MANAGERIAL ACCOUNTING

Fourth Edition

Dominiak and Louderback

FOURTH EDITION

MANAGERIAL ACCOUNTING

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Kent Publishing Company

Boston, Massachusetts

A Division of Wadsworth, Inc.

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KENT PUBLISHING COMPANY

A Division of Wadsworth, Inc.

Printed in the United States of America

3 4 5 6 7 8 9 — 89 88 87 86

Library of Congress Cataloging in Publication Data

Dominiak, Geraldine F.
Managerial accounting.

Includes index.
I. Managerial accounting. I. Louderback, Joseph G. II. Title.
HF5635.D64 1984 658.1'5 84-23395
ISBN 0-534-04185-X

Preface

The fourth edition, like the first three editions, is designed for an introductory course in managerial accounting. Though the book is written with the undergraduate student in mind, we have had several reports of successful use of earlier editions in both graduate and management development courses. Accordingly, we have made additional efforts to provide a wide variety of assignment material so that instructors can select assignments consistent with the backgrounds of student users.

Because of the book's emphasis on the *uses* of managerial accounting information, we think the book appropriate not only for accounting majors but also for nonaccounting business majors (in marketing, management, finance, etc.), as well as for majors in nonbusiness areas such as engineering, mathematics, and the physical sciences. Our concern for a broader audience is consistent with the information we have received about enrollments in managerial accounting courses across the nation.

We make few assumptions in this book about the background knowledge of the reader. We assume that a reader has had one or two terms of financial accounting or a working exposure to basic financial statements. From this limited, assumed background, we expect only that a reader will have developed some understanding of the most basic principles upon which financial statements are based. The journal-entry/T-account framework appears only in Chapter 15 and is not, with the exception of that chapter, of critical importance to the understanding of the concepts being presented.

Most discussions in the book focus on the important functions of management: planning, decision making, controlling, and performance evaluation. This emphasis is apparent even in the three chapters on product costing (Chapters 13–15), a topic often presented in accounting textbooks but seldom discussed with the nonaccountant in mind. Thus, the product-costing chapters approach that subject from the standpoint of analyzing results under different costing systems, rather than concentrating on cost-accumulation procedures or on the problems that accountants encounter related to those procedures.

Our objectives in this edition remain essentially the same as those for the first three editions:

1. To present clearly and understandably the most important conceptual and practical aspects of managerial accounting;
2. To order the material in a way that allows the reader to build from elementary concepts to more complex topics and thus to integrate and expand early understanding;
3. To help a student to see some of the interrelationships among the several courses that are required parts of a normal business curriculum;
4. To show the reader, through discussion, illustration, and assignment material, what seems to us the almost infinite number of applications of managerial accounting principles to decision making in economic entities of all types (including personal decisions).

In this and earlier editions we had one further objective that was not explicitly stated but was, nevertheless, reflected in the ways we stated, approached, and offered possible solutions in decision situations. We want to encourage the reader to recognize that *people,* not entities, make decisions and are responsible for the results of those decisions, and that unquantifiable factors influence decisions.

We use several means to achieve these objectives. First, we use examples and illustrations liberally. Sometimes we introduce an important concept by means of an example; sometimes we try to give meaning to a rather abstract concept by immediately concentrating on an illustration. Second, we proceed through the text (and its increasingly complex concepts) in a building-block fashion. Thus, we begin with the principles of cost behavior and volume-cost-profit analysis, which underlie virtually all of managerial accounting, and use this basis for approaching the more complex problems encountered in decision making, comprehensive budgeting, responsibility accounting, and product costing. A reader will discern the continued reliance on previously developed concepts by the regularity of text references to earlier chapters. Our frequent text references to the concepts, research, and practices of other business disciplines are intended both to encourage further study and to remind the reader that decision making requires an integration of knowledge from many areas.

The applicability of the concepts of managerial accounting to a wide variety of economic entities is most obvious in the specific sections of the text that refer to nonbusiness situations. But the reader will also see, through examples in other parts of the text and in the decision situations posed in the assignment material, our efforts to demonstrate the many opportunities for using managerial accounting concepts in a nonbusiness context.

Wherever possible, we consider the qualitative and difficult-to-quantify aspects of a topic. As part of the qualitative considerations, we pay a good deal of attention to behavioral problems and point out the implications of such problems. In raising these qualitative issues, our intention is to emphasize that decisions are made by individuals who have personal beliefs and feelings. We expect readers to come away from this book with an appreciation of the role of accounting data: to provide relevant information but not to *dictate* courses of action.

