

PART ONE

ACCOUNTING THEORY

—CONCEPTS AND FRAMEWORK

CHAPTER 1

ACCOUNTING: THE BASIS FOR DECISIONS

Accounting is a “language”, a language of business for general-purpose in the world. It is widely used to describe all types of business activity. Accounting is an information system designed to record, classify and summarize systematically significant financial and other economic information about business firms, and analyses and interprets its results, with monetary unit as its main criterion. Accounting as an information system provides necessary information to the management and those outside the firm to aid them in their decision making.

1.1 Accounting: Information for Decision Making

The primary objective of accounting is to provide information that is useful for decision making purposes. We emphasize that accounting is not an end, but rather it is a means to an end. The final product of accounting information is the decision that is enhanced by the use of that information, whether the decision is made by owners, management, creditors, governmental regulatory bodies, labor unions, or the many other groups that have an interest in the financial performance of an enterprise.

Because accounting is widely used to describe all types of business activity, it is sometimes referred to as the language of business. Costs, prices, sales volume, profits, and return on investment are all accounting measurements. Investors, creditors, managers, and others who have a financial interest in an enterprise need a clear understanding of accounting terms and concepts if they are to understand and communicate about the enterprise. While our primary orientation in this text is the use of accounting information in business, from time to time we emphasize that accounting information is also used by governmental agencies, nonprofit organizations, and individuals in much the same manner as it is by business organizations.

1.1.1 Accounting from a User's Perspective

Many people think of accounting as simply a highly technical field practiced only by professional accountants. In reality, nearly everyone uses accounting information daily. Accounting information is the means by which we measure and communicate economic events. Whether you manage a business, make investments, or monitor how you receive and use your money, you are working with accounting concepts and accounting information.

Our primary goal in this book is to develop your ability to understand and use accounting information in making economic decisions. To do this, you need to understand the following:

- The nature of economic activities that accounting information describes.
- The assumptions and measurement techniques involved in developing accounting information.
- The information that is most relevant for making various types of decisions.

Figure 1—1 illustrates how economic activities flow into the accounting process. The accounting process produces accounting information used by decision makers in making economic decisions and taking specific actions. These decisions and actions result in economic activities that continue the cycle.

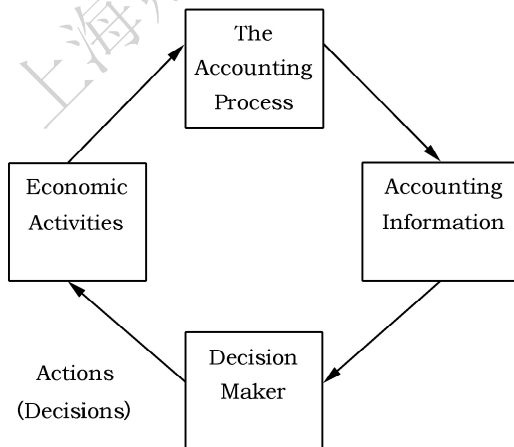


Figure 1—1

1.1.2 Types of Accounting Information

As there are many types of economic decisions, there are also many types of accounting information. The terms financial accounting, management accounting, and tax accounting often are used in describing three types of accounting information that are widely used in the business community.

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Financial Accounting

Financial accounting refers to information describing the financial resources, obligations, and activities of an economic entity (either an organization or an individual). Accountants use the term financial position to describe an entity's financial resources and obligations at a point in time and the term results of operations to describe its financial activities during the year.

Financial accounting information is designed primarily to assist investors and creditors in deciding where to place their scarce investment resources. Such decisions are important to society, because they determine which companies and industries will receive the financial resources necessary for growth.

Financial accounting information also is used by managers and in income tax returns. In fact, financial accounting information is used for so many different purposes that it often is called “general-purpose” accounting information.

Management Accounting

Management (or managerial) accounting involves the development and interpretation of accounting information intended specifically to assist management in operating the business. Managers use this information in setting the company's overall goals, evaluating the performance of departments and individuals, deciding whether to introduce a new line of products, and making virtually all types of managerial decisions.

A company's managers and employees constantly need information to run and control daily business operations. For example, they need to know the amount of money in the company's bank accounts; the types, quantities, and dollar amounts of merchandise in the company's warehouse; and the amounts owed to specific creditors. Much management accounting information is financial in nature but is organized in a manner relating directly to the decision at hand.

Tax Accounting

The preparation of income tax returns is a specialized field within accounting. To a great extent, tax returns are based on financial accounting information. However, the information often is adjusted or reorganized to conform with income tax reporting requirements.

