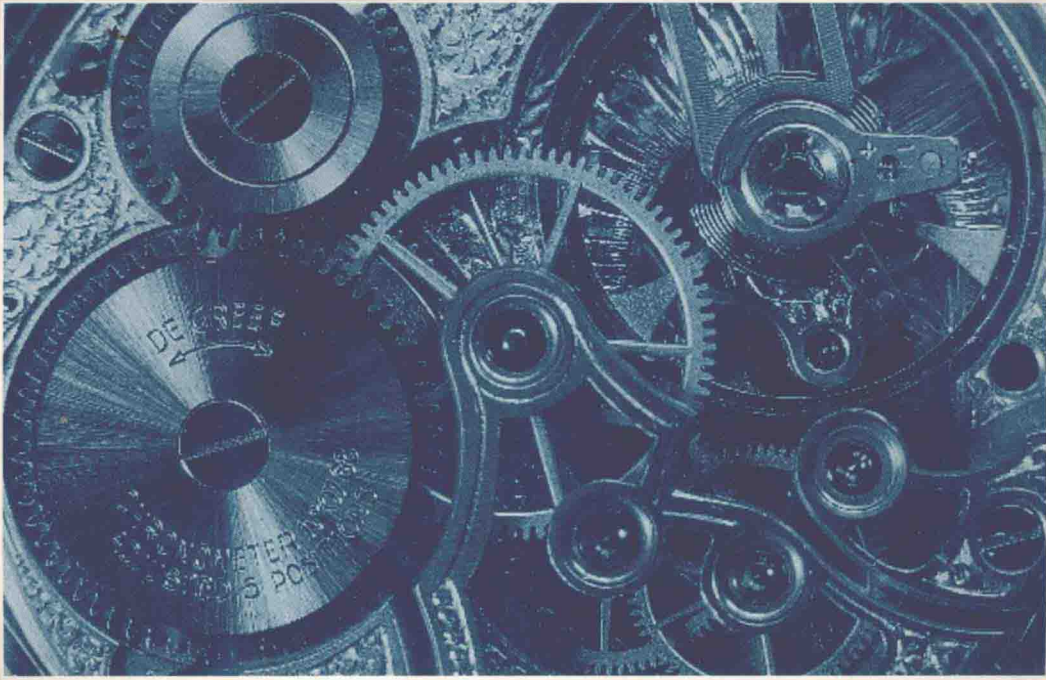


Seventh Edition

WORKBOOK/STUDY GUIDE
for use with



MANAGERIAL ACCOUNTING

Ray H. Garrison

Eric W. Noreen

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MANAGERIAL ACCOUNTING

CONCEPTS FOR PLANNING CONTROL, DECISION MAKING

Seventh Edition

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Preface

To The Student

This study guide has been prepared for your use as a student in the study of managerial accounting. It is designed to supplement the seventh edition of *Managerial Accounting: Concepts for Planning, Control, Decision Making*, by Ray H. Garrison and Eric W. Noreen. The purposes of the study guide are:

1. To provide suggestions for the study of chapter material.
2. To summarize the essential points in each chapter, thus making it possible to review chapter material quickly, particularly before examinations.
3. To test your knowledge of chapter material by means of a series of *self-test* questions and exercises. Answers to these questions and exercises are provided immediately following the questions and exercises themselves in order to give you immediate feedback and to point out areas that may need additional study.

Each chapter in the study guide begins with a brief section titled *Chapter Study Suggestions*. These study suggestions relate to the corresponding textbook chapter and will help you in your initial reading of the chapter material. Immediately following these study suggestions, a chapter outline is provided which highlights the key points and concepts discussed in the text. The purpose of this outline is to help you review the chapter material before attempting to complete the self-test questions and exercises provided for each chapter in the study guide. The self-test questions and exercises consist of true-false questions, multiple-choice questions, completion statements, and short exercises. This self-test material is designed to both measure and reinforce your understanding.

The way in which this study guide is used may differ from student to student; however, we would recommend the following approach:

1. Before reading the chapter in your textbook, read the *Chapter Study Suggestions* contained at the beginning of the corresponding chapter in the study guide.
2. Study the textbook chapter.
3. Study the outline contained in the *Chapter Highlights* section of the study guide. If you encounter any statements or comments that you do not understand, refer to the textbook for a more detailed discussion of the topic.
4. Work the review questions and exercises contained in the study guide, and then compare your answers to those given in the study guide. If you find something you don't understand, refer to the textbook for help.
5. Work the homework exercises and/or problems assigned by your instructor.