Throughout the book we emphasize that decisions are made on the basis of estimates and that it is difficult to quantify some factors important to a decision. Our intentions are to underscore (1) the presence of the manager's constant companion, uncertainty, and (2) the importance of recognizing all the available alternatives and all the factors relevant to each alternative. Both the text and many of the problems—especially those that come relatively late in the assignment material—emphasize that a major problem in managing any enterprise is determining the right questions to ask and, concomitantly, what kinds of information to seek. In our opinion, students should learn that real-world problems do not present themselves in the form of schedules to be filled in and manipulated. Indeed, sometimes a manager's most difficult task is to discern, from the mass of economic activity taking place all around, exactly what the problem is that requires investigation and resolution.

PLAN OF THE BOOK

We organized this book to emphasize the fundamental importance of cost behavior patterns to all aspects of managerial decision making. Accordingly, after an introductory chapter, Part One, Volume-Cost-Profit Analysis and Decision Making, consists of four chapters that are intended to help the reader develop a clear and firm grasp of the basic implications and applications of this fundamental issue. These chapters introduce different types of cost behavior, the reasons for such behavior, a tool for using information about behavior (volume-cost-profit analysis), and the basic analytical approaches used for making short-term decisions.

Part Two, Budgeting, treats operating, financial, and capital budgeting in four chapters. Chapter 6 concentrates on operating budgets, building on the material in Part One and introducing, on a more formal basis, behavioral considerations. Chapter 7 deals with financial budgeting, including cash budgets and pro forma balance sheets, and considers the special problems of budgeting for not-for-profit entities. Chapter 8 introduces capital budgeting, covering income taxes but dealing only with relatively straightforward types of decisions involving the acquisition of new assets. Chapter 9 considers more complex decisions, such as those involving the replacement or disposing of assets, as well as some of the more technical aspects of the tax laws (especially the Investment Tax Credit and Accelerated Cost Recovery System) as they may relate to capital budgeting decisions. A full understanding of the topics covered in Chapters 8 and 9 requires an understanding of the concepts of present value analysis. Appendix A offers a basic discussion and illustrations of present value analysis, with the emphasis on promoting an understanding of relationships and without the mathematical development of present value factors.

Part Three integrates the topics of control and performance evaluation. Chapter 10 introduces responsibility accounting and alternative organizational structures and emphasizes the behavioral aspects of both topics. Chapter 11 treats divisional performance evaluation—again, with emphasis on behavioral issues. Chapter 12 uses standard variable costs and variance analysis to evaluate cost centers.

Part Four consists of three chapters on product costing. The emphasis in these chapters is on the uses of product-cost information and on analysis of reports that result from applying different product-costing methods. Chapter 13 introduces the general ideas of cost flows, absorption costing, and predetermined overhead rates; both actual and normal costing are illustrated in a job-order context. Chapter 14, building on the standard cost concepts of Chapter 12 and the absorption costing ideas of Chapter 13, contrasts absorption and variable costing as well as developing the idea of a standard fixed cost per unit. Chapter 15 completes the product-costing coverage by introducing the special problems of a process-costing situation and illustrating the flows of costs through accounts. (An Appendix to Chapter 15 illustrates the computational problems of adopting a first-in-first-out cost-flow assumption under process costing.)

Part Five consists of three chapters, the topical coverage in which will fit the plans for some, but not all, courses in managerial accounting. Chapter 16 discusses several quantitative methods of analysis that might be applied to some of the situations presented in earlier chapters of this text. Included in Chapter 16 are basic applications of statistical decision theory and linear programming, as well as an introduction to inventory control models. Chapter 17 deals with the statement of changes in financial position, which is used by decision makers both inside and outside of the entity preparing such a statement. Chapter 18 offers an introduction to the analysis of financial statements, with special attention given to the interpretation (and misinterpretation) of commonly used ratios. Throughout these last two chapters, the topics in which are often considered to be part of financial rather than managerial accounting, the emphasis is on why and how a manager might use the available information.

