
Principles of
Cost Accounting:
Managerial
Applications

L. Gayle Rayburn

Principles of Cost Accounting: Managerial Applications

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The Willard J. Graham Series in Accounting

To
Mike, Doug, and Beverly

Preface

This cost accounting textbook has been written to allow instructors flexibility in the chapter material presented. The first 11 chapters discuss cost accounting principles and concepts concerned with the collection of costs, which is an influencing factor in such managerial decisions as determining sales price. The last part of the book emphasizes the application of cost principles and quantitative tools to decision making.

Chapter 1 introduces the students to determining the need for and use of cost information. Chapter 2 discusses the basic cost concepts. An appendix illustrates factory ledger and home office ledger accounts. If students have not had a good foundation in inventory costing, Chapter 3 contains an appendix demonstrating these concepts; quantitative models for materials planning and control are contained in the Chapter 3 text. Labor accounting and learning curve theory is presented in Chapter 4. The third element of production cost, *overhead, is presented in Chapters 5 and 6, with emphasis on understanding the behavior of overhead costs through regression analysis and other methods.* If an instructor prefers, Chapters 15 and 16 can be presented before Chapters 5 and 6. Process costing is introduced in Chapter 7 in a unique way. Students are encouraged to think of a snowball gathering snow (cost) as it travels from one department to another. This analogy communicates the essence of the procedure of accumulating costs in a process system.

Standard costs for overhead analysis is uniquely presented so a closer relationship can be understood between the various methods of analysis. Standards provide a good introduction into Chapters 12 and 13 concerned with the budgeting process. Capital budgeting is present in Chapter 14 along with the other chapters devoted to planning and controlling cost.

Quantitative models including PERT analysis, decision tree analysis and linear programming are presented in Chapter 18 and 19. The last part of the text is devoted to performance evaluation and pricing analysis with separate chapters for behavioral factors in accounting control and marketing cost analysis. The use of costs in pricing decisions is presented in Chapter 22 followed by chapters discussing segment analysis and transfer pricing.

An appendix annotates the Cost Accounting Standards Board pronouncements; details of the standards are integrated into the relevant chapters.

To aid the student, each chapter begins with an outline of the chapter and a set of measurable objectives which focus attention on important areas of coverage. Each chapter also contains a listing of the important terms and concepts which can be helpful to students for review.

End-of-chapter material totals 422 discussion questions, 178 exercises, 217 problems, and 47 cases. Most of it is new or revised and has been thoroughly tested.

The supplementary materials accompanying the text include a detailed instructor's manual, which offers teaching suggestions and the solutions to all questions, exercises, problems, and cases. A Student Study Guide and Workbook for the student's assistance in obtaining an understanding of the material has been written by the author. The Study Guide is keyed to a chapter of the text and provides a detailed outline of each chapter, matching questions containing important new terms and concepts, true-false questions, completion questions, and exercises. Answers to all the questions are included in the Study Guide, providing verification of responses, as well as explanation as to why the statement is true or false. A list of key figures for each exercise and problem is available for students. Instructors may also obtain a booklet of supplementary test material including multiple-choice questions and short-answer problems, along with more comprehensive problems.

My first and most important acknowledgment goes to my husband, Mike, and children, Douglass and Beverly, who have supported my commitment to writing this book and its accompanying materials. I also acknowledge the helpful comments and support of the following: Charles Bailey, Florida State University; Arthur J. Brissette, Sacred Heart University; Samuel Chesler, University of Lowell; Cindy Heagy, Memphis State University; Richard S. Roberts, The University of Akron; Lamon P. Steedle, Lehigh University; Mary F. Strecker, Kansas State University; and James T. Thompson, Memphis State University.

In addition, many students have worked the problems to insure that they are as error-free as possible, and they have contributed ideas for more effectively presenting the concepts.

Appreciation also goes to the American Institute of Certified Public Accountants, the Institute of Management Accounting of the National Association of Accountants, and the Institute of Internal Auditors, Inc., for their permission to use problem materials from their past examinations. Problems from the

Uniform CPA Examination are designated (AICPA), problems from the Certificate in Management Accounting examinations are designated (CMA), and problems from the Certified Internal Auditing Examination are designated (CIA).

Suggestions and comments regarding the textbook and related materials are welcome.