The most challenging aspect of tax accounting is not the preparation of an income tax return, but tax planning. Tax planning means anticipating the tax effects of business transactions and structuring these transactions in a manner that will minimize the income tax burden. Because the focus of this text is financial accounting, and because tax

accounting is quite complex, we defer coverage of tax accounting subjects to subsequent accounting books.

1.2 Financial Accounting Information

The users of accounting information are diverse, but they may be categorized as external users or internal users. This distinction allows us to classify accounting into two fields—financial accounting and management accounting. That is, financial accounting information is for internal and external users; management accounting information is for internal users.

Financial accounting is an important subject for students who need only an introduction to the field of accounting, as well as students who will pursue accounting as a major and take many additional accounting courses. Financial accounting provides information about the financial resources, obligations, and activities of an enterprise that is intended for use primarily by external decision makers—investors and creditors.

1.2.1 Internal Users of Accounting Information

Users of financial accounting information are both internal and external. Among the wide range of users of financial accounting are management of firms, investors, creditors, governmental organizations, trade unions, consulting institutions and so on.

Internal users of accounting information are management and employees of firms, such as presidents, managers, clients, workers and so on. They are directly involved in the day-to-day operations of that enterprise.

The management of a business may use the information in answering the questions: What are the resources of the firm? What debts does it owe? Will the firm be able to meet its own debts as they mature? Are amounts owed by customers being collected rapidly? Is too little or too much inventory being kept? Are expenses too large in relation to sales? Does it have earnings? Should the plant be expanded? Should a new production line and new product be introduced?

Internal users of accounting information use more the information of management accounting to make operating decisions.

1.2.2 External Users of Accounting Information

What do we mean by external users and who are they? External users of accounting

information are individuals and other enterprises that have a financial interest in the reporting enterprise, but that are not involved in the day-to-day operations of that enterprise.

External users of financial information may include the following:

- Owners
- Creditors
- Labor unions
- Governmental agencies
- Suppliers
- Customers
- Trade associations
- General public

Each of these groups of external decision makers requires unique information to be able to make decisions about the reporting enterprise. For example, customers who purchase from the enterprise need information to allow them to assess the quality of the products they buy and the faithfulness of the enterprise in fulfilling warranty obligations. Governmental agencies may have an interest in whether the enterprise meets certain governmental regulations that apply. The general public may be interested in the extent to which the reporting enterprise is socially responsible (for example, does not pollute the environment).

Providing information that meets the needs of such a large set of diverse users is difficult, if not impossible, in a single set of financial information. Therefore, external financial reporting is directed toward the information needs of two primary groups—investors and creditors. As you will soon see, investors are individuals and other enterprises that own the reporting enterprise. Creditors, on the other hand, are individuals and other enterprises that have provided credit to the reporting enterprise. For example, a commercial bank may have loaned money to the reporting enterprise, or a supplier may have permitted the reporting enterprise to purchase goods and to pay for those goods later. Our assumption is that by meeting the financial information needs of investors and creditors, we provide information that is also useful to many other users of financial information.

For these reasons, we sometimes refer to investors and creditors as the primary external financial information users. When you see references like these, keep in mind that we are talking about both current investors and creditors and those individuals and other

enterprises that may become investors and creditors in the future.

1.2.3 Objectives of External Financial Reporting

As we mentioned above, financial accounting information is designed primarily for those external users to make decisions. Thus, objectives of external financial reporting are to provide useful information for making decisions.

The external decision makers may use the financial accounting information to understand the operation performance and financial position of enterprise.

Grantors of credit such as creditor-banks, wholesale houses and manufacturers may use accounting information in answering such questions as: Are the customer's earning prospects good? What is his debt-paying-ability? Has he paid his debts promptly in the past? Should he be granted additional credit?

If you had invested in a company, or if you had loaned money to a company, what would be your primary financial interest in the company? You probably would be interested in two things, both of which make up the company's cash flow prospects. You would be interested in the return to you at some future date of the amount you had invested or loaned. We refer to this as the return of your investment. In addition, you would expect the company to pay you something for the use of your funds, either as an owner or a creditor. We refer to this as the return on your investment. Information that is useful to you in making judgments about the company's ability to provide you with what you expect in terms of the return of your funds as well as a return on your funds while you do not have use of them is what we mean by information about cash flow prospects. Investors make wide use of accounting data in investment decisions.

Governmental units use accounting information in regulating and supervising the firm and collecting all kinds of taxes. Trade unions may use accounting information as important references in negotiating working conditions and wage agreements. Consulting institutions deposit necessary accounting information for preparation for future use.

1.3 Profession Fields of Accounting

The fields of accounting professions are divided into three broad areas: public accounting, private accounting and accounting for governments and nonprofit organizations.

