



Hammer

Carter

Usry

Cost Accounting



Lawrence H. Hammer
Oklahoma State University

William K. Carter
University of Virginia

Milton F. Usry
University of West Florida

Cost Accounting

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Preface

In the past decade, globalization of business, increased competition, and new manufacturing technologies forced many companies to reevaluate their business practices. This process led to changes in management philosophy and to alterations in business systems, which in turn made it necessary for accountants to reevaluate the usefulness of information provided to management by the accounting system. Accounting systems created primarily to provide information for external reporting or created at a time when manufacturing technologies and systems were essentially labor driven do not provide the information necessary to plan and control these new business systems. In some cases the information provided by obsolete accounting systems is useless; in others it is dangerously misleading.

To provide the kind of information needed by management, accountants began to redesign accounting systems. Different kinds of data are needed for different kinds of decisions, and different kinds of business systems require different kinds of accounting systems to provide that data. As business systems change over time, accounting systems must be reevaluated. Depending on the nature and magnitude of changes in the business systems, accounting systems may need to be changed. Recognition of these relationships leads to the development and implementation of new measurement systems, such as quality costing, activity based costing, and backflush costing, as well as to increased reporting of nonfinancial performance measures.

The eleventh edition of *Cost Accounting* emphasizes the belief that accounting information should be useful in planning and controlling the company's business systems. To be effective in this mission, the accounting system must be tailored to the unique nature of the business systems employed by the company. Since the nature of the goods and services produced by different companies vary substantially, the business systems required to produce and market such a variety vary as well. Because of these differences, there is no one accounting system or alternative that is superior to all others in all situations. The most economical and efficient accounting system or alternative depends on the business system and the information needs of management. To adequately prepare the student, this textbook not only demonstrates the mechanics of alternative accounting systems and techniques but also explains the logic behind the different alternatives. The objective is to help the student learn to look at the business system first and then to design an accounting system that can collect and generate the kind of information that is needed.

This textbook is designed to provide the necessary background for those who prepare accounting information and for those who use such information. Not only is the system of collecting, organizing, processing, and reporting

economic data presented, but the use of accounting information in decision making is presented as well. This dual emphasis stems from a belief that (1) the accountant must understand how the user will use the information in order to design an accounting system that will collect and report the kind of information needed and (2) the user of accounting information must understand how the accounting system works in order to most efficiently use the information reported by it.

Highlights of Changes in the Eleventh Edition

The textbook has undergone significant reorganization and expansion to incorporate and expand on new concepts and practices in cost/managerial accounting. As with the preceding edition, considerable effort has been made to enhance clarity and thoroughness of the coverage throughout. The most noticeable changes from the tenth edition follow:

1. The discussion of spoilage and rework has been removed from the job order and process costing chapters (new Chapters 5 and 6). Production losses in both kinds of costing systems are now presented in a separate chapter (new Chapter 7) that discusses such production losses in light of total quality management (TQM) and the need for continuous improvement. This change was made for two reasons. First, removing spoilage and rework from the job order and process cost chapters simplifies the presentation. This makes it possible for the student to concentrate on understanding and mastering the fundamentals of these two costing systems without the distraction of learning how to handle the cost of spoilage and rework at the same time. Second, pooling the accounting treatment of spoilage and rework in the same chapter provides an ideal opportunity to introduce the concept of TQM and emphasize the importance of measuring the cost of quality.
2. The materials chapters have been substantially reorganized and revised. Accounting for materials procurement and planning materials requirements are now presented in the first materials chapter (new Chapter 9). The second materials chapter presents an expanded discussion of just-in-time inventory (JIT) and backflush costing (new Chapter 10). Although this topic was discussed in the 10th edition, it has been expanded to a full chapter in the 11th edition because of the increasing importance and use of JIT in manufacturing.
3. A new chapter has been added that discusses activity based costing (ABC) and activity based management (ABM) in depth (new Chapter 14). As was the case with the new chapter on JIT, the coverage has expanded to a full chapter in the 11th edition because of the increasing importance, interest, and use of ABC in manufacturing.
4. The chapter covering cost behavior analysis (Chapter 12 in the tenth edition) is now Chapter 3. This material was moved to the beginning of the book because a firm understanding of how costs are affected when business activity changes is required in order to effectively cost products or services, to plan costs, and to control costs.
5. Responsibility accounting and reporting is now presented along with flexible budgeting in a completely rewritten chapter that follows the budgeting chapters and precedes the standard cost chapters (new Chapter 17). Chapter 17 discusses the traditional view of responsibility accounting and reporting, including the preparation of flexible budgets and variance reports, and then presents an analysis of dysfunctional behavior

attributable to the misuse of such systems and to limitations on the usefulness of control data reported to managers by such systems.