Letricia Gayle Rayburn

Contents

PART I

BASIC COST ACCOUNTING CONCEPTS

1. **The role of cost accounting in planning and control 3**
Business goals: *Trade-offs. Goal congruence.* Organization chart: *Production and service departments. Line and staff relationships. Responsibility accounting.* Relationship of cost accounting to other tasks. Comparison of cost accounting with financial accounting: *Cost defined. Production, marketing, and administrative costs defined. Planning and control activities.* Professional and government organizations.
2. **Basic cost concepts and manufacturing statements 31**
Financial statements: *Inventory accounts.* Elements of production costs: *Direct material. Direct labor. Factory overhead.* Manufacturing inventory flows. Applications of factory overhead: *Factory overhead applied account. Under- or overapplied overhead.* Cost of goods manufactured statement: *Manufacturer's statement of income. Merchandiser's statement of income. Inventory physical flow.* Three behavior patterns: Fixed, variable, and semivariable (mixed) costs. Job order costing. Process costing: *Basic journal entries in job order costing.* Appendix: Reciprocal accounts.
3. **Costing materials and quantitative models for materials planning and control 79**
Application rates for material acquisition and handling costs: *Application of materials acquisition and handling costs illustrated.* Material requisitions and issues: *Job order sheet.* The effect of product waste: *Scrap report.* Accounting for the various types of material waste: *Sales value of scrap is not known. Sales value of scrap can be reliably estimated. Accounting for scrap illustrated.*

Defective units. Spoiled goods. Inventory planning: Stockouts, TOS, and B/O. ABC analysis and two-bin system: Two-bin system. Automatic reorder system. Economic order quantity: Effect of quantity discounts. Economic production runs. Lead time. Calculating safety stock and reorder points: Reorder point. CAS 411. Appendix 3-A: Inventory costing methods. Appendix 3-B: Lower of cost or market rule.

4. Learning curve theory and labor accounting 131

Variety of labor systems. Types of payroll-related costs: 1. *Direct Benefits. Group incentive plans. Learning curve theory: 2. Indirect or “fringe” benefits. 3. Employer payroll tax. Payroll accounting: Timekeeping records. Two basic labor entries: Adjusting and reversing labor entries. Holidays, vacations, and bonus pay. Overtime premium pay. Shift premium. Optional payroll deductions. Accounting for human resources. CASB and compensation accounting: CAS 408. CAS 412. CAS 413. CAS 415.*

5. Behavior of overhead costs and regression analysis 171

Cost, profit, and investment centers: *Cost centers. Profit and investment centers. Subsidiary factory overhead accounts. Cost behavior: Fixed, variable, and semivariable (mixed) costs. Analyzing ledger accounts. Cost and engineering studies: High-low method. Scattergraph. Regression analysis: Least squares method. Fixed (static) and variable (flexible) budgeting: Comparison of fixed and variable budgets. Cost of idle capacity.*

6. Allocating overhead costs and variance analysis 205

Plant capacity concepts: *Theoretical capacity. Practical capacity. Normal capacity. Expected actual capacity. Comparison of capacity levels. Effect on unit fixed costs. Evaluating capacity levels. Idle capacity versus excess capacity. Activity measures: Unit of production base. Direct labor cost or dollars. Direct labor-hours. Machine-hours. Direct materials cost. Prime cost. Production and service departments. Direct and indirect costs. Allocation methods for service costs. Allocating indirect costs versus allocating service department costs: Direct method. Step method. Linear algebra or reciprocal method. Issues surrounding allocations: Absorption and variable costing. Plantwide versus departmental rates. Spending and volume variances: Disposition of over- or underapplied overhead. Cost Accounting Standards: CAS 402. CAS 410. CAS 416. CAS 418. CAS 420.*

PART II

PRODUCT COST ACCUMULATION PROCEDURES

7. Process costing—weighted-average and FIFO costing 253

Contrast between job order and process costing: *Departmentalization of work in process inventory. Equivalent units. Accounting for total costs. Cost of production report: Five steps to preparing a cost of production report. Second department is illustrated. Issuance of material. Journal entries using process*

costing. Accounting for opening inventory: Weighted-average and FIFO Sources of units transferred. Weighted-average costing illustrated. FIFO costing illustrated. Completed and on-hand inventory.