Remember, the study guide is not intended as a substitute for the textbook. Rather, its purpose is to *supplement* the textbook and to serve as an *aid* to learning.

The author welcomes suggestions and comments from users.

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Chapter 1

Managerial Accounting— A Perspective

Chapter Study Suggestions

As its title indicates, the purpose of this chapter is to provide a perspective of managerial accounting. The chapter describes the work that managers do and the kinds of information they need in order to do this work effectively. Study the section titled "The Work of Management" carefully; it contains a number of key concepts which carry on through the book. Also pay particular note to the similarities between organizations discussed in the chapter.

Many new terms are introduced in the chapter. Study these terms with care, and be sure you understand *how* the terms are used in the chapter discussion.

To ease your transition from financial accounting to managerial accounting, be sure you understand the points made in the "Comparison of Financial and Managerial Accounting" section near the end of the chapter.

CHAPTER HIGHLIGHTS AND STUDY GUIDE

A. An organization is a group of people united together for a common objective or purpose. The objective(s) of an organization are set by its managers, through strategic planning. Strategic planning occurs in two phases: 1) deciding on the product/service to produce/render, and 2) deciding on the best way to market the desired product/service.

B. The work of management centers around the thing to be managed—the organization. Four broad functions are involved in the manager's work:

1. Planning, which involves deciding on the actions to be taken in order to achieve the organization's objectives.

2. Organizing and directing, which involve putting the organization's resources together effectively and overseeing day-to-day activities.

3. Controlling, which involves the obtaining of feedback to ensure that all parts of the organization are following the plans which have been set and approved.

4. Decision making, which involves the making of choices between alternative courses of action. Decision making is an integral part of the *other* functions of management—that is, in order to plan, it is necessary to make decisions; in order to organize, it is necessary to make decisions, etc. As a practical matter, decision making is really the culmination of the work of the manager at key points in the planning and control cycle.

C. The work of management is done most effectively in an organizational structure that is decentralized. Decentralization means the delegation of decision-making authority, by moving the decision-making point to the lowest managerial level possible.

D. The organization chart is designed to show the levels of responsibility and formal channels of communication in an organization. Basically, a manager may occupy either a line position or a staff position as depicted on the organization chart.

1. Line positions are those positions which are directly related to the achievement of the basic objectives of the organization.

2. Staff positions are those positions which provide service, assistance, and specialized support to the line positions. In this sense, accounting is a staff posi-

tion; however, authority is delegated to the accounting department by top management to prescribe accounting and reporting procedures which line units must follow.

3. The controller is the manager of the accounting department. He or she advises top management and heavily influences the decision-making process through the providing and interpreting of data.

E. Organizations can be divided into three basic groups: 1) profit-oriented business enterprises, 2) service-oriented agencies and associations, such as the Red Cross, and 3) service-oriented agencies, such as the Department of Defense, which are created and controlled by governmental bodies. All these organizations share five basic similarities:

1. Each has an objective toward which it is working.

2. Each has a set of strategies designed to assist it in achieving its basic objective.

3. Each has a manager or managers who plan, organize, direct, and control its activities, and who make numerous decisions.

4. Each has an organizational structure that shows responsibility relationships between managers, and that shows line and staff relationships.

5. Each has an insatiable need for information to assist in the execution of its strategies.

F. Information is the "fuel" that makes management go. Information comes to management from many directions, one of which is from the accounting department. The information provided by accounting is largely quantitative in nature and is provided to help management do three things:

1. To plan effectively
2. To direct operations
3. To solve problems

G. There are at least eight major differences between financial and managerial accounting. Managerial accounting:

1. Focuses on providing data for internal uses.
2. Places more emphasis on the future.
3. Emphasizes the relevance and flexibility of data.

4. Places less emphasis on precision and more emphasis on nonmonetary data.

5. Emphasizes the segments of an organization rather than just looking at the organization as a whole.

6. Draws heavily from other disciplines.

7. Is not governed by generally accepted accounting principles.

8. Is not mandatory, whereas most financial accounting data are required.

As these differences suggest, managerial accounting is less structured and less mechanical than is financial accounting. Thus, in order to master the concepts involved in managerial accounting, you will need to devote the bulk of your time to understanding *logic* rather than *mechanical procedure*.

