

COST ACCOUNTING

Michael Chatfield

Denis Neilson

COST ACCOUNTING

Michael Chatfield

California State University, Fresno

Denis Neilson

University of San Francisco



HARCOURT BRACE JOVANOVICH, INC.

New York San Diego Chicago San Francisco Atlanta
London Sydney Toronto

Copyright © 1983 by Harcourt Brace Jovanovich, Inc.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

Requests for permission to make copies of any part of the work should be mailed to: Permissions, Harcourt Brace Jovanovich, Publishers, 757 Third Avenue, New York, NY 10017.

Printed in the United States of America
Library of Congress Catalog Card Number: 82-082703
ISBN: 0-15-514140-6

PREFACE

Cost accounting has the reputation of being hard to teach and hard to learn. Most current texts in the area have done little to alleviate this problem. This book takes a new approach to the subject: teaching by example. The discussion of each topic that involves conceptual or computational difficulties is immediately followed by a numerical illustration. This method of instruction is reinforced by a solved comprehensive review problem at the end of most chapters.

This book is divided into three parts. Parts One and Two (Chapters 1–14) deal with cost accumulation and the use of cost information for planning and control purposes. These chapters are meant to be covered sequentially and comprise the basic materials for a one-term cost accounting course for undergraduate accounting majors. The more computationally challenging topics in Part Three (Chapters 15–22) may be covered at the instructor's discretion or as time permits. Alternatively, the entire text can be taught in a two-term sequence, with the first course providing coverage of those topics needed by all undergraduate business students and the second term devoted to the more specialized and technical subjects needed by accounting undergraduates. Finally, selective coverage of appropriate chapters provides a text suitable for the introductory managerial accounting course taken by graduate students entering an MBA program.

In this book, we cover a specified and "generally accepted" body of knowledge, and support approved accounting methods with citations from authority. Our discussion of the various aspects of cost accounting combines practice, theory, and authoritative statements of best practice—and, where such exist, statements of required practice. This is the essential format of nearly all intermediate and advanced financial accounting texts. Recent efforts to regulate and standardize cost accounting procedures parallel financial accounting developments of the 1930s and 1940s, and seem to call for a similar pedagogical response.

Although this text covers more topics and offers a wider range of quantitative analysis than many cost accounting books, the level of discussion is not beyond the abilities of most accounting undergraduates. We assume that the student has already taken an introductory course in financial accounting but has no cost accounting background. Those attempting Part Three will find it easier if they have had some previous exposure to basic college algebra and elementary statistics. However, the problem materials are arranged in order of difficulty, allowing the more quantitative chapters to be taught either comprehensively or on a survey basis.

Assignment materials are an important component of any textbook. The questions, exercises, cases, and problems contribute significantly to the strength of this text as a total teaching–learning package. All assignment materials have

been written entirely by the authors, and are, therefore, fully coordinated and consistent with the techniques, concepts, and terminology presented in the chapters.

These assignment materials have been successfully class tested for more than four years in accounting courses at the University of California, Berkeley; University of San Francisco; California State University, Hayward; San Francisco State University; Saint Mary's College; and College of Marin. To those students who used these materials in their developmental form, we express our sincere thanks for their numerous suggestions, comments, and criticisms.

Many colleagues also provided suggestions and encouragement during the development and writing of this text. In particular, our personal thanks to Dean Bernard L. Martin, McLaren College of Business Administration, University of San Francisco; Richard Bagozzi, Massachusetts Institute of Technology; Greg Buckman, California State University, Hayward; Alan P. Johnson, California State University, Hayward; Frank Lowenthal, California State University, Hayward; and John Grant Rhode, McLaren College of Business Administration, University of San Francisco. Robert H. Trezevant, College of Marin, has been of invaluable assistance in contributing a substantial amount of the material incorporated into the instructor's Solutions Manual. The following professors provided helpful reviews of the manuscript as it developed: Alison Hubbard Ashton, New York University; James Bedingfield, University of Maryland, College Park; Charles Brandon, Rollins College; William Call, New Mexico State University; John A. Caspari, Bradley University; Joseph R. Curran, Northeastern University; Carl Dennler, Florida Atlantic University; Joseph Goetz, Jr., Iowa State University; Lawrence A. Gordon, University of Maryland, College Park; Michael Haselkorn, Bentley College; Ronald W. Hilton, Cornell University; Robert R. Irish, University of Toledo; Robert S. Main, Butler University; Charles D. Mecimore, University of North Carolina, Greensboro; Ronald Pawliczek, Boston College; Gordon Pirrong, Boise State University; and Harry Wolk, Drake University.