1. 3. 1 Public Accounting

Public accountants who are similar to doctors or lawyers can offer their accounting service to the public on a fee basis. Public accounting firms are organizations in which public accountants mainly work. Most of the people in the public accounting are licensed as certified public accountants (CPAs). Thus, Public accounting firms often are called CPA firms. These firms vary in size from one person practice to large, international organizations with several thousand professional accountants. Almost all countries in the world have promulgated laws for the CPAs.

The primary services offered by CPA firms include auditing, income tax services, and management advisory services.

Auditing

The principal function of CPAs is auditing. Auditing is an analytical process applied to everyday business situations. Hence it is closely related to existing business practices. The CPAs study the company's accounting records and gather other evidence regarding every item in the financial statements through the investigation. The CPAs' signature is treated by users of company accounts as an important assurance of the quality of accounting information.

Income Tax Services

An important element of decision making by business executives is consideration of the income tax consequences of an alternative course of action. The CPA is often called upon for "tax planning", which will help the business executives to hold the company's income taxes to a minimum amount. To render tax services, the CPA must have extensive knowledge of tax statutes, regulations, and court decisions, as well as a thorough knowledge of accounting.

Management Advisory Services

Many CPA firms offer their clients a wide range of management consulting services. The services include as follows: What are the resources of the business? What debts does it owe? Will the business be able to meet these debts as they mature? Are accounts owed by customers collected properly? Is too little or too much inventory being kept? Are expenses too large in relation to sales? Does the business earn profit properly? Should the plant be expanded? Should a new production line or new product be introduced? Business executives often seek their CPAs' advice on a wide range of problems from the illustration of accounting information to business decision.

1.3.2 Private Accounting

The scope of activities and duties of private accountants varies widely. Private accountants are frequently called management accountants. If they are employed by a manufacturer, they may be referred to as industrial or cost accountants. Other not-for-profit agencies also employ accountants.

The accountants in a private business, large or small, must record transactions and prepare periodic financial statements from accounting records. The chief accounting officer in a medium-sized or large business is usually called the controller, who manages the work of the accounting staff. As a part of the top management team, the controller is charged with the task of running the business, setting its objectives, and seeing that these objectives are met.

The work of the accountants in a private business mainly includes the following areas:

Design of Accounting Systems

Although the same basic accounting principles are applicable to all types of business, each enterprise requires an individually tailored financial information system. This system consists of accounting forms, records, instruction manuals, flow charts, computer programs, and reports to fit the particular needs of the business.

Cost Accounting

Accountants must know the cost of a particular product in order to make sound business decision. Calculating and controlling cost is vital to the efficient management of a business. The phase of accounting particularly concerned with collecting and interpreting cost data is called cost accounting.

Internal Control and Auditing

A key responsibilities of the manager of a business is to keep its operation under control. Internal control is a management priority, not merely a part of the accounting system. Thus it not a responsibility only of accountants but of managers as well. To make internal control effective, internal auditing in a business is very important. Most large corporations maintain staff of internal auditors with the responsibility of evaluating the efficiency of operations and determining whether company policies are being followed consistently in all divisions of the corporation.

1. 3. 3 Accounting for Governments and Nonprofit Organizations

Many accountants work in government offices or for nonprofit organizations. These two areas are often joined together under the term governmental accounting and nonprofit accounting. All of these accountants like those in private businesses, work on a salary basis.

Most enterprises face government regulation. Government officials rely on information to help them direct the affairs of their agencies just as do the executives of corporations.

Many governmental accounting problems are similar to those applicable to private business. In other respects, however, accounting for governmental affairs requires a somewhat different approach because the objective of earning a profit is absent from public affairs.

ACCOUNTING ETHIC

Extending Your Knowledge

A characteristic common to all recognized professions, including medicine, law, and accounting, is the need for competent individual practitioners to solve problems using their professional judgment and applying strong ethical standards. In many cases, accountants' ethical behavior is directly affected by the effect of accounting work.

Integrity in accounting information requires honesty and a strong commitment to ethical conduct—doing the right thing. For a professional accountant, ethical behavior is just as important as competence. However, it is far more difficult to test or enforce.

Many professional organizations have codes of ethics or professional conduct that direct the activities of their members. The AICPA, for example, has a code of professional conduct that expresses the accounting profession's recognition of its responsibilities to the public, to clients, and to colleagues. The principles included in the code guide AICPA members in the performance of their professional responsibilities. This code expresses the basic tenets of ethical and professional behavior and has been codified into law in many states.