H. The role of managerial accounting is expanding rapidly, due to the operation of many forces on the organization and on its managers.

1. These forces include increased business competition, a severe cost-price squeeze, and rapidly developing technology.

2. For the most part, these forces have intensified the manager's need for information beyond that which is contained in the traditional balance sheet and income statement.

I. Trade barriers in international markets are slowly being eliminated, making it easier to conduct international trade. Firms can no longer be complacent in their "home" markets, since competition may suddenly come from a competitor half way around the world.

1. The implication for managerial accounting is that firms' accounting systems must be "world class" in order to compete.

2. Throughout this book we highlight the differences between obsolete accounting systems and well-designed accounting systems.

J. Ethics can be defined as "The study of standards of conduct and moral judgment." In recent years, many concerns have been raised regarding ethical behavior in business.

1. Ethical problems occur at several organizational levels. These include the corporate level, the intercorporate level, the intracorporate level, the professional level, and the personal level.

2. Many companies have developed codes of ethical conduct. These codes are broad-based statements of a company's responsibilities to its employees, customers, suppliers, and others.

3. A code titled *Standards of Ethical Conduct for Management Accountants* has been developed as a guide to management accountants in their duties. Codes of ethical conduct also exist on the international level that control cross border activities.

REVIEW AND SELF TEST

Questions and Exercises

True or False

For each of the following statements, enter a T or F in the blank to indicate whether the statement is true or false.

____ 1. Managerial accounting is equally as concerned with providing information to stockholders as it is with providing information to managers.

____ 2. An organization consists of buildings, equipment, and other physical assets dedicated to a common purpose.

____ 3. The steps to be followed in implementing an organization's objectives are set down through strategic planning.

____ 4. Strategic planning is sometimes referred to as setting policy.

____ 5. "Controlling" refers primarily to setting maximum limits on spending in an organization.

4 Managerial Accounting—A Perspective

____ 6. The plans of management are expressed in quantitative form as budgets.

____ 7. In practice, the planning, organizing, and controlling functions of management are kept separate from the decision-making function.

____ 8. A performance report is a device for obtaining feedback for the manager.

____ 9. Staff departments in an organization generally have direct authority over line departments.

____ 10. Profit-oriented organizations and service-oriented organizations share many basic similarities.

____ 11. The information needs of management are all supplied through the accounting system.

____ 12. Managerial accounting focuses more on the segments of an organization than on the organization as a whole.

____ 13. International competition is decreasing as firms become more content to focus on "home" markets.

____ 14. Ethical problems are generally confined to the professional level such as with lawyers, politicians and other professionals.

____ 15. Codes of ethical conduct exist for professional groups and also exist on the international level.

Multiple Choice

Choose the best answer or response by placing the identifying letter in the space provided.

____ 1. The work of management: a) consists only of strategic planning; b) is clearly explained by the organization chart; c) follows a well-defined cycle; d) responses *a*, *b*, and *c* are all correct; e) none of these.

____ 2. Staff positions: a) are not shown on the organization chart; b) are superior in authority to line positions; c) are equal in authority to line positions; d) none of these.

____ 3. Organizations: a) share only one basic similarity—the need for information; b) share similarities only with other organizations that have like objectives; c) are divided into three basic groups; d) responses *b* and *c* are both correct; e) none of these.

____ 4. The controller: a) has delegated authority over line departments; b) occupies a line position; c) has little influence in the decision-making process; d) none of these.

____ 5. Managerial accounting: a) is governed by generally accepted accounting principles; b) places more emphasis on precision of data than does financial accounting; c) draws heavily from other disciplines; d) is geared primarily to the past rather than to the future; e) none of these.

____ 6. Financial and managerial accounting are similar in that: a) both are mandatory; b) both rely on the same accounting information system; c) both focus on providing data for internal uses; d) none of these.

____ 7. In a decentralized organization, decisions are made: a) only by top management; b) only by managers occupying staff positions; c) at the lowest managerial level possible in the organization; d) none of these.