Financial assistance was provided by the Accountancy Council of McLaren College of Business Administration at the University of San Francisco. Secretarial, reproduction, and inspirational assistance were provided by the following people at various stages of the project: Sandy Anderson, Anita Doleman, Gini Ferguson, Barbara Gunderson, Sharon Kwiatkowski, M. Kaye Long, Patricia G. Murphy, Kiyo Noji, Hannah Peña, Peggy L. Renk, Gloria Rodriguez, Barbara Rothman, Nancy Six, and Connie Wong. We also wish to acknowledge the editorial assistance of Steve Dowling and Karen Bierstedt, both formerly part of the College Department of Harcourt Brace Jovanovich.

We appreciate the help received from all of these individuals. However, they are absolved from responsibility for what appears in the text. Any errors remaining are the property of the authors. Comments from users are welcome.

Finally, a word of personal thanks from one of the authors to some very special people—John, Joe, Jaime, Jeff, and Sweetie Pie. In the words of a prominent spokesman from another field, "Thank you for making this whole thing necessary!"

Michael Chatfield
Denis Neilson

CONTENTS

Preface

iii

PART ONE COST ACCUMULATION

| | | |
|----------|---|------------|
| 1 | ACCOUNTING INFORMATION FOR MANAGEMENT | 1 |
| | Management Tasks | 3 |
| | Accounting Information and Management Decisions | 4 |
| | Three Purposes of Management Accounting | 7 |
| | The Controller | 10 |
| | Accounting Reports for Management | 12 |
| | Foundations of Management Accounting | 12 |
| | Sources of Authority in Management Accounting | 16 |
| | Summary | 18 |
| | Key Words and Phrases | 20 |
| 2 | COST CONCEPTS, OBJECTS, AND CLASSIFICATIONS | 23 |
| | Basic Concepts of Cost | 25 |
| | Objects of Costing | 27 |
| | Cost Classification Systems | 31 |
| | Cost Concepts and Terminology Illustrated The Better-Built Bat Company | 40 |
| | Summary | 45 |
| | Key Words and Phrases | 47 |
| 3 | COST ALLOCATION | 61 |
| | Cost Accumulation | 63 |
| | Cost Allocation | 63 |
| | Alternative Cost Allocation Models Full Absorption Costing and Variable Costing | 66 |
| | Measuring Product Costs | 67 |
| | Accounting for Overhead Costs | 72 |
| | Decision Center Cost Measurement | 31 |
| | Summary | 86 |
| | Key Words and Phrases | 87 |
| 4 | JOB ORDER COST SYSTEMS | 113 |
| | Two Methods of Cost Accumulation | 115 |
| | The Cost Accounting Cycle for Jobs | 116 |
| | Accounting for Raw Materials | 119 |
| | Accounting for Direct Labor Costs | 122 |
| | Accounting for Manufacturing Overhead Costs | 124 |

| | |
|---|------------|
| Accounting for Costs of Completed Jobs | 129 |
| Nonmanufacturing Costs in Job Order Costing | 130 |
| Cost Control in Job Order Systems | 131 |
| Job Order Costing Illustrated Karter Kustom Body Company | 131 |
| Summary | 139 |
| Key Words and Phrases | 141 |
| 5 PROCESS COST SYSTEMS | 159 |
| Uses of Process Cost Information | 161 |
| What Is a Process? | 162 |
| Assigning Process Costs to Completed Units | 162 |
| Equivalent Units An Averaging Technique | 163 |
| Cost Accumulation in Process Costing | 165 |
| Calculating Unit Process Costs Weighted Average Cost Method | 167 |
| Transferring Costs to Subsequent Processing Departments | 168 |
| The Production Cost Report | 169 |
| Calculating Unit Process Costs FIFO Cost Method | 172 |
| The Cost Flow Assumptions Compared | 173 |
| Process Costs and Interdepartmental Transfers | 177 |
| The Process Costing Period | 178 |
| Process Costing and the Variable Cost Model | 181 |
| Process Costing Illustrated Presto Products Corporation | 181 |
| Summary | 189 |
| Key Words and Phrases | 191 |
| 6 JOINT PRODUCTS, BY-PRODUCTS, AND PRODUCTION IRREGULARITIES | 211 |
| Joint Products | 213 |
| By Products | 222 |
| Production Irregularities in Process Costing Systems | 224 |
| Summary | 237 |
| Key Words and Phrases | 239 |
| PART TWO COST INFORMATION FOR PLANNING AND CONTROL | |
| 7 THE BUDGETARY PROCESS | 263 |
| The Need for Predictive Information in Decision Making | 265 |
| Characteristics of Budgets | 268 |
| Budgets as Planning Devices | 272 |
| Preparing the Budget | 274 |
| Budgeting Illustrated Nice and Eezee Flour Company | 285 |
| Summary | 295 |
| Key Words and Phrases | 297 |
| 8 COST-VOLUME-PROFIT ANALYSIS | 317 |
| An Overview of Cost-Volume-Profit Analysis | 319 |
| The Basic Cost-Volume-Profit Model | 320 |
| Sensitivity Analysis | 329 |
| Limitations of the Basic Cost-Volume-Profit Model | 337 |
| Activity Level Measures in Cost-Volume-Profit Analysis | 343 |