Key words, phrases, and special terms

accounting	会计, 会计学
enterprise	企业
decision making	制定决策
public accounting	公共会计
certified public accountants	注册会计师
(CPAs)	所得税
income tax	现金流预测
cash flow prospects	审计
auditing	成本会计
cost accounting	内部控制
internal control	私人会计(企业会计)
private accounting	政府会计
governmental accounting	非营利组织
nonprofit organizations	税务筹划
tax planning	高级管理人员
executives	职业判断力
professional judgment	道德准则
ethical standard	完整性, 诚信(正直)
integrity	美国注册会计师协会
AICPA	

MULTIPLE-CHOICE QUESTIONS

1. Which of the following does not describe accounting?
 - a. Language of business.
 - b. An end rather than a means to an end.
 - c. Useful for decision making.
 - d. Used by business, government, nonprofit organizations, and individuals.
2. To understand and use accounting information in making economic decisions, you must understand:
 - a. The nature of economic activities that accounting information describes.

- b. The assumptions and measurement techniques revolved in developing accounting information.
 - c. Which information is relevant for a particular type of decision that is being made.
 - d. All of the above.
3. External users of financial accounting information include all of the following except:
- a. Investors.
 - b. Labor unions.
 - c. Line managers.
 - d. General public.
4. Objectives of financial reporting to external investors and creditors include preparing information about all of the following except:
- a. Information used to determine which products to produce.
 - b. Information about economic resources, claims to those resources, and changes in both resources and claims.
 - c. Information that is useful in assessing the amount, timing, and uncertainty of future cash flows.
 - d. Information that is useful in making investment and credit decisions.
5. Which of the following are important factors in ensuring the integrity of accounting information?
- a. Institutional factors, such as standards for preparing information.
 - b. Professional organizations, such as the American Institute of CPAs.
 - c. Competence, judgment, and ethical behavior of individual accountants.
 - d. All of the above.

EXERCISES

1. You recently invested \$12 000 of your savings in a security issued by a large company. The security agreement pays you 7 percent per year and has a maturity two years from the day you purchased it. What is the total cash flow you expect to receive from this investment, separated into return on your investment and the return of your investment?
2. Divide into groups as instructed by your professor and discuss the following:

a. How does the description of accounting as the “language of business” relate to accounting as being useful for investors and creditors?

b. Explain how the decisions you would make might differ if you were an external investor or member of an enterprise’s management team.

CASES

1. A friend learns that you are taking an accounting course. Knowing that you do not plan a career in accounting, the friend asks you why you are “wasting your time”. Explain to the friend how you and your friends will use accounting information in

- a. Your personal life.
- b. The business life of your friend, who plans to be a farmer.
- c. The business life of another friend, who plans a career in sales.

2. Ethical conduct and professional judgment each play important roles in the accounting process.

a. In general terms, explain why it is important to society that people who prepare accounting information act in an ethical manner.

b. Identify at least three areas in which accountants must exercise professional judgment, rather than merely relying on written rules.

CHAPTER 2

THEORETICAL FRAMEWORK UNDERLYING FINANCIAL ACCOUNTING

Accounting practice needs certain guidelines to action. Accounting theory provides the rationale or justification for accounting practice. The structure of accounting theory rests on foundation of basic concepts and assumptions that are very broad, few in number, and derived from accounting practice.

The principles of accounting are unlike the principles of the natural sciences and mathematics, because they cannot be derived from or proved by the laws of nature. Accounting principles cannot be discovered; they are created, developed, or decreed. Accounting principles are supported and justified by intuition, authority, and acceptability. Because it is difficult to substantiate accounting principles objectively or by experimentation, as a result, accounting principles rest upon their general recognition and acceptance, which depend upon such criteria as usefulness, relevance, reliability, and cost-benefit and materiality considerations.

2.1 Nature of a Theoretical Framework

A theoretical framework, we also call it a conceptual framework, is “a coherent system of interrelated objectives and fundamentals that can lead to consistent standards and that prescribes the nature, function, and limits of financial accounting and financial statements”.

Why is a conceptual framework necessary? Because this framework should increase financial statement users’ understanding of and confidence in financial reporting, and it should enhance comparability among companies’ financial statements. New and emerging practical problems should be more quickly soluble by reference to an existing framework of basic theory.

Figure 2—1 provides an overview of the conceptual framework.

At the first level, the objectives identify the goals and purposes of accounting and are the building blocks for the conceptual framework.

At the second level are the qualitative characteristics that make accounting information useful and definitions of the elements of financial statements (assets, liabilities, and so on).

At the final or third level are the measurement and recognition concepts that accountants use in establishing and applying accounting standards. These measurement and recognition concepts encompass the use of assumptions, principles, and constraints that describe the present reporting environment.