8. Process costing—addition of material and lost units 297

Addition of material. Increase in units under average costing: *Preceding department costs*. Increase in units under FIFO costing. Loss of units. Normal versus abnormal loss: *Normal tolerance limits*. Inspection at end of operations. Inspection at the beginning of operations: *Units never put in process*. Allocation of normal loss. Inspection at midpoint of processing.

9. Joint product and by-product costing 335

Joint products and by-products defined: *Compared with scrap. Common costs and joint costs. Inventory valuations*. Split-off point and separable costs. Accounting for by-products: *Assigning inventory value to by-products produced. Income from by-products sold. Journal entries for by-products*. Assignment of costs to joint products: *Diagram processing operations. Quantity method. Average unit cost approach. Weighted factors. Market or sales value. Inventories at sales price. Differential cost and revenue.*

PART III

PLANNING AND CONTROL OF COSTS WITH STANDARDS AND BUDGETS

10. Standard costs for material and labor 371

Standard cost defined: *Budgets and standard costs. Advantages of a standard cost system. Levels of activity. Levels of efficiency. Job order and process cost systems. Incorporation in the accounting system*. Setting material standards: *Material quantity standards. Material price standards*. Setting labor standards: *Preliminary plant survey. Time and motion study. Test runs. Labor rate standards. Group piece rates. Salaried personnel*. Standard specifications: *Material variances for job order costing. Material variances for process costing. Journal entries for material*. Labor variances: *Labor variances for process costing. Journal entries for labor*. Mix and yield variances: *CAS 407*.

11. Standard costs for factory overhead and variance analysis 413

Determining standard overhead rates: *Four capacity levels*. Budgeted volume. Two-variance method. Three-variance method. Four-variance method: *Three volume levels used. Outline of interrelationship. Proof of method used. Journal entries illustrated*. Disposition of variances. Variance analysis: *Revision of standards. Budgets and standards*. Causes of and responsibility for variances.

12. The budgeting process 451

Principles of budgeting: *Advantages of budgets. Budget committee. Budget manual. Length of budget period. Fixed versus variable budgets. Standards and budgets. Financial forecasts. Formal communication. Steps in developing a profit plan*. Master budget: *Sales budget. Production budget.*

Direct-materials-purchases budget. Direct labor budget. Factory overhead budget. Cost of goods sold budget. Limitations of budgets: Unrealistic budgets. Reporting shortcomings. Participative budgeting process.

13. **Nonmanufacturing budgets, cash management, and forecasted statements** 487
- Cash management: *Centralization of cash. Cash budgets. Marketing and administrative budgets: Advertising budgets. Direct selling expense budget. Research and development budget.* Budgeted income statement and balance sheet: *Capital expenditures budget. Government budgeting. Zero-base budgeting: Decision packages. Levels of effort. Ranking decision packages. Incremental budgeting: Budget revisions.*
14. **Capital budgeting and cost analysis** 535
- Tax impact on capital decisions. Evaluation techniques: *Payback or payout method. Unadjusted return on investment. Discounted cash flow methods.* Inflation in the capital budgeting process. Assets constructed for own use: *Capitalizing general factory overhead. Capitalizing interest costs. Excess construction cost.* CASB Standards: CAS 404. CAS 409. CAS 414. CAS 417.

PART IV

COST ANALYSIS FOR DECISION MAKING

15. **Cost-volume-profit analysis** 573
- Breakeven analysis. Contribution margin: *Variable cost ratio. Marginal income. Margin of safety. Cash flow breakeven point. Breakeven chart.* Assumptions of breakeven analysis: *Sales mix effect on breakeven.* Sales-quantity and sales-mix variances: *Desired income level.* Effect of volume change: *Price and volume alternatives. P/V chart.*
16. **Variable costing** 607
- Variable costing (direct costing): *Absorption costing. Development of variable costing. Income distortion.* Comparison of variable and absorption costing: *Volume variance. Adjustment to include fixed costs.* Advantages of variable costing: *Cost-volume-profit relationships. Marginal products. Impact of fixed costs. Pricing policies.* Dangers of variable costing: *Long-range pricing policies.* Opinions on variable costing: *Variable costing evaluated.*
17. **Decision models and cost analysis** 639
- Constraints on decision making: *Relevant-irrelevant costs.* Differential cost analysis: *Accept-or-decline decisions. Make-or-buy decisions. Escapable costs.* Opportunity cost analysis: *Payoffs of alternative actions. Quantified regrets table. Expected value.* Replacement cost analysis: *Applications of replacement costs. Replacement cost of land.*