| | |
|--|------------|
| Inventory Levels in Cost–Volume–Profit Analysis | 351 |
| Nonlinear Cost and Revenue Functions | 352 |
| Linear Versus Nonlinear Cost–Volume–Profit Models | 354 |
| Cost–Volume–Profit Analysis Illustrated Mercer Manufacturing Company | 354 |
| Summary | 357 |
| Key Words and Phrases | 359 |
| 9 INCREMENTAL ANALYSIS FOR SHORT-RUN DECISION MAKING | 383 |
| Short-run Decision Analysis | 385 |
| Cost Terminology in Decision Analysis | 386 |
| Eight Short-run Decision Situations | 387 |
| Summary | 405 |
| Key Words and Phrases | 406 |
| 10 ACCOUNTING CONTROL SYSTEMS | 435 |
| What Is Control? | 437 |
| How Control Systems Operate | 438 |
| Objectives of Accounting Control Systems | 441 |
| Responsibility Accounting | 442 |
| Which Items Are Controllable? | 444 |
| Control Reports | 448 |
| Internal Review and Audit | 450 |
| Cost–Benefit Analysis | 451 |
| Accounting Control and Human Behavior | 451 |
| Traditional Versus Modern Behavioral Assumptions | 451 |
| Summary | 460 |
| Key Words and Phrases | 461 |
| 11 FLEXIBLE BUDGETING | 481 |
| Control Limitations of Static Budgets | 483 |
| Control Limitations of Elementary Cost–Volume–Profit Analysis | 485 |
| The Concept of a Flexible Budget | 485 |
| Advantages of Flexible Budgets | 486 |
| The Scope of Flexible Budgets | 487 |
| Applicability of Flexible Budgeting Techniques | 487 |
| Developing a Flexible Budget | 488 |
| Measuring and Interpreting Variances | 493 |
| Flexible Budgeting and Service Department Cost Reallocations | 500 |
| Flexible Budgeting Illustrated Weinstein Corporation | 502 |
| Summary | 509 |
| Key Words and Phrases | 511 |
| 12 STANDARD COSTS | 537 |
| What Are Standard Costs? | 539 |
| Standard Cost Specifications | 540 |
| Uses of Standard Costs | 543 |
| Limitations of Standard Costs | 547 |
| Measuring Variances Between Actual and Standard Costs | 547 |
| Journal Entries for Standard Costs | 556 |
| Frequency of Variance Reporting | 558 |
| Standard Costs in Published Financial Statements | 559 |
| Standard Costs in a Process Cost System | 559 |

| | |
|--|------------|
| Standard Costs in Job Order and Composite Cost Systems | 561 |
| Standard Costs in Variable Cost Systems | 562 |
| Standard Costs in Service Department Cost Reallocations | 562 |
| Standard Costing Illustrated Vasicek Powder Company | 564 |
| Summary | 570 |
| Key Words and Phrases | 572 |
| 13 SALES VARIANCES, COMPLEX PRODUCTION VARIANCES, AND VARIANCE ANALYSIS AND INVESTIGATION | 595 |
| Sales-Related Variances | 597 |
| Complex Production Related Variances | 602 |
| Variance Analysis and Investigation | 609 |
| Summary | 617 |
| Key Words and Phrases | 619 |
| 14 VARIABLE AND FULL ABSORPTION COSTING: INCOME MEASUREMENT AND PRICING POLICIES | 641 |
| The Product Cost Models Compared | 643 |
| Income Measurement Using the Variable and Full Absorption Cost Models | 644 |
| The Variable Cost Model and Decision Analysis | 652 |
| The Full Absorption Cost Model and Decision Analysis | 654 |
| Objectives of Long-run Pricing Policies | 655 |
| Cost Based Pricing Techniques | 657 |
| Long-run Transfer Pricing | 666 |
| Summary | 669 |
| Key Words and Phrases | 671 |
| PART THREE | |
| COST INFORMATION FOR SPECIALIZED DECISION MAKING | |
| 15 FORECASTING COSTS AND REVENUES | 697 |
| Elementary Forecasting Methods | 699 |
| Elementary Time Dependent Forecasting Techniques | 706 |
| Formal Statistical Forecasting Procedures | 709 |
| Comparing the Results of the Visual Fit High-Low and Linear Regression Methods | 726 |
| Time Series Regression Analysis | 728 |
| Multiple Regression Analysis | 729 |
| A Checklist Evaluation of Alternative Regression Formulations | 732 |
| Forecasting Illustrated Evaluating Alternative Regression Formulations | 733 |
| Applying the Results of Formal Regression Analysis | 736 |
| Limitations of Formal Regression Analysis | 736 |
| Summary | 737 |
| Key Words and Phrases | 739 |
| Appendix Regression Analysis—Method of Least Squares | 740 |
| 16 ACCOUNTING INFORMATION FOR DECISION MAKING UNDER UNCERTAINTY | 775 |
| Deterministic or Probabilistic Decision Techniques? | 777 |
| Expected Value Decision Models | 777 |
| Heuristic Decision Rules | 782 |

| | |
|---|-------------|
| Dispersion of Outcomes as Decision Criteria | 784 |
| Incorporating Uncertainty into Accounting Planning and Control Techniques | 787 |
| Multistage Decisions and Uncertainty Decision Trees | 798 |
| Game Theory Models | 801 |
| Measuring the Costs and Benefits of Information | 804 |
| Summary | 808 |
| Key Words and Phrases | 810 |
| 17 BASIC CAPITAL BUDGETING ANALYSIS | 829 |
| The Capital Budgeting System | 831 |
| The Time Horizon in Capital Budgeting | 831 |
| Accounting Terminology in Capital Budgeting Analysis | 833 |
| An Overview of Capital Budgeting Analysis | 838 |
| Evaluating Capital Budgeting Proposals | 840 |
| Nondiscounting Methods | 840 |
| Discounting Methods | 847 |
| Capital Budgeting Illustrated Gibson Company | 857 |
| Summary | 864 |
| Key Words and Phrases | 865 |
| Appendix A The Time Value of Money | 867 |
| Appendix B Present and Future Value Tables | 873 |
| 18 SPECIAL PROBLEMS IN CAPITAL BUDGETING | 901 |
| Income Tax Aspects of Capital Budgeting Analysis | 903 |
| Ranking Competing Projects | 907 |
| Evaluating Projects with Unequal Lives | 909 |
| Evaluating Projects with Unequal Investment Outlays | 912 |
| Evaluating Alternative Sources of Project Financing | 915 |
| Evaluating Disinvestment and Refinancing Proposals | 917 |
| Capital Budgeting under Uncertainty | 920 |
| Summary | 928 |
| Key Words and Phrases | 930 |
| 19 SEGMENT PERFORMANCE EVALUATION: PROFIT CENTERS | 955 |
| The Basis for Organizational Segmentation | 957 |
| Advantages and Disadvantages of Decentralization | 957 |
| Purposes of Segment Performance Evaluation | 958 |
| The Scope of Segment Performance Evaluation | 959 |
| Profit Center Performance Evaluation | 960 |
| Uses of Profit Center Performance Measures | 969 |
| Transfer Prices and Segment Performance Evaluation | 974 |
| Criteria for Using Transfer Pricing in Evaluation Systems | 975 |
| The Transfer Pricing Systems Compared | 987 |
| Misuses and Limitations of Transfer Price Systems | 988 |
| Summary | 989 |
| Key Words and Phrases | 990 |
| 20 SEGMENT PERFORMANCE EVALUATION: INVESTMENT CENTERS | 1011 |
| Return on Investment Analysis | 1013 |
| Establishing Segment Return on Investment Targets | 1018 |
| Return on Investment Evaluation Problems | 1020 |
| Return on Investment Calculation Problems | 1021 |

| | |
|--|-------------|
| <i>The Investment Base Identification Problems</i> | 1022 |
| <i>The Investment Base Measurement Problems</i> | 1023 |
| <i>Conflict Between the Use of Return on Investment Techniques for Planning and Evaluation</i> | 1027 |
| <i>Residual Income</i> | 1031 |
| <i>Transfer Pricing and Investment Center Evaluation</i> | 1037 |
| <i>Summary</i> | 1040 |
| <i>Key Words and Phrases</i> | 1042 |
| 21 ACCOUNTING INFORMATION FOR QUANTITATIVE DECISION | |
| MODELS: PLANNING | 1063 |
| <i>The Scope and Components of Quantitative Decision Models</i> | 1065 |
| <i>Inventory Planning and Control Models</i> | 1067 |
| <i>Inventory Control Models</i> | 1070 |
| <i>Linear Programming Models</i> | 1081 |
| <i>PERT/CPM Analysis</i> | 1090 |
| <i>Summary</i> | 1095 |
| <i>Key Words and Phrases</i> | 1097 |
| 22 COST INFORMATION FOR QUANTITATIVE DECISION MODELS: | |
| CONTROL | 1113 |
| <i>Learning Curve Analysis</i> | 1115 |
| <i>Statistical Techniques for Variance Analysis</i> | 1123 |
| <i>Investigating Nonrandom Variances</i> | 1129 |
| <i>Variance Investigation and Bayesian Statistics</i> | 1133 |
| <i>Summary</i> | 1135 |
| <i>Key Words and Phrases</i> | 1136 |
| <i>Appendix Statistical Tables</i> | 1137 |
| INDEX | 1163 |

1

ACCOUNTING INFORMATION FOR MANAGEMENT

| | |
|--|-----------|
| MANAGEMENT TASKS | 3 |
| The Organization Chart | 4 |
| ACCOUNTING INFORMATION AND MANAGEMENT DECISIONS | 4 |
| Financial Accounting | 6 |
| Management Accounting | 6 |
| Cost Accounting | 7 |
| THREE PURPOSES OF MANAGEMENT ACCOUNTING. | 7 |
| Performance Measurement | 7 |
| Control | 9 |
| Planning | 9 |
| THE CONTROLLER. | 10 |
| ACCOUNTING REPORTS FOR MANAGEMENT | 12 |
| FOUNDATIONS OF MANAGEMENT ACCOUNTING | 12 |
| SOURCES OF AUTHORITY IN MANAGEMENT ACCOUNTING | 16 |
| The Cost Accounting Standards Board | 17 |
| The Certificate in Management Accounting | 18 |
| SUMMARY | 18 |
| KEY WORDS AND PHRASES | 20 |

LEARNING OBJECTIVES

After studying Chapter 1, you should be able to:

1. *Describe the principal management tasks and explain how top managers delegate authority to perform those tasks.*
2. *Explain the nature and purposes of financial accounting and management accounting.*
3. *Discuss how cost accounting is related to both financial and management accounting.*
4. *Identify three purposes of management accounting*
5. *Prepare an income statement for a manufacturing business.*
6. *Explain the basic uses of budgets in a management accounting system.*
7. *Describe the role of a controller in a modern business.*
8. *Distinguish between line and staff functions and the duties of line and staff managers.*
9. *Understand the differentiation of detail in reports prepared for top-level, middle-level, and low-level managers.*
10. *Describe the role of the Cost Accounting Standards Board and its effects on management accounting procedures.*

Introductory accounting textbooks may briefly discuss *management accounting*, which provides information for use by decision makers within an organization. But they emphasize *financial accounting*, which provides information to stockholders, creditors, and others outside the organization.

In the real world of operating businesses, these priorities tend to be reversed. A company's audited financial statements *must* be prepared—they are required by state law, by such regulatory agencies as the Securities and Exchange Commission, and by the stock exchanges as a condition for trading the firm's securities. On the other hand, no business is legally required to produce accounting information for use by its executives. Management accounting data is expected to justify its cost by providing benefits that exceed the expense of producing the information. It does so by helping managers plan for the future, control operations, reduce costs and waste, and generally by improving performance and increasing profits. As one management accountant said, pointing to his company's published financial statements, "Those are the things we *have* to do, and these"—indicating a stack of managerial accounting reports—"are the things we *want* to do."

This chapter first outlines the managerial functions that require accounting information. It then defines the major purposes of management accounting and illustrates accounting reports prepared for managers at different operating levels. Finally, it traces the development of management accounting procedures and describes the sources of authority underlying those procedures.

MANAGEMENT TASKS

Management is the art of getting things done. More specifically, business management involves setting company goals and directing human and physical resources to achieve those goals. A study of management accounting logically begins with a survey of basic management functions:

1. *Policymaking*—deciding in general what should be done.
2. *Goal Setting*—specifying the firm's short- and long-run objectives.
3. *Planning* to reach those objectives
4. *Staffing*—finding the right person to do each job.
5. *Organizing* economic and human resources in accordance with the plans made
6. *Coordinating* the efforts of employees whose duties are interrelated.
7. *Directing* the conduct of day-to-day operations by giving subordinates sufficiently detailed instructions so that they always know what is expected of them

8. *Controlling* operations by taking corrective action when needed to see that plans are carried out, goals are reached, and jobs are done in the best possible way
9. *Evaluating* the performance of responsible individuals and groups

The president of a company, as chief executive, has overall management authority. But no individual can personally supervise all the activities of a large business. Effective management requires that the company be divided into operating units, that authority be delegated to the managers of those units, and that managers at all levels be held responsible for their performance. This delegation of management tasks may be based on functions to be performed, such as production, sales, or research. Authority may also be delegated on the basis of product lines, sales territories, geographic areas, or any combination of these.

Each such operating unit is a **decision center**—a department or other company segment headed by a manager who has the *authority* to make decisions and the *responsibility* for the results of those decisions. This is an important management accounting concept because internal accounting information is gathered, processed, interpreted, and distributed according to the activities and needs of these decision centers.

Managers need accounting information that is relevant to their particular interests and responsibilities. Consequently, in designing the accounting reports required for different managers, it is first necessary to specify what those interests and responsibilities are.

THE ORGANIZATION CHART

An **organization chart** identifies each manager's areas of authority, responsibility, and accountability. Every box on the chart represents an individual or group with a job to do—in other words, a defined responsibility. The lines connecting these boxes show the responsibilities of managers to each other and the delegations of authority that created those responsibilities.

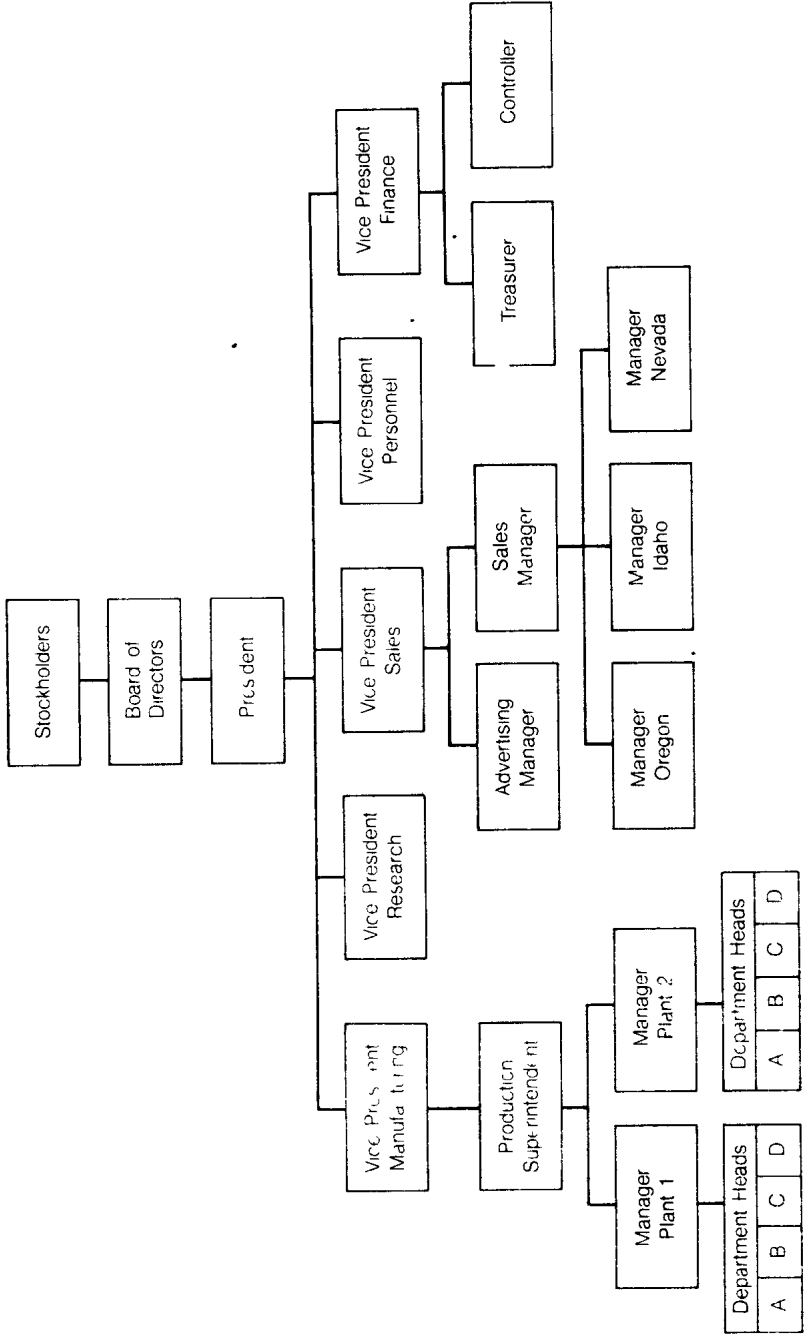
In Figure 1-1, for example, the line connecting the president and the manufacturing vice president indicates that the latter is responsible to the president and reports directly to him. The chart also shows that the president has delegated authority over major company functions to five vice presidents. The manufacturing vice president has delegated operating authority to a production superintendent, who in turn has given control of day-to-day operations to managers of the two factories, and so on. The whole organization chart resembles a multi-layered pyramid, with executives at each lower level given certain rights in exchange for performing certain duties.

ACCOUNTING INFORMATION AND MANAGEMENT DECISIONS

All management tasks involve making decisions. Managers need accounting information to estimate the costs and benefits of alternative courses of action, to implement decisions, and to evaluate the results of past decisions. By requiring

FIGURE 1-1

Partial Organization Chart of a
Manufacturing Corporation



that certain information be made available, the managerial decision process helps to structure the accounting system. The output from that system influences managerial perceptions of reality and, in doing so, affects the decisions finally taken.

The extent of the information needed depends on both the decision to be made and the size of the business. In very small firms, where managers are in personal contact with operations, the information processing methods can be quite simple. In larger companies, a formal accounting system becomes a practical necessity. In all cases, the amount of information to be supplied should be determined through a comparison of its estimated cost with the benefits to be derived from it.

Information for managers is provided by financial accountants as well as by management accountants. These two types of accounting should be viewed as parts of a company-wide **accounting information system**. Both financial and managerial accounting employ the double entry system, use broadly similar terminology and account classifications, and record essentially the same transactions. They also have common output, although a company's financial statements are intended primarily for stockholders, they always include inventory, profit, and other performance measures originally prepared for use by managers. The two systems differ chiefly in the needs of their users, in the types of information they provide, and in the rules under which that information is produced.

FINANCIAL ACCOUNTING

Financial accounting primarily reports the results of transactions with outsiders. Its end products are financial statements that serve as communication devices between the managers who run a company and the stockholders who own it. When a corporation's stock is publicly held, its balance sheet, income statement, and statement of changes in financial position are made available to anyone who wants them. These statements summarize the entire company's financial position and operating results. Their broad scope is intended to satisfy the information needs of stockholders, creditors, financial analysts, regulatory agencies, customers, suppliers, and others who must make decisions about the company *as a whole*. Investors must buy shares in the entire corporation, creditors can only lend to the company as a whole, the government normally taxes and regulates each firm as a single entity.

MANAGEMENT ACCOUNTING

Management accounting tends to focus on *segments* of a business. Typical managerial decisions concern the operations of a particular department—a choice between two products, or the replacement or retention of an individual machine. General purpose financial statements sometimes provide starting points for such analyses. For example, an income statement might raise questions about the profitability of certain divisions within a company. However, most managerial decisions require more detailed information about company segments. Such information can only be found in specialized management accounting reports.