# Managerial Accounting

Fifth Edition



**Dominiak and Louderback** 

### FIFTH EDITION

# MANAGERIAL ACCOUNTING

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Publisher, Accounting: John B. McHugh

Assistant Editor: Marcia Cole Production Editor: Leslie Baker Cover Designer: Nancy Lindgren

Manufacturing Coordinator: Marcia A. Locke

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### PWS-KENT Publishing Company is a division of Wadsworth, Inc.

Printed in the United States of America

1 2 3 4 5 6 7 8 9-92 91 90 89 88

### Library of Congress Cataloging-in-Publication Data

Dominiak, Geraldine F.

Managerial accounting/Geraldine F. Dominiak, Joseph G. Louderback III.—5th ed.

p. cm.

Includes index.

ISBN 0-534-07740-4: \$30.00

1. Managerial accounting. J. Louderback, Joseph G. II. Title.

HF5657.4.D66 1988

658.1'5-dc19

87-21472

CIP.

### **PREFACE**

The fifth edition, like the first four editions, is designed for an introductory course in managerial accounting. Though we wrote the book with the undergraduate student in mind, we have had many reports of its successful use in both graduate and management development courses. One reason is the wide variety of assignment material, allowing instructors to select assignments consistent with the backgrounds of their students.

The book emphasizes the *uses* of managerial accounting information and is therefore 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 broad audience is consistent with trends in enrollments in managerial accounting courses.

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 accounting problems related to those procedures.

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

1. To present clearly and understandably the most important conceptual and practical aspects of managerial accounting;

- 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 show students 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);
- 5. To encourage the reader to recognize that *people*, not entities, make decisions and are responsible for the results of those 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 see 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.

We pay attention to the qualitative and difficult-to-quantify aspects of a topic. As part of the qualitative considerations, we discuss 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 with beliefs and feelings. We expect readers to gain 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. After an introductory chapter, Part One, Volume-Cost-Profit Analysis and Decision Making, consists of four chapters that are intended to help the student 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 of assets, as well as a few of the more technical aspects of the tax laws (especially the Accelerated Cost Recovery System) as they 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. In an Appendix we offer 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, alternative organizational structures, and cost allocation, emphasizing the behavioral aspects of these topics. Chapter 11 treats divisional performance evaluation—again, emphasizing behavioral issues. Chapter 12 discusses standard variable costs and variance analysis to evaluate cost centers.

Part Four consists of three chapters on product costing. These chapters emphasize the uses of product-cost information and analysis of reports prepared under 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 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 are basic applications of statistical decision theory, linear programming, learning curves, and inventory control models. Chapter 17 deals with the statement of cash flows, which is used by decision makers both inside and outside of the entity. Chapter 18 is 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**

- We have rewritten Chapters 2 through 5 extensively. Our major objective was to integrate the principles of cost behavior into the framework of volume-costprofit analysis.
  - a. Chapter 2 now provides more illustrations of techniques that were implicit in previous editions. It also simplifies coverage of the contribution margin percentage. Income taxes in volume-cost-profit analysis, formerly in Chapter 3, are now in an Appendix to Chapter 2.
  - b. Chapter 3 provides more discussion of the types of fixed costs (avoidable, unavoidable, direct, and indirect). This makes it easier for instructors to omit Chapter 4 if they do not wish to cover its topics.
  - c. Chapter 4 now uses the weighted-average contribution margin per unit as well as the weighted-average contribution margin percentage.
  - d. The examples in Chapter 5 focus more sharply on the specific types of short-term decisions. We have simplified and strengthened the discussion of sunk costs and opportunity costs.
- 2. Chapter 8 no longer covers the Accelerated Cost Recovery System (ACRS). It still introduces income taxes, *after* covering the basics of capital budgeting. The changes brought about by the 1986 Tax Reform Act, including those in ACRS, are covered in Chapter 9.
- We rewrote Chapter 10, with special attention to reasons for allocating indirect costs. The chapter also distinguishes more clearly between transfer prices and cost allocations. We changed Chapter 11 for consistency with the changes in Chapter 10.
- 4. Chapter 13 has been simplified. It still covers actual and normal costing in a job-order framework. It also still covers the analysis of misapplied overhead into budget and volume components, to reflect our concern with the uses of product-costing information and to provide more continuity with Chapter 12's coverage of standard costs and variances.
- 5. Chapter 17 now covers only the cash flow statement, in keeping with the trend in financial reporting and the deliberations of the Financial Accounting Standards Board. It still stands independent of any other chapter and can be covered at any time.