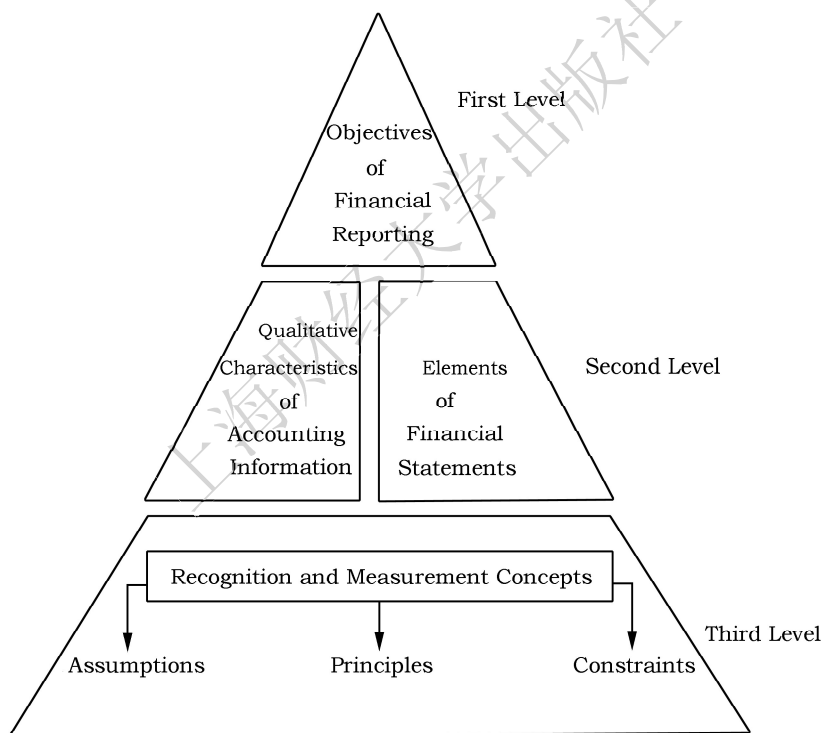


Figure 2—1 A Conceptual Framework for Financial Reporting

2.2 First Level: Basic Objectives

The objectives of financial reporting are to provide information that is

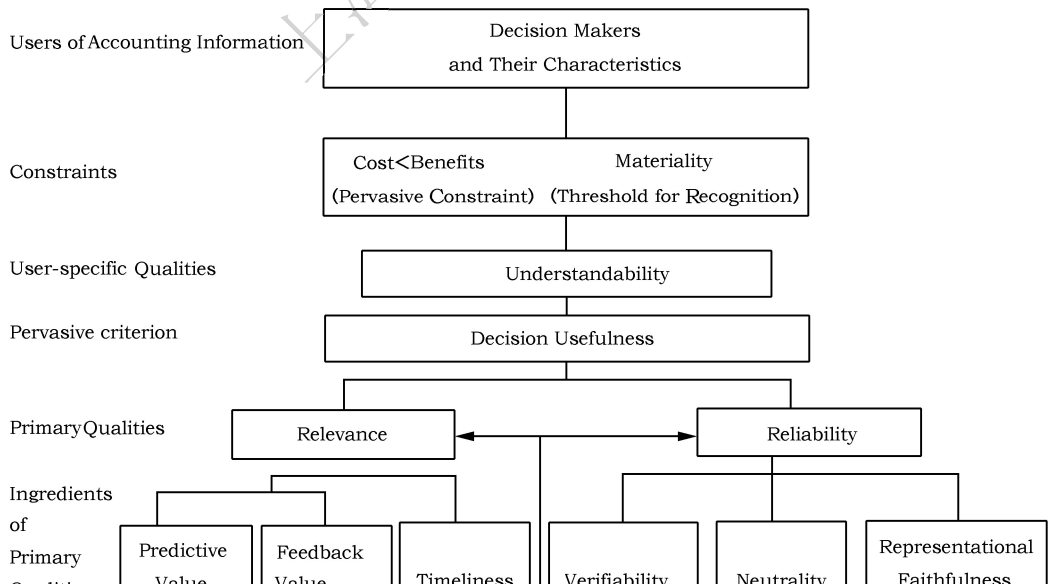
- (1) useful to those making investment and credit decisions who have a reasonable understanding of business and economic activities;
- (2) helpful to present and potential investors and creditors and other users in assessing the amounts, timing, and uncertainty of future cash flows; and
- (3) about economic resources, the claims to those resources, and the changes in them.