____ 8. In large part, "control" in an organization is achieved through: a) decentralization of decision-making authority; b) obtaining feedback on how well the organization is moving toward its objectives; c) preparing an organization chart which shows both line and staff functions; d) none of these.

Complete the Statements

Fill in the necessary words to complete the following statements.

1. An _____ can be defined as a group of people working together for some common purpose.

2. The implementation of an organization's objectives is known as _____.

3. Essentially, the manager carries out four broad functions in an organization: 1 _____, 2 _____ and _____, 3 _____, and 4 _____.

4. In _____, the manager outlines the steps to be taken in moving the organization toward its objectives.

5. Control, in large part, is a function of obtaining useful _____ on how well the organization is doing.

6. In _____ the manager attempts to make rational choices between alternatives.

7. The work of management can be summarized very nicely in a model known as the _____ and _____ cycle.
8. Responsibility relationships between managers are shown on the _____.
9. A _____ department is one whose activities are directly related to the basic objectives of the organization.
10. Strategic planning in an organization is carried out by persons occupying _____ positions.
11. The accounting department has _____ authority over line departments in accounting matters.
12. The plans of management are often expressed as _____.
13. The manager generally is most interested in _____ of information drawn from accounting records, rather than in the details of transactions.
14. As compared to _____ accounting, _____ accounting places much more emphasis on the future.
15. _____ accounting draws heavily from other disciplines.
16. _____ means the delegation of decision-making authority throughout an organization by allowing managers at various operating levels to make key decisions relating to their area of responsibility.

Exercise

1.1 Critical thought writing exercise: Managerial accounting information is sometimes described as a means to an end, whereas financial accounting information is described as an end in itself. In what sense is this true?

Chapter 1

Answers to Questions and Exercises

True or False

- | | | | |
|------|--|-------|---|
| 1. F | The central purpose of managerial accounting is to provide information to managers. The information needs of stockholders are provided through financial accounting. | 10. T | There are many similarities among organizations, as discussed in the text. |
| 2. F | An organization consists of people, not physical assets. | 11. F | Only a portion of the information needs of management are provided through the accounting system; information also comes from economists, marketing specialists, and others. |
| 3. T | The purpose of strategic planning is to outline the steps that must be followed in achieving an organization's objectives. | 12. T | The primary concern of managerial accounting is with the segments of an organization, rather than with the organization as a whole. |
| 4. T | As strategic planning takes place, policy is set for the organization. | 13. F | International competition is increasing as trade barriers continue to fall. Firms are being forced to become "world class," rather than to stay at home. |
| 5. F | Controlling refers to the steps that must be taken to ensure that each part of the organization follows the plan that was outlined in the planning stage. | 14. F | Ethical problems occur at all levels in an organization. These include the corporate level, the intracorporate level, the intercorporate level, the professional level, and the personal level. |
| 6. T | A budget is a plan of action expressed in quantitative terms. | 15. T | Codes of ethical conduct are widely used. A code title, Guideline on Ethics for Professional Accountants is designed for international use. |
| 7. F | Decision making is an integral part of the planning, organizing, and controlling functions. | | |
| 8. T | Feedback comes in many forms, one of which is a performance report. | | |
| 9. F | Staff departments provide support or services for line departments, but do not have direct authority over them. | | |

Multiple Choice

- | | | | |
|------|---|------|--|
| 1. c | The work of management follows the planning and control cycle, which is illustrated in Exhibit 1-1. | 3. c | The three groups are: profit-oriented business enterprises; service-oriented agencies that are operated as nonprofit corporations; and service-oriented agencies that are created and controlled by governmental bodies. |
| 2. d | Staff positions (such as Accounting) do appear on the organization chart, but they are neither superior nor equal in authority to line positions. They serve the needs of line positions by providing essential services. | 4. a | The controller has delegated authority from top management to specify accounting and reporting requirements that the line departments must follow. |

- | | |
|---|---|
| <p>5. c Managerial accounting draws from the behavioral sciences, statistics, and economics, as well as from other disciplines.</p> <p>6. b Since it would be a waste of money to have two data collecting systems existing side by side, managerial accounting uses the data generated by the financial accounting system.</p> | <p>7. c The purpose of decentralization is to move all decisions to the lowest managerial level possible in an organization.</p> <p>8. b By obtaining feedback, management can see how well an organization is moving toward its objectives and thus control is maintained.</p> |
|---|---|