- 6. Over one-third of the assignment material is new or revised. The total number of assignments is slightly higher than in the fourth edition. In revising assignment material, we have included even more short exercises covering one or two essential points. There are several additional integrative assignments, including those that begin in one chapter and continue in a later one.
- 7. We have simplified and strengthened the coverage of long-term budgeting in Chapter 7.
- 8. Chapter 16 introduces the increasingly important subject of learning curves.

### 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 many questions have 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 must 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.

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

This text contains more material than is normally 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 cash 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 658–668) 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 668–674) is particularly relevant to Chapter 6, which covers production and purchases budgets. The linear programming section (pages 674–681) extends the material in Chapter 5 on alternative uses of limited resources (pages 165–167).

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 in that event we recommend giving additional time to the early discussion of joint/common costs. (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. Chapter 4 can be omitted without loss of continuity. The basic concept of avoidability of costs is now introduced in Chapter 3. 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.

The Appendix, 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 suggested 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 a brief commentary about concepts or approaches that students find difficult to understand. It also suggests some text assignments that might be useful for examination purposes.

The Test Bank contains true-false and multiple-choice questions, and short problems.

The Solutions Manual contains detailed solutions for all assignment material, as well as suggested times for completing assignments. In addition, it 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 upon adoption for selected solutions and text illustrations. There is also a set of Lotus® 1-2-3® templates for various assignments.

The Study Guide is designed to help students obtain full value from the study of this text. This supplement, which offers key 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.

In addition to the above supplements, all prepared by the authors, the publisher makes a computerized test bank available to adopters.

### **ACKNOWLEDGMENTS**

We wish to thank the many instructors and students whose comments and suggestions have helped us significantly in the preparation of all five editions of this book. In particular, we want to thank the reviewers of the first four editions, plus the reviewers of the revised material for the fifth 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
Wayne Johnson
Bowling Green State University

Bernard T. Kaylor
Northeast Louisiana University
Dayal Kiringoda
University of Akron
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
Robert Ruland
Northeastern University
Stephen Senge
Western Washington University

Jeannette Sylvestre University of South Alabama 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, without whom the development of this volume, in its current and prior editions, would have been a much less pleasant task.

Geraldine F. Dominiak Joseph G. Louderback III

### **CONTENTS**

### 1 INTRODUCTION 1

```
Functions of Management 2
Types of Managers
Managerial Accounting and Functions of Management 3
    Planning and Budgeting
    Decision Making
    Controlling
    Evaluating
    Illustration
Managerial Accounting and Financial Accounting
Activities of Managerial Accountants
Summary
          -11
Key Terms
           12
Assignment Material
    Questions for Discussion
    Problems
              12
```

## PART ONE VOLUME-COST-PROFIT ANALYSIS AND DECISION MAKING 17

### 2 PROFIT PLANNING 19

```
Cost Behavior 20
Variable Costs 20
Contribution Margin 21
Fixed Costs 21
Emphasis on Expectations 22
Income Statement Formats—Financial Accounting and Contribution Margin 23
Relevant Range 25
Volume-Cost-Profit Graph 26
```

**Achieving Target Profits** Target Dollar Profit Target Return on Sales 31 Changing Plans Target Selling Price Variable Costs as a Constant Per-Unit Amount 32 Mixture of Variable Costs 33 Assumptions and Limitations of VCP Analysis 33 Summary **Key Terms** Key Formulas 35 Review Problem 35 Appendix: Income Taxes and Profit Planning 37 Assignment Material 38 Questions for Discussion 38 Exercises 39 Problems 47 Cases 54

### 3 ANALYZING COST BEHAVIOR 57

Mixed Costs High-Low Method of Estimation Scatter-Diagram Method of Estimation 59 Regression Method of Estimation Estimates and Facts Step-Variable Costs 62 Managerial Action and Fixed Costs 64 Discretionary Costs 64 Committed Costs Selecting a Measure of Volume The Manufacturing Firm Other Examples Cost Structure and Managerial Attitudes 71 Margin of Safety 72 Indifference Point Summary 74 Key Terms Key Formulas 75 Review Problem 75 Appendix: Regression Analysis 77 Simple Regression Multiple Regression Assignment Material Questions for Discussion 83 Exercises 85

