability often reduces its effectiveness as a control device. Likewise, using an accounting system as a control mechanism usually comes at the expense of using the system for decision making. Most texts discuss the importance of deriving different estimates of costs for different purposes. Existing books do a good job illustrating how accounting costs developed for one purpose, such as inventory valuation, cannot be used without adjustment for other purposes, such as a make-or-buy decision. However, these books often leave the impression that one accounting system can be used for multiple purposes as long as the users make the appropriate adjustments in the data.

What existing texts do not emphasize is the trade-off between designing the accounting system for decision making and designing it for control. For example, activity-based costing presumably improves the accounting system's ability for decision making (pricing and product design), but existing texts do not address what activity-based costing gives up in terms of control. *Accounting for Decision Making and Control* emphasizes the trade-offs managers confront in an organization's accounting system.

Economic Darwinism

A central theme throughout this book is **economic Darwinism**, which simply implies that accounting systems that survive in competitive industries must be yielding benefits that are at least as large as their costs. While newer accounting innovations such as the balanced scorecard are described, the text also indicates through a series of company histories that many elements of today's modern costing systems can be traced back to much earlier times. It is useful to understand that today's managers are struggling with the same accounting issues as their predecessors, because today's students will also be struggling with the same problems. These problems continue to exist because they involve making trade-offs, usually between systems for decision making (e.g., product pricing and make-or-buy decisions) versus control (e.g., performance evaluation).

Accounting systems differ across firms and change as firms' circumstances change. Today's students will be making these trade-offs in the future. The current rage in managerial accounting texts is to present the latest, most up-to-date accounting system innovations. While recent innovations are important to discuss, they should be placed in their proper perspective. Traditional absorption costing systems have survived the test of time for hundreds of years. Accounting system innovations are new, not necessarily better. We certainly do not know if they will survive.

Logical Sequence

Another meaningful distinction between this text and other books in the field is that the chapters in this text build on one another. The first four chapters develop the opportunity cost and organization theory foundation for the course. The remaining chapters apply the foundation to analyzing specific topics such as budgets and standard costs. Most of the controversy in product costing involves apportioning overhead. Before absorption, variable, and activity-based costing are described, an earlier chapter provides a general analysis of cost allocation. This analysis is applied in later chapters as the analytic framework for choosing among the various product costing schemes. Other books emphasize a modular, flexible approach that allows instructors to devise their own sequence to the material, with the result that these courses often appear as a series of unrelated, disjointed topics without any underlying cohesive framework. This book has 14 chapters, compared with the usual 18–25. Instead of dividing a topic such as cost allocation into three small chapters, most topics are covered in one or at most two unified chapters.

End-of-Chapter Material

The end-of-chapter problem material is an integral part of any text, and especially important in *Accounting for Decision Making and Control.* The problems and cases are drawn from actual company applications described by former students based on their work experience. Many problems require students to develop critical thinking skills and to write short essays after preparing their numerical analyses. Good problems get students excited about the material and generate lively class discussions. Some problems do not have a single correct answer. Rather, they contain multiple dimensions demanding a broad managerial perspective. Marketing, finance, and human resource aspects of the situation are frequently posed. Few problems focus exclusively on computations.

Changes in the Seventh Edition

Based on extensive feedback from instructors using the six editions and from my own teaching experience, the seventh edition focuses on improving the book's readability and accessibility. In particular, the following changes have been made:

- Each chapter has been updated and streamlined based on student and instructor feedback. More intuitive, easier-to-understand numerical examples have been added.

- Additional actual company practices have been integrated into the text.
- Sixteen new problems and cases supplement the existing problems. Users were uniform in their praise of the problem material. They found it challenged their students to critically analyze multidimensional issues while still requiring numerical problem-solving skills. Further problems and cases to complement this selection have been added.

Overview of Content

Chapter 1 presents the book's conceptual framework by using a simple decision context regarding accepting an incremental order from a current customer. The chapter describes why firms use a single accounting system and the concept of economic Darwinism, among other important topics. This chapter is an integral part of the text.

Chapters 2, 4, and 5 present the underlying conceptual framework. The importance of opportunity costs in decision making, cost–volume–profit analysis, and the difference between accounting costs and opportunity costs are discussed in Chapter 2. Chapter 4 summarizes recent advances in the theory of organizations and Chapter 5 describes the crucial role of accounting as part of the firm's organizational architecture. Chapter 3 on capital budgeting extends opportunity costs to a multiperiod setting. This chapter can be skipped without affecting the flow of later material. Alternatively, Chapter 3 can be assigned at the end of the course.

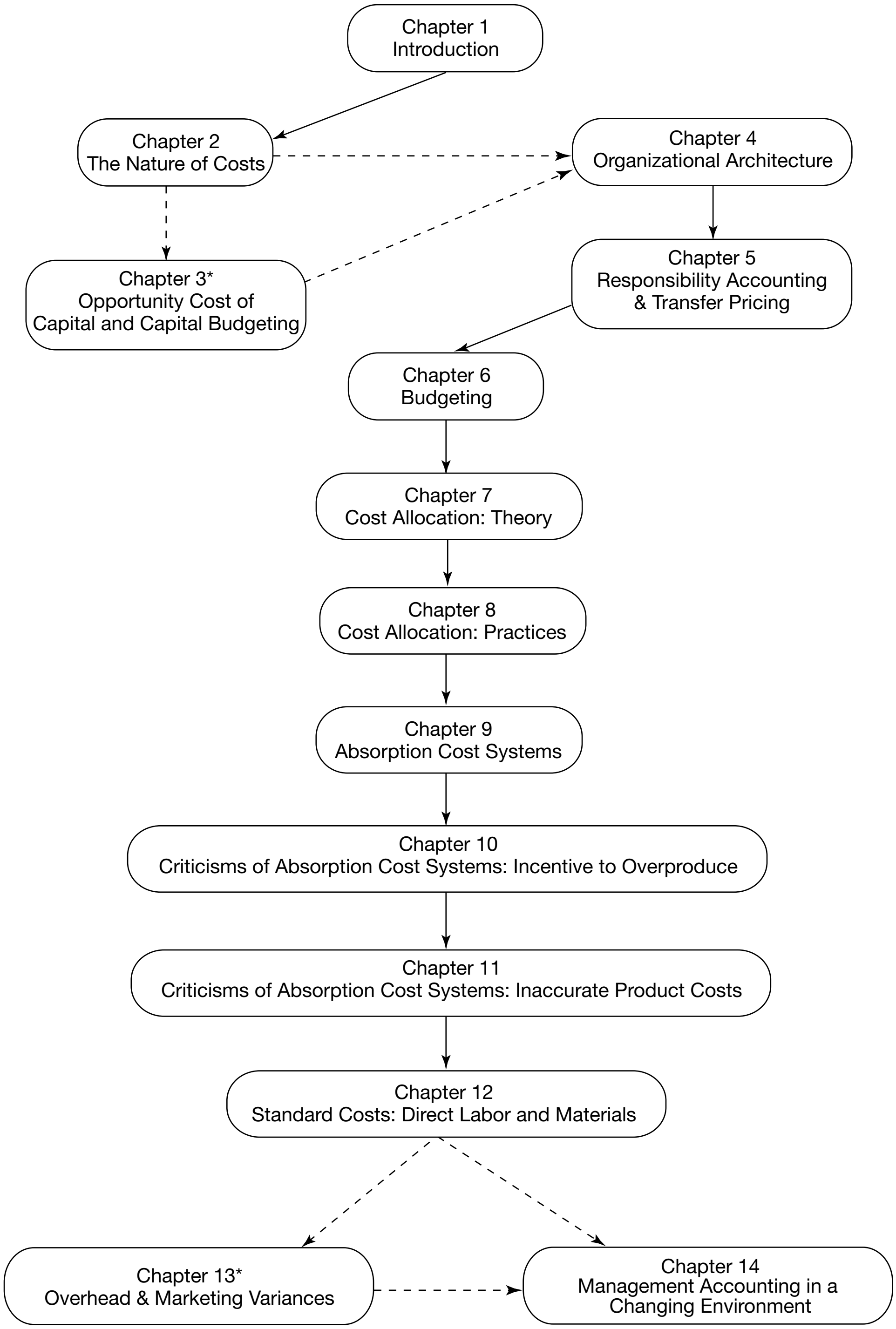
Chapter 6 applies the conceptual framework and illustrates the trade-off managers must make between decision making and control in a budgeting system. Budgets are a decision-making tool to coordinate activities within the firm and are a device to control behavior. This chapter provides an in-depth illustration of how budgets are a significant part of an organization's decision-making and control apparatus.

Chapter 7 presents a general analysis of why managers allocate certain costs and the behavioral implications of these allocations. Cost allocations affect both decision making and incentives. Thus, there is again the trade-off between decision making and control. Chapter 8 continues the cost allocation discussion by describing the "death spiral" that can occur when significant fixed costs exist and excess capacity arises. This leads to an analysis of how to treat capacity costs—a trade-off between underutilization and overinvestment. Finally, several specific cost allocation methods such as service department costs and joint costs are described.

Chapter 9 applies the general analysis of overhead allocation in Chapters 7 and 8 to the specific case of absorption costing in a manufacturing setting. The managerial implications of traditional absorption costing are provided in Chapters 10 and 11. Chapter 10 analyzes variable costing, and activity-based costing is the topic of Chapter 11. Variable costing is an interesting example of economic Darwinism. Proponents of variable costing argue that it does not distort decision making and therefore should be adopted. Nonetheless it is not widely practiced, probably because of tax, financial reporting, and control considerations.

Chapter 12 discusses the decision-making and control implications of standard labor and material costs. Chapter 13 extends the discussion to overhead and marketing variances. Chapter 13 can be omitted without interrupting the flow of later material. Finally, Chapter 14 synthesizes the course by reviewing the conceptual framework and applying it to recent organizational innovations, such as Six Sigma, lean production, and the balanced scorecard. These innovations provide an opportunity to apply the analytic framework underlying the text.

Overview of Table of Contents



*Chapter can be omitted without interrupting the flow of material.

Using the Text

This book assumes that the student is familiar with introductory financial accounting. *Accounting for Decision Making and Control* can be used in advanced undergraduate, graduate, or executive programs. It is being used widely outside the United States. While the book relies on opportunity costs and organizational economics, much of the discussion is at an intuitive level. To focus on the managerial implications of the material, journal entries are deliberately de-emphasized.

The text is concise, which allows the instructor to supplement the course with additional outside readings or heavy problem assignments. The text has been used in a 10-week quarter course with few outside readings and two to three hours of homework assignments for every class period. MBA students find this challenging and rewarding. They report a better understanding of how to use accounting numbers, are more comfortable at preparing financial analyses, and are better able to take a set of facts and communicate a cogent analysis. Alternatively, the text can support a semester-length course. Executive MBA students praise the text's real-world applicability, readability, and the relevance of the problem material.

Some of the more challenging material is presented in appendixes following the chapters. Chapter 2's appendix describes the pricing decision. Chapter 6's appendix contains a comprehensive master budget. The reciprocal method for allocating service department costs is described in the appendix to Chapter 8. The appendixes to Chapter 9 describe process costing and demand shifts, fixed costs, and pricing. Appendixes can be deleted without affecting future chapter discussions.

Supplements

Online Learning Center (OLC): www.mhhe.com/zimerman7e.
The Instructor Edition of *Accounting for Decision Making and Control,* 7e, OLC is password protected and a convenient place for instructors to access course supplements. Resources for professors include chapter-by-chapter teaching strategies, suggested problem assignments, recommended outside cases, lecture notes, sample syllabi, chapter PowerPoint presentations, and complete solutions to all problems and case material within the text.

The Student Edition of *Accounting for Decision Making and Control,* 7e, OLC contains review material to help students study, including PowerPoint presentations and multiple-choice quizzes.

Tegrity Campus: Lectures 24/7 Tegrity Campus is a service that makes class time available 24/7 by automatically capturing lectures in a searchable format for students to review when they study and complete assignments. With a simple one-click start-and-stop process, you capture all computer screens and corresponding audio. Students can replay any part of any class with easy-to-use browser-based viewing. With Tegrity Campus, students quickly recall key moments by using Tegrity Campus's unique search feature.

To learn more about Tegrity, watch a two-minute Flash demo at *http://tegritycampus.mhhe.com.*

Acknowledgments

William Vatter and George Benston motivated my interest in managerial accounting. The genesis for this book and its approach reflect the oral tradition of my colleagues, past and present, at the University of Rochester. William Meckling and Michael Jensen stimulated my thinking and provided much of the theoretical structure underlying the book, as anyone familiar with their work will attest. My long and productive collaboration with Ross Watts sharpened my analytical skills and further refined the approach. He also furnished most of the intellectual capital for Chapter 3, including the problem material. Ray Ball has been a constant source of ideas. Clifford Smith and James Brickley continue to enhance my economic education. Three colleagues, Andrew Christie, Dan Gode, and Scott Keating, supplied particularly insightful comments that enriched the analysis at critical junctions. Valuable comments from Anil Arya, Ron Dye, Andy Leone, K. Ramesh, Shyam Sunder, and Joseph Weintrop are gratefully acknowledged.

This project benefited greatly from the honest and intelligent feedback of numerous instructors. I wish to thank Mahendra Gupta, Susan Hamlen, Badr Ismail, Charles Kile, Leslie Kren, Don May, William Mister, Mohamed Onsi, Ram Ramanan, Stephen Ryan, Michael Sandretto, Richard Sansing, Deniz Saral, Gary Schneider, Joe Weber, and William Yancey. This book also benefited from two other projects with which I have been involved. Writing *Managerial Economics and Organizational Architecture* (McGraw-Hill/Irwin, 2009) with James Brickley and Clifford Smith and *Management Accounting: Analysis and Interpretation* (Pearson Education, Limited (UK), 2008) with Cheryl McWatters and Dale Morse helped me to better understand how to present certain topics.

To the numerous students who endured the development process, I owe an enormous debt of gratitude. I hope they learned as much from the material as I learned teaching them. Some were even kind enough to provide critiques and suggestions, in particular Jan Dick Eijkelboom. Others supplied, either directly or indirectly, the problem material in the text. The able research assistance of P. K. Madappa, Eamon Molloy, Jodi Parker, Steve Sanders, Richard Sloan, and especially Gary Hurst, contributed amply to the manuscript and problem material. Janice Willett and Barbara Schnathorst did a superb job of editing the manuscript and problem material.

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