Complete the Statements

- | | |
|--|--|
| <p>1. organization</p> <p>2. strategic planning</p> <p>3. planning, organizing, directing, controlling, decision making</p> <p>4. planning</p> <p>5. feedback</p> <p>6. decision making</p> <p>7. planning, control</p> <p>8. organization chart</p> | <p>9. line</p> <p>10. line</p> <p>11. delegated</p> <p>12. budgets</p> <p>13. summaries</p> <p>14. financial, managerial</p> <p>15. Managerial</p> <p>16. Decentralization</p> |
|--|--|

Exercise

1-1. The purpose of financial accounting is to produce financial statements for stockholders and others. Once the financial statements have been produced, therefore, the purpose has been accomplished. Thus, the information is an end in itself. On the other hand, managerial accounting information is produced to help management in its planning, control, and decision making responsibilities. Thus, it functions as a means to accomplish these ends.

Chapter 2

Cost Terms, Concepts, and Classifications

Chapter Study Suggestions

This chapter introduces general cost terms which will be used throughout the remainder of the book. The chapter also gives a broad outline of the flow of costs in a manufacturing company. (Cost flow is treated in more depth in Chapter 3.) As you read the chapter, note each new term that is introduced and be sure you understand its meaning. Pay particular attention to the concepts of product cost, variable cost, fixed cost, direct cost, indirect cost, and differential cost.

Exhibit 2-3 presents the *schedule of cost of goods manufactured*. The format of this schedule should be put to memory, as well as the material in Exhibits 2-5 and 2-6. Learning the material in these exhibits will help you for Chapter 3 and also lay a foundation for many chapters which follow.

CHAPTER HIGHLIGHTS AND STUDY GUIDE

A. Manufacturing costs are those costs involved in the manufacture of units of product. Manufacturing costs can be subdivided into three basic elements: direct materials, direct labor, and manufacturing overhead.

1. Direct materials include those materials which become an integral part of a finished product, and which can be conveniently traced into it.

a. An example of direct materials would be the steel used in manufacturing a file cabinet.

b. Small materials items, such as glue, would be treated as indirect materials and added to manufacturing overhead.

2. Direct labor consists of those labor costs which are physically traceable to the creation of products in a "hands on" sense.

a. An example of direct labor cost would be the worker on an assembly line in a manufacturing plant.

b. Other labor costs, such as supervisors and janitors, are treated as indirect labor and added to manufacturing overhead.

c. Direct materials and direct labor together are known as prime cost.

3. Manufacturing overhead consists of all costs of manufacturing except direct materials and direct labor.

a. Synonymous terms for manufacturing overhead are: factory overhead, overhead, factory burden, indirect manufacturing costs, and manufacturing expense.

b. Direct labor and manufacturing overhead together are known as conversion cost.

B. Nonmanufacturing costs are those costs involved with selling and administrative activities.

1. Selling costs include all costs associated with the marketing of finished products, including commissions, depreciation of delivery equipment, depreciation of finished goods warehouses, and advertising.

2. Administrative costs include all costs associated with the general administration of an organization, including secretarial salaries, depreciation of general administrative facilities and equipment, and executive compensation.

C. The costs of an organization can also be classified as being either product costs or period costs.

1. Product costs and manufacturing costs are synonymous terms. Thus, product costs include direct materials, direct labor, and manufacturing overhead.

2. Period costs and nonmanufacturing costs are synonymous terms. Thus, period costs include selling costs and administrative costs.

D. The income statements and balance sheets prepared by manufacturing firms differ in important respects from those prepared by merchandising firms.

1. The income statement of a manufacturing firm contains an element termed "cost of goods manufactured." You should study Exhibit 2-3 in the text very carefully; it shows how the cost of goods manufactured is computed.

2. The balance sheet of a manufacturing firm contains three inventory accounts: Raw Materials, Work in Process, and Finished Goods. By contrast, the balance sheet of a merchandising firm contains only one inventory account—Merchandise Inventory.

a. Raw Materials consists of materials on hand which will be used in the manufacture of units of product.

b. Work in Process consists of units of product only partially completed at the end of a period.

c. Finished Goods consists of units of product which are completed and ready for sale to customers.

E. Manufacturing costs (direct materials, direct labor, and overhead) are also known as *inventoriable* costs.

1. The term inventoriable costs arises since direct materials, direct labor, and overhead go into Work in Process and Finished Goods, which are *inventory* accounts. Therefore, direct materials, direct labor, and overhead can end up on the balance sheet as part of these inventory accounts (as assets) if goods are either not completed or not sold at the end of a period.

2. You should study Exhibit 2-5 in the text with great care. It shows the conceptual flow of manufacturing costs through inventory accounts and the way these costs become an expense (cost of goods sold) on the income statement. *This is a key exhibit for Chapter 2.*

3. We can summarize manufacturing and non-manufacturing cost terms as follows:

<i>Synonymous Cost Terms</i>	<i>Costs Involved</i>
Manufacturing costs	Direct materials, direct labor, and manufactur- ing overhead
Product costs	
Inventoriable costs	
Nonmanufacturing costs	Selling and administrative expenses
Period costs	

F. For planning and control purposes, costs are classified as variable and fixed, direct and indirect, and controllable and noncontrollable.

1. Variable costs are those costs which vary, in total, in direct proportion to changes in the volume or level of activity within the relevant range. Variable cost behavior is illustrated in Exhibit 2-8.

a. Variable costs include, for example, direct materials, direct labor, commissions to salespersons, and cost of goods sold.

b. The relevant range is that range of activity within which the company normally operates and within which assumptions relative to cost behavior are valid.

2. Fixed costs are those costs which remain constant in total amount regardless of changes in the level of activity. They include, for example, depreciation, supervisory salaries, and rent. Fixed cost behavior is illustrated in Exhibit 2-8.

3. The terms direct cost and indirect cost have no meaning unless one first identifies some object or segment to which the costs are to be related.

a. A direct cost is a cost which can be obviously and physically traced to the object or segment under consideration. For example, if the object under consideration is a unit of product, then the materials and labor involved in its manufacture would both be direct

b. An indirect cost is a cost which must be allocated in order to be assigned to the object or segment under consideration. For example, if the object under consideration is a unit of product, then the manufacturing overhead involved in its manufacture would be an indirect cost.

4. A cost is considered to be controllable at a particular level of management if that level has power to authorize the cost. If a manager has no power to authorize a particular cost, then the cost is not considered to be controllable by that manager.

G. The difference in costs between alternatives is known as differential cost. Differential costs include both cost increases and cost decreases.

1. Cost increases are also known as incremental costs.

2. Cost decreases are also known as decremental costs.

3. Differential costs can be either variable or fixed.

H. An opportunity cost is the potential benefit that is lost or sacrificed when the selection of one course of action makes it necessary to give up a competing course of action.

1. Every alternative facing a manager has opportunity costs attached to it.

2. Opportunity costs are not recorded on the books of an organization. They simply represent those benefits which are lost through giving up some competing course of action.

I. A sunk cost is a cost which has already been incurred and which cannot be changed by any decision made now or in the future. Sunk costs are never differential costs in decision making.

Appendix A: Further Classification of Labor Costs

A. Labor costs can be broken down into five main categories: direct labor, indirect labor, idle time, overtime premium, and labor fringe benefits.

1. Direct labor has already been discussed. As mentioned earlier, it consists of those factory labor costs which can be physically traced to the creation of products in a "hands on" sense.

2. Indirect labor consists of those factory labor costs which are supportive or supervisory in nature. These would include the labor costs of supervisors, superintendents, custodians, maintenance persons, and others whose services are essential to factory operations, but who do not work directly on the product.

3. Idle time represents the costs of direct labor workers who are unable to perform their assignments due to material shortages, power failures, and the like. Idle time is treated as part of manufacturing overhead.

4. Overtime premium consists of any amount paid above an employee's base hourly rate.

a. For example, if the base rate is \$6 per hour and the employee is paid time-and-a-half for overtime, then the overtime premium would be \$3 per hour (*not* \$9 per hour).

b. Overtime premium is not charged to specific jobs, but rather is included as part of manufacturing overhead.

5. Labor fringe benefits include employment related costs paid by the employer, such as insurance programs, retirement plans, etc.

a. Many firms include *all* such costs as part of manufacturing overhead.

b. Other firms include only the labor fringe benefits relating to indirect labor as part of manufacturing overhead and treat those benefits relating to direct labor as added direct labor costs.