2.3 Second Level: Fundamental Concepts

The objectives (first level) are concerned with the goals and purposes of accounting. Later, we will discuss the ways these goals and purposes are implemented (third level). Between these two levels it is necessary to provide certain conceptual building blocks that explain the qualitative characteristics of accounting information and define the elements of financial statements. These conceptual building blocks form a bridge between the why of accounting (the objectives) and the how of accounting (recognition and measurement).

2.3.1 Qualitative Characteristics of Accounting Information

The characteristics may be viewed as a hierarchy, as illustrated in Figure 2-2 below.



2.3.2 Elements of Financial Statements

Assets

Probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events.

Liabilities

Probable future sacrifices of economic benefits arising from present obligations of a particular entity to transfer assets or provide services to other entities in the future as a result of past transactions or events.

Equity

Residual interest in the assets of an entity that remains after deducting its liabilities. In a business enterprise, the equity is the ownership interest.

Revenue

Inflows or other enhancements of assets of an entity or settlement of its liabilities (or a combination of both) during a period from delivering or producing goods, rendering services, or other activities that constitute the entity's ongoing major or central operations.

Expenses

Outflows or other using up of assets or incurrence of liabilities (or a combination of both) during a period from delivering or producing goods, rendering services, or carrying out other activities that constitute the entity's ongoing major or central operations.

Net Income(or Net Loss)

The result of matching revenue with expenses. When revenue exceeds expenses, net income occurs, otherwise net loss occurs.

2.4 Third Level: Recognition and Measurement Concepts

The accounting profession continues to use these concepts as operational guidelines, which we have chosen to identify as basic assumptions, principles, and constraints. These concepts serve as guidelines or aids in developing rational responses to controversial financial reporting issues.

2. 4. 1 Basic Assumptions

Four basic assumptions underlie the financial accounting structure: (1) accounting entity, (2) going concern, (3) monetary unit, and (4) periodicity.

Accounting Entity Assumption

A major assumption in accounting is that economic activity can be identified with a particular unit of accountability. In other words, the activity of a business enterprise can be kept separate and distinct from its owners and any other business unit. If there were no meaningful way to separate all of the economic events that occur, no basis for accounting would exist.

Under this concept, for accounting purposes, all kinds of business concerns are conceived and treated as a separate entity, separate and distinct from its owners and from other concerns. Either the transactions or the assets of a concern should not include those of the owner or owners. As for the transactions between the concern and the owners in accounting procedures, they should be treated as those with other concerns. As a result, all the accounting records and reports should be made by a concern as an independent entity rather than by owners personally.

Going Concern Assumption

Most accounting methods are based on the assumption that the business enterprise will have a long life. Experience indicates that, in spite of numerous business failures, companies have a fairly high continuance rate. Although accountants do not believe that business firms will last indefinitely, they do expect them to last long enough to fulfill their objectives and commitments.

A balance sheet is prepared under the assumption that the concern for which the statement is made will continue in operation, so far as going concern the assets used in carrying on its operations are not for sale. Their current market values are not relevant and need not be shown. Also, without a sale, their current market values usually can not be objectively established as is required by the “objectivity principle”.

Monetary Unit Assumption

Accounting is based on the assumption that money is the common denominator by which economic activity is conducted, and that the monetary unit provides an appropriate basis for accounting measurement and analysis. This assumption implies that the monetary unit is the most effective means of expressing to interested parties changes in capital and exchanges of goods and services. The monetary unit is relevant, simple, univer-

sally available, understandable, and useful. Application of this assumption is dependent on the even more basic assumption that quantitative data are useful in communication economic information and in making rational economic decisions.

Periodicity Assumption

The most accurate way to measure the results of enterprise activity would be to measure them at the time of the enterprise's eventual liquidation. Business, government, investors, and various other user groups, however, cannot wait indefinitely for such information. Accountants must provide financial information periodically, so that all users make their decisions upon the information.

The periodicity or time period assumption simply implies that the economic activities of an enterprise can be divided into artificial time periods of equal length. These time periods vary, but the most common are monthly, quarterly, and yearly.

2.4.2 Basic Principles of Accounting

There are four basic principles of accounting that are used to record transactions: (1) Accrual-basis, (2) historical cost, (3) revenue recognition, (4) matching, and (5) full disclosure.

Accrual-basis Principle

In accrual-basis accounting, an accountant recognizes the impact of a business transaction as it occurs. When the business performs a service, makes a sale, or incurs an expense, the accountant must enter the transaction into the journals, whether or not cash has been received or paid. Accrual-basis accounting can provide more complete information than cash-basis accounting does, which is very important for decision-makers.