Problems 94 Cases 102

## 4 ADDITIONAL ASPECTS OF VOLUME-COST-PROFIT ANALYSIS 103

Analysis of Results 103 Multiple Products 105

Weighted-Average Contribution Margin Percentage 106

Changes in Sales Mix 108

- Weighted-Average Contribution Margin per Unit 109

Overall Planning 111

Fixed Costs and Multiple-Product Firms 112

Price-Volume Relationships 113

Volume-Cost-Profit Analysis in Not-for-Profit Entities 114

Benefit-Cost Analysis 115

Summary 117

Key Terms 117

Key Formulas 117

Review Problem 118

Assignment Material 120

Questions for Discussion 120

Exercises 120

Problems 127

Cases 143

## 5 SHORT-TERM DECISIONS AND ACCOUNTING INFORMATION 146

The Criterion for Short-Term Decisions 147

Sunk Costs and Opportunity Costs 148

Basic Example 149

Developing Relevant Information 152

Allocated Costs 154

Typical Short-Term Decisions 154

Dropping a Segment 154

- Complementary Effects and Loss Leaders 156

Make-or-Buy Decisions 159

Joint Products 160

Special Orders 163

Factors in Limited Supply 165

A Word of Caution 167

Decision Making Under Environmental Constraints 168

Summary 169

Key Terms 169

Review Problem 169
Assignment Material 172
Questions for Discussion 172
Exercises 173
Problems 181
Cases 193

### PART TWO BUDGETING 199

### 6 OPERATIONAL BUDGETING 201

Comprehensive Budgets **Budgets and Planning** 202 Budgets and Control 203 Organization of Budgets Developing the Comprehensive Budget 205 Sales Forecastina 206 Indicator Methods Historical Analysis 207 Judgmental Methods Which Method to Use 208 **Expected Values and Forecasting** Interim Period Forecasts **Expense Budgets** 210 Alternative Measures of Activity **Budgeting Discretionary Costs** 213 Budgeting and Human Behavior Conflicts 214 Imposed Budgets Budgets as "Checkup" Devices 215 Unwise Adherence to Budgets Illustration of a Comprehensive Budget **Budgeted Income Statement** Purchases Budget 218 Purchases Budget—A Manufacturing Firm Summary 221 Key Terms 222 **Key Formulas** 222 Review Problem Assignment Material 223 Questions for Discussion 223 Exercises 225 **Problems** 228 Cases 239

### 7 FINANCIAL BUDGETING 241

Illustration of Cash Budget Cash Receipts 242 Cash Disbursements 243 Cash Budget 244 Revised Financial Statements Minimum-Cash-Balance Policies Concluding Comments Annual and Long-Term Budgets Asset Requirements Financing Requirements Illustrations of Annual and Long-Term Budgets Annual Budgets 252 Long-Term Planning 254 **Budgeting in Not-for-Profit Entities** 256 Zero-Based Budgeting 258 **Program Budgeting** Summary 259 **Key Terms** 260 Review Problem 260 262 Assignment Material Questions for Discussion 262 Exercises 263 **Problems** 269 Cases 280

### 8 CAPITAL BUDGETING, PART I 284

Capital Budgeting and Resource Allocation 285 Cost of Capital 285 Types of Capital Budgeting Decisions Capital Budgeting Techniques 287 Cash Flows and Book Income 287 Basic Example 288 Net Present Value (NPV) Method Internal Rate of Return (IRR) Method Generality of the Analysis Taxes and Depreciation **Uneven Cash Flows** Salvage Values 293 Variations in Revenues 294 **Decision Rules** Other Methods of Capital Budgeting 296 Payback 296 Book Rate of Return 298

Summary Evaluation of Methods 300 Investing Decisions and Financing Decisions Summary 301 **Key Terms** 301 **Key Formulas** 301 Review Problem Assignment Material 303 Questions for Discussion 303 Exercises 304 307 Problems Cases 316

### 9 CAPITAL BUDGETING, PART II 318

Complex Investments Working Capital Investment 319 Replacement Decisions Mutually Exclusive Alternatives **Unequal Lives** Ranking Investment Opportunities 327 Sensitivity Analysis 329 More on Income Taxes ACRS 332 Social Consequences of Decision Making 335 Summary 337 **Key Terms** 337 Key Formulas 337 Review Problem—Replacement Decision and Investment in Working Capital 338 Review Problem—Determining Required Volume Review Problem—ACRS 341 Assignment Material Questions for Discussion 341 Exercises 342 Problems 346 Cases 355

## PART THREE CONTROL AND PERFORMANCE EVALUATION 359

### 10 RESPONSIBILITY ACCOUNTING 361

Goal Congruence and Motivation 361
Responsibility Centers 362
Cost Centers 363
Profit Centers and Investment Centers 363
Criteria for Evaluation 364

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