6. The discussion of capital budgeting (Chapter 22 in the tenth edition) is presented in two chapters in the eleventh edition (new Chapters 22 and 23). New Chapter 22 discusses planning and controlling capital expenditures, with an expanded discussion and illustration of the process of estimating cash flows. New Chapter 23 presents the techniques used to evaluate the economic viability of capital projects.

Organization of the Book

The organization of the materials presented is designed to provide maximum flexibility in meeting different course objectives. Part One presents material that forms a foundation for understanding the basic concepts and objectives of cost/managerial accounting systems. It thoroughly discusses the cost concept, cost objects, classifications of cost, and cost behavior. Part Two then discusses and illustrates the flow of cost in manufacturing and services businesses. It begins with a general explanation of the flow of costs through the accounts and then expands into an in-depth discussion of the two basic costing systems: job order costing and process costing. Part Two includes the cost of quality, accounting for production losses, and joint- and by-product costing. Part Three focuses on an in-depth understanding of the elements of cost, materials, labor and overhead, from both the planning and control perspectives.

Part Four elaborates on the heart of planning and control: static and flexible budgeting, responsibility accounting and reporting, and standard costing. And Part Five, the final section, covers the entire spectrum of analysis of costs and profits, including direct costing, cost-volume-profit analysis, differential cost analysis, capital expenditure planning and analysis, decision making under uncertainty, marketing cost and profitability analysis, profit performance measurements, and transfer pricing.

Organization for Instruction

The presentation of the fundamental theoretical and practical aspects of cost accounting provides wide flexibility for classroom usage. In addition to its applicability to the traditional two-semester course sequence, this textbook may be used in a variety of one-semester courses. For these alternative courses, a suggested outline, by chapter numbers, follows:

Course Description	Textbook Chapters
Cost Accounting (two-semester course)	Chapters 1-14 (first semester) Chapters 15-26 (second semester)
Cost Accounting (one-semester course)	Chapters 1-14 and 17
Cost Control (one-semester course)	Chapters 1-4, 9-14, and 17-19
Budgetary Control (one-semester course)	Chapters 1-4, 15-19, and 22-23
Cost Analysis (one-semester course)	Chapters 14-26

End of Chapter Materials

Many of the end-of-chapter materials are new or revised and include discussion question, exercises, problems, and cases. For each topic, these materials afford coverage of relevant concepts and techniques at progressive levels in the learning process, thereby providing a significant student-learning benefit. Selected

exercises and problems with which the template diskette may be used are designated by symbols in the margin. The end-of-chapter materials include numerous items from the examinations administered by the American Institute of Certified Public Accountants (AICPA adapted), the Institute of Management Accounting (ICMA adapted), the Institute of Internal Auditors (CIA adapted), the Canadian Institute of Chartered Accountants (CICA adapted), the Certified General Accountants' Association of Canada (CGA-Canada Adapted), and the Society of Management Accountants of Canada (SMAC adapted).

Learning and Teaching Aids that Accompany the Book

For the Instructor

Solutions Manual. This manual contains detailed solutions to the end-of-chapter materials, including the discussion questions, exercises, problems, and cases. Items with which the template diskette may be used are designated by symbols in the margin. In addition, a listing of items coded for use with the template diskette is provided.

Instructor's Manual. The manual contains a Summary section, which gives an abbreviated restatement of the contents of each chapter; and a Discussion section, which gives additional material for use in responding to students' questions and in clarifying some of the more difficult points in a chapter. In addition, a schedule of concepts covered by the exercises and problems, and a schedule of estimated time requirements for solving problems are included. Also included in the Instructor's Manual are transparency masters of selected illustrations from the textbook.

Solutions Transparencies. Transparencies of solutions to all exercises, problems, and cases are available to the instructor.

Test Bank, prepared by Edward J. VanDerbeck of Xavier University, Cincinnati. A test bank of multiple choice questions and examination problems accompanied by solutions is available in both printed and microcomputer (MicroExam 4.0) versions. The Test Bank is designed to save time in preparing and grading periodic and final examinations.