PART V

QUANTITATIVE MODELS FOR PLANNING AND CONTROL

18. Gantt charts, PERT, and decision tree analysis 685
 Gantt charts: *Control device. Advantages of Gantt charts.* Network models: *Program Evaluation Review Technique. PERT-Cost analysis.* Decision tree analysis: *Advantages of decision tree analysis. Weaknesses of decision tree analysis. Requirements.* Roll-back concept. Discounted expected value of decisions: *Accounting for time. Other factors to consider.*
19. Linear programming and the cost accountant 723
 Linear programming defined: *Lack of constraints.* Effect of constraints: *Linear programming terms. Linear programming requirements. Solution methods.* Graphic method. Objective function lines. Simplex method. Sensitivity analysis.

PART VI

PERFORMANCE EVALUATION AND PRICING ANALYSIS

20. Behavioral factors in accounting control 755
 Universality of management: *Functions of management. Formal and informal organization. Goal congruence.* Behavioral implications of profit and cost centers. Control activities: *Responsibility accounting and control. Guidelines for control reports. Cost-benefit analysis. Accounting controls.* Traditional accounting model: Theory X. Behavioral science approach: Theory Y: *Hierarchy of needs. Herzberg's two-factor theory. Reinforcement theory. Evaluation of human relations approach.* CAS Standards: CAS 401. CAS 405. CAS 406.
21. Marketing cost analysis 799
 Marketing costs defined: *Significance of marketing cost. Marketing management concept. Marketing cost accounting.* Objectives of marketing cost accounting: *Cost control and cost analysis. Government regulations. Segmentation. Natural expense classification. Functionalization. Units of variability.* Standards for marketing costs: *Repetitive and nonrepetitive operations. Order-getting and order-filling costs. Variable budgets.* Variance analysis: *Expense variance report. Efficiency variance. Price variance. Incorporation of marketing standards.*
22. The use of costs in pricing decisions 837
 Influence of various parties. Determinants of pricing: *Demand and supply curves. Price elasticity of demand.* Competitive structures: *Monopoly. Monopolistic competition. Oligopoly. Perfect competition.* Economic profits. Relationship among demand, supply, and cost: *Social costs. Return on assets employed.* Cost-plus pricing methods: *Variable cost pricing. Differential cost pricing. Full-cost pricing. Conversion cost pricing. Direct cost pricing.*

23. Segmental analysis	881
Degree of decentralization. Segment performance. Methods of evaluating segments: <i>Return on investment. Contribution reporting. Segment margin. Breakeven point analysis. Full costing and segment analysis. Residual income. Ratios. Nonfinancial evaluations.</i> Goal congruence and suboptimization: CAS 403.	
24. Transfer pricing in multidivisional companies	917
<i>Degrees of interdependence. Purposes of transfer prices.</i> Transfer pricing bases: <i>Full-cost transfer pricing. Variable cost transfer pricing. Opportunity cost and differential cost. Market-based transfer prices. Negotiated transfer prices. Transfer pricing illustrated.</i> Dual transfer pricing. Suboptimization: <i>Internal competition. External procurement.</i> Recording internal transfers.	

APPENDIXES

Appendix A: Present value tables	955
Appendix B: Cost Accounting Standards Board	957

INDEX	961
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PART I

Basic cost accounting concepts

OUTLINE OF CHAPTER 1

Business goals

Organization chart

Relationship of cost accounting to other tasks

Comparison of cost accounting with financial accounting

Professional and government organizations

OBJECTIVES OF CHAPTER 1

1. To discuss business goals and organization structure.
2. To describe the nature of the production and service departments in the organization structure of a manufacturing firm.
3. To discuss the role of controllers in the organization structure and their relationship to cost accounting and other departments.
4. To contrast cost accounting, financial accounting, and managerial accounting.
5. To present the professional and government organizations that influence the cost accounting system.