NEW FEATURES

1. Extensive rewriting and reorganization of Chapters 13 and 15. The changes were designed to simplify the introductory presentations of product-costing concepts and to further the goal of building carefully and deliberately on an understanding of basic concepts. Chapter 13 continues to concentrate on absorption costing, but the presentation is enhanced by an earlier introduction of the general idea of the flows of costs through a manufacturing firm. We also believe that specifying a job-order setting for the initial illustration of absorption costing will help the reader understand the idea and implications of a predetermined overhead rate for manufacturing costs. Chapter 15 now considers the multiple-process manufacturing situation that was covered in an appendix in the third edition. The special problems of adopting the first-in-first-out cost-flow assumption, which were covered in the text of Chapter 15 in the third edition, are now in an appendix to that chapter.
2. Extensive revision of Chapter 9 and considerable rewriting of some sections in Chapter 8. Because we believe that tax considerations are an integral part of capital budgeting decisions, Chapter 8 continues to recognize the most basic tax implications associated with such decisions. Accordingly, *after* covering the other critical concepts of capital budgeting, we offer some specific, though limited, comments on the Accelerated Cost Recovery System (ACRS). The revised Chapter 9 provides further details about ACRS as well as the investment tax credit, but omits several specialized topics considered in the previous edition (e.g., net operating loss carryovers, differential tax rates, and the many issues relating to the special taxation associated with capital gains).
3. Considerable rewriting of sections in Chapters 10 (on responsibility accounting) and 11 (on divisional performance measurement). The goal of the rewriting was

further integration of the coverage of transfer pricing and clarification of the discussions of cost allocations.

4. Change in orientation for Chapter 17. This chapter is now independent of any earlier coverage of cash budgeting. In the second and third editions, the discussion of funds flows incorporated many references to prior study of cash budgeting and called upon the reader's understanding of that topic. Chapter 17 can now be covered at any time.
5. Revisions of Chapters 3 through 7 (and associated assignment material) to incorporate still more examples of the applicability of concepts in a manufacturing setting. These revisions emphasize the broad applicability of the basic concepts of cost behavior and may be helpful to those users who choose a chapter sequencing to provide earlier coverage of product costing.
6. Revisions of, deletions from, and additions to previously used assignment material. There is 15% more assignment material, and, in addition, approximately forty percent of the total assignments are either new or revised. There is more integration of assignments in Chapters 6 and 7, with several new items in Chapter 6 continued in Chapter 7.

ASSIGNMENT MATERIAL

End-of-chapter material includes questions for discussion, exercises, problems, and cases. We believe there are no discussion questions that can be answered simply by referring to a sentence or two, or to a list of points in the chapter. Rather, discussion questions are meant to increase understanding of concepts introduced in the chapter, and for many questions there are no clearly correct answers. Exercises are generally short and cover the most basic applications of one or two key concepts. Problems tend to be longer than exercises, are more challenging, sometimes contain irrelevant information, and often ask the student to state reservations about whatever solutions are proposed. Both exercises and problems are generally arranged in order of increasing difficulty.

Cases normally contain less than all the information needed to develop a single solution, the intention being to emphasize this inconvenient characteristic of real-life situations. For most cases, the student is required to propose an analytical approach appropriate to the available, relevant information. The cases, and the later problems, require the student to determine what principles are relevant and how those principles apply in a given situation. That is, these assignments are designed to encourage the student to think, since a manager must do so.

We believe one of the strongest features of this book is the integration of assignment material and text. We have been told by users of previous editions that judicious choice of assignment material makes it possible to teach this course, and the individual topics therein, at various levels of difficulty. Considering the variety of economic enterprises and the dynamic nature of the economic environment, it is impossible to illustrate every conceivable application of every fundamental principle covered in the text. We do believe, however, that the principles and the variety of situations presented in the text and assignment material provide a student with sufficient background to develop an approach for analyzing almost any economic decision.

ALTERNATIVE CHAPTER SEQUENCING

There is more material in this text than would normally be needed for a one-term course. We recommend covering the chapters in the order presented. Nevertheless, the text offers considerable flexibility in the order of coverage, and several users have found alternative sequencing to be practical.

Chapters in Part Four are the most likely candidates for alternative sequencing. Chapters 17 and 18, on funds flows and financial analysis, are intended primarily for students whose financial accounting backgrounds did not include these topics. The chapters contain only a few, noncritical references to earlier chapters. Accordingly, either one or both of these chapters can be taken up at any time or omitted entirely.

Chapter 16, which discusses several quantitative methods of analysis, can be covered separately at any time after Chapter 12. Or, individual segments of that chapter can be assigned in conjunction with earlier chapters. The section on statistical decision theory (pages 640–650) has illustrations that use materials from Chapters 6, 8, and 12. The illustrations, while concentrating on applying the quantitative methods, draw on topics discussed in these earlier chapters. The concept of expected value could be introduced as early as Chapter 5. The section on inventory control models (pages 650–657) is particularly relevant to Chapter 6, which covers production and purchases budgets. The linear programming section (pages 657–664) extends the material in Chapter 5 on alternative uses of fixed facilities (pages 159–160).

Instructors desiring an earlier and greater emphasis on product costing could move to Chapters 12 through 15 after Chapter 5. A jump to Chapter 12 is also possible after covering Chapter 4 (or even after Chapter 3), but we would recommend additional discussion of joint/common costs if this sequencing is selected. (Note that if early emphasis on product costing is desired, it is necessary to incorporate Chapter 12 in the coverage of product costing rather than as a part of the study of responsibility accounting. This combination is required because some understanding of standard costs is assumed in Chapters 14 and 15.) Some users have increased the time available to cover product costing by omitting Chapters 10 and 11. Alternatively, some users have omitted all product-costing material, or have omitted all or parts of Chapters 14 and 15.

Some instructors have chosen to omit Chapter 4. Following this plan, some coverage of the ideas of joint and separable costs is required for an understanding of the presentations in Chapter 5 (short-term decision-making). It is also possible to omit one or both chapters on capital budgeting (Chapters 8 and 9) without serious loss of continuity, and some users have taken these options.

Appendix A, which deals with present values, was designed to be used with Chapters 8 and 9 on capital budgeting. Previous exposure to the general idea of the time value of money is not assumed, but those who have had such exposure are likely to find this material useful for review.

SUPPLEMENTARY MATERIAL

An Instructor's Manual contains possible time allocations for alternative course lengths and chapter sequencing, a brief statement of the topical coverage of each chapter, suggestions of assignment items for coverage of basic concepts, and, where appropriate, a brief commentary about concepts or approaches that students find difficult to understand. It also suggests some text assignments that may be useful for examination purposes.

A Test Bank, consisting of true-false and multiple-choice questions, and some basic problems, is also available.

The Solutions Manual contains detailed solutions for all assignment material, as well as suggested times for completing assignments. In addition, the Solutions Manual provides notes to the instructor regarding class use of the material. Important features of these notes are (1) presentations of alternative approaches for arriving at solutions; (2) suggestions for eliciting class discussion; and (3) suggestions for expanding individual assignments to cover new issues, pursuing existing issues in more depth, or highlighting relationships between managerial accounting concepts and concepts studied in courses in other business disciplines.

A list of check figures for at least some parts of virtually every exercise, problem, and case is available in quantity from the publisher. In addition, transparencies are available for selected solutions and text illustrations.

A Study Guide, prepared by Sanoa J. Hensley and Geraldine Dominiak, is designed to help students obtain full value from the study of this text. This supplement, which offers key questions or statements to use as guides in reading the chapters, includes not only objective questions but also a variety of short and medium-length problems (solutions included) to test understanding. The final section of the Guide for each chapter identifies those concepts, practices, or approaches that cause the most difficulty or greatest misunderstanding for students.

ACKNOWLEDGMENTS

We wish to thank the many instructors and students whose comments and suggestions have helped us significantly in the preparation of all four editions of this book. In particular, we want to thank the reviewers of the first and second editions, plus the reviewers of the third edition and the revised material for the fourth edition: Don E. Collins, Franklin University; Michael Fetters, Babson University; Maurice L. Hirsch, Jr., Southern Illinois University at Edwardsville; James T. Hood, Northeast Louisiana University; Philip Jagolinzer, University of Southern Maine; Bernard T. Kaylor, Northeast Louisiana University; Robert Koehler, The Pennsylvania State University; W. E. McTeer, Texas A & I University; Thomas A. Morrison, University of Connecticut; Denis T. Raihall, Drexel University; John M. Ruble, Bradley University; and David Weiner, University of San Francisco. Special thanks for their insightful comments and suggestions go to Fara Elikai, Bill Ferrara, Sanoa Hensley, and Bob Koehler.

We also want to express our appreciation to the American Institute of Certified

Public Accountants, and to the National Association of Accountants, for their generous permission to use problems adapted from past CPA and CMA examinations, respectively.

Finally, we offer our thanks to our respective institutions, and to our colleagues at those institutions; for without those colleagues and institutions, the development of this volume, in its current and prior editions, would have been a much less pleasant task.

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