Spreadsheet Applications. These template diskettes are used with Lotus 1-2-3¹ for solving selected end-of-chapter exercises and problems identified in the textbook with the symbol in the margin. The diskettes, which also provide a Lotus 1-2-3 tutorial, are provided free of charge to instructors at educational institutions who adopt this text.

Decision Tools. The Decision Tools software is a set of programs, for use with MS-DOS computers, which assist the student in solving dozens of problems from the text. The purpose of this software is to aid the instructor in changing the focus of text problems and cases from computation to "what if" analysis. The software helps the student analyze the solution (graphically with some of the tools) and easily change the problem parameters in order to see the effect of changes.

¹ Lotus and 1-2-3 are registered trademarks of the Lotus Development Corporation. Any reference to Lotus or 1-2-3 refers to this footnote.

Decision Tools software also contains a “pop-up” word processor and calculator for writing up cases, as well as context-sensitive help screens and mouse support.

For the Student

Study Guide, prepared by Edward J. VanDerbeck. This study guide contains a brief summary of each chapter, as well as questions and exercises with answers, thus providing students with immediate feedback on their comprehension of material.

Practice Cases, prepared by William K. Carter. Four cases—a job order case, a process cost case, a standard cost analysis case, and a budgeting case—are available. Each case acquaints students with basic procedural and analytical characteristics without involving time-consuming details. Notes and solutions for the four cases are provided for the instructor.

Electronic Spreadsheet Applications for Cost Accounting, third edition, by Gaylord N. Smith of Albion College. This supplemental text-workbook with template diskettes includes accounting applications and a Lotus 1-2-3® tutorial. It requires approximately 20-25 hours for completion and is available in IBM and Macintosh² (Excel) versions.

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Lawrence H. Hammer
William K. Carter
Milton F. Usry



About the Authors

Lawrence H. Hammer teaches primarily in the areas of cost accounting and income taxation at Oklahoma State University. He earned his BS from Sam Houston State University, MBA from North Texas State University, and DBA from Indiana University, and he is a CPA.

Dr. Hammer is widely published in the tax literature, and he has served on the editorial review boards of *The Accounting Review* and *The Journal of Accounting Education*. He is a member of the American Accounting Association Management Accounting Section, the American Taxation Association, the American Institute of CPAs, and the National Association of Accountants.

William K. Carter teaches cost accounting and managerial accounting at the graduate and undergraduate levels in the McIntire School of Commerce, University of Virginia. He earned BS and MS degrees in accounting from the University of Southern Mississippi and a PhD from Oklahoma State University, and he is a CPA. He has written articles on accounting, accounting education, marketing, and finance, which have appeared in a variety of journals including *The Accounting Review* and the *Journal of Accountancy*. He has published cases on cost accounting and on business policy.

Dr. Carter has served on committees of the American Assembly of Collegiate Schools of Business and the American Accounting Association, and on the editorial boards of *The Journal of Accounting Education* and the Education Section of *The Accounting Review*. He has testified as an expert witness in litigation involving accounting matters and has conducted consulting engagements and executive development programs for clients that include IBM, Babcock & Wilcox, the Institute of Chartered Financial Analysts, the Consumer Bankers Association, and the Administrators of Accounting Programs Group of the American Accounting Association.

Dr. Carter is a member of the National Association of Accountants, the American Institute of CPAs, and the American Accounting Association Management Accounting Section.

Milton F. Usry is the Mary Ball Washington Professor of Accountancy at the University of West Florida after previously serving on the Oklahoma State University faculty (1961-1986). He earned his BBA from Baylor University, MBA from the University of Houston, PhD from the University of Texas at Austin, and is a CPA. He has written numerous articles, especially in the areas of cost accounting and accounting education, and has served on the editorial boards of several national professional journals.

Dr. Usry received the Oklahoma State University College of Business Administration Outstanding Teacher Award on three occasions. He has served in

numerous professional organizations, including the American Accounting Association, the American Institute of CPAs, and the Institute of Management Accountants.

In the area of professional certification, Dr. Usry has been a member of the AICPA Board of Examiners and the Institute of Certified Management Accountants Board of Regents. In the field government service, he has served on the National Board of the Fund for the Improvement of Postsecondary Education of the U.S. Department of Education. In the private sector, he currently serves as chairman of the Baptist Health Care Board of Directors, Pensacola, Florida.

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