Historical Cost Principle

Traditionally, preparers and users of financial statements have found that cost is generally the most useful basis for accounting measurement and reporting. Under the cost principle, all goods and services purchased by an enterprise are recorded at acquisition cost and appear on financial statement at cost. This is often referred to as the historical cost principle.

The Realization Principle

The realization principle means that revenue are usually measured in which they occur, rather than in the period in which they are collected. In other words, this is the period in which goods are shipped or services are rendered, in which revenue is said to

be realized.

Matching Principle

Matching principle requires that revenues and expenses be matched. It is well recognized that a business incurs expenses in order to earn revenues. The revenues earned are the results of the expenses paid. Consequently it is only proper that expenses be matched with the revenues they helped to produce.

In recognizing expenses, accountants attempt to follow the approach of “let the expense follow the revenue”. Expenses are recognized not when wages are paid, or when the work is performed, or when a product is produced, but when the work (service) or the product actually makes its contribution to revenue. Thus, expense recognition is tied to revenue recognition. This practice is referred to as the matching principle because it dictates that efforts (expenses) be matched with the revenues whenever it is reasonable and practicable to do so.

Full Disclosure Principle

Under this principle, it is held that financial statements and their accompanying notes should disclose fully and completely all relevant data of material nature relating to the financial position of the company.

In deciding what information to report, accountants follow the general practice of providing information that is of sufficient importance to influence the judgment and decisions of an information user.

2.4.3 Constraints

In providing information with the qualitative characteristics that make it useful, two overriding constraints must be considered: (1) the cost-benefit relationship and (2) materiality. Two other less dominant yet important full disclosures that are part of the reporting environment are industry practices and conservatism.

Cost-benefit Relationship

Too often, users assume that information is a cost free commodity. But preparers and providers of accounting information know that it is not. The cost of providing the information must be weighed against the benefits that can be derived from using the information. Obviously the benefits should exceed the costs.

Materiality

Accountants must consider the relative importance of any transactions. An item is material if its inclusion or omission would influence or change the judgment of a reason-

able person. It is immaterial and, therefore, irrelevant if its inclusion or omission would have no impact on a decision maker. In short, it must make a difference or it need not be disclosed. The point involved here is one of relative size and importance.

Conservatism

Conservatism holds that accountants should be conservative in their selection of procedures—valuation of assets and determination of revenues, choosing those that is lower among several alternatives. It means: when in doubt choose the solution that will be least likely to overstate assets and income. The financial positions can be presented reasonably and the income amount be calculated correctly if the principle of conservatism is applied properly.

INDUSTRY PRACTICE

Extending Your Knowledge

Occasionally, accounting principles are not followed in an industry because adherence to them would generate misleading or unnecessary information. So, another practical consideration, which sometimes requires departure from basic theory, is the peculiar nature of some industries and business concerns. For example, in the west, banks often report certain investment securities at market value because these securities are traded frequently, and many believe a cash equivalent price provides more useful information. In the public utility industry, non-current assets are reported first on the balance sheet to highlight the industry's capital-intensive nature. Agricultural crops are often reported at market value because it is costly to develop accurate cost figures on individual crops. Such variations from basic theory are not many; yet they do exist, and so, whenever we find what appears to be a violation of basic accounting theory, we should determine whether it is explained by some peculiar feature of the type of business involved before we criticize the procedures followed.

Key words, phrases, and special terms

theoretical framework
conceptual framework

理论框架
概念框架

accounting objective	会计目标
qualitative characteristics	质量特征
accounting elements	会计要素
measurement and recognition	确认与计量
asset	资产
liabilities	负债
equity	权益
revenue	收入
expense	费用
net income (net loss)	净利润或净亏损
accounting entity	会计主体
going concern	持续经营
monetary unit	货币计量
accrual-basis	权责发生制(应计制)
realization principle	实现原则
full disclosure	充分反映
materiality	重要性
constraint	约束
conservatism	稳健性
industry practices	行业实务

MULTIPLE-CHOICE QUESTIONS

1. An objective of financial reporting is to:

- Assess the adequacy of internal control.
- Provide information useful for investor decisions.
- Evaluate management results compared with standards.
- Provide information on compliance with established procedures.

2. A publicly held corporation is required to have its financial statements audited by an independent external auditor. The three purposes of these financial statements are to provide useful information (1) for credit and investment decisions, (2) about the firm's resources, and (3) for

- Determining the impact of inflation.

- b. Long-lived asset replacements.
- c. Assessing market values of assets.
- d. Evaluating prospective cash flows.

3. The information reported in the statement of cash flows should help investors, creditors, and others to assess all of the following except the

- a. Amount, timing, and uncertainty of prospective net cash inflows of a firm.
- b. Company's ability to pay dividends and meet obligations.
- c. Company's ability to generate future cash flows.
- d. Management of the firm with respect to the efficient and profitable use of its resources.

4. A statement of financial position is intended to help investors and creditors

a. Assess the amount, timing, and uncertainty of prospective net cash inflows of a firm.

- b. Evaluate economic resources and obligations of a firm.
- c. Evaluate economic performance of a firm.
- d. Evaluate changes in the ownership equity of a firm.

5. According to the text, objectives of financial reporting by business enterprises,

- a. External users have the ability to prescribe information they want.
- b. Information is always based on exact measures.
- c. Financial reporting is usually based on industries or the economy as a whole.
- d. Financial accounting does not directly measure the value of a business enterprise.

6. The accounting system should be designed

a. To meet external reporting requirements.

b. To balance management information needs with the cost of obtaining that information.

- c. To eliminate fraud by accounting personnel.
- d. By persons not directly involved with the system, such as consultants.

7. If the going-concern assumption is no longer valid for a company,

- a. Land held as an investment would be valued at its liquidation value.
- b. All prepaid assets would be completely written off immediately.
- c. Total contributed capital and retained earnings would remain unchanged.
- d. The allowance for uncollectible accounts would be eliminated.

EXERCISE

On February 1, 2000, a computer software firm agrees to program to a software package. Twelve payments of \$10 000 on the first of each month are to be made, with the first payment March 1, 2000. The software is accepted by the client June 1, 2001. How much 2000 revenue should be recognized?

CASES

1. The realization principle determines when a business should recognize revenue. Listed next are three common business situations involving revenue. After each situation, we give two alternatives as to the accounting period (or periods) in which the business might recognize this revenue. Select the appropriate alternative by applying the realization principle, and explain your reasoning.

a. Airline ticket revenue: Most airlines sell tickets well before the scheduled date of the flight. (Period ticket sold; period of flight)

b. Sales on account: In June 2005, a San Diego-based furniture store had a big sale, featuring “No payments until 2006”. (Period furniture sold; periods that payments are received from customers)

c. Magazine subscriptions revenue: Most magazine publishers sell subscriptions for future delivery of the magazine. (Period subscription sold; periods that magazines are mailed to customers)

2. Assume you have recently completed your college degree with a major in accounting and have accepted a position on the accounting staff of a large corporation. In preparing for your first day on the job, your supervisor suggests that you become familiar with the basic accounting principles, and also know the code of ethics of the CPA.

Briefly explain what you learn as you study the code and how it might affect your behavior on your new job.

3. The concept of materiality is one of the most basic generally accepted accounting principle.

a. Briefly explain the concept of materiality. Is \$3 000 a “material” dollar amount? Explain.

b. Avis Car-rent Shop purchases a large number of cars each year for its rental

fleet. The cost of any individual car is immaterial to Avis, which is a very large corporation. Would it be acceptable for Avis to charge the purchase of cars for its rental fleet directly to expense, rather than to an asset account? Explain.

4. Using the search engine you are most comfortable with, identify at least five sources on the general topic of auditor independence. Write a brief memo to provide an update on the current status of the auditor independence standard-setting process.

(Note: You might find it useful to contrast the opinions expressed by any of the Big 4 CPA firms to those expressed by nonaccounting professionals.)

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PART TWO

ACCOUNTING INFORMATION

—RECORDING AND DISCLOSURE

CHAPTER 3

ACCOUNTING CYCLE

The accounting cycle is the sequence of accounting procedures used to record, classify, and summarize accounting information in financial reports at regular intervals and the procedures must be repeated in the same order during each accounting period. The accounting cycle begins with the initial recording of business transactions and concludes with the preparation of a complete set of formal financial statements. The accounting cycle generally consists of five special steps:

- (1) Analyzing business transactions and making accounting entries according to original documents.
- (2) Journalizing all transactions occurred, posting each journal entries to the appropriate ledger accounts and preparing an unadjusted trial balance.
- (3) Making end-of-period adjusting entries, journalizing and posting them in the ledger accounts and preparing an adjusted trial balance.
- (4) Making closing entries, journalizing and posting closing entries, and preparing an after-closing trial balance.
- (5) Preparing financial statements.

3.1 Double-entry Accounting

The mechanics of double-entry accounting are such that every transaction is recorded in the debit side of one or more accounts and in the credit side of one or more accounts with equal debits and credits. Such form of combination is called accounting entry. Where there are only two accounts affected, the debit and credit amounts are equal. If more than two accounts are affected, the total of the debit entries must equal the total of the credit entries. The double-entry accounting is used by virtually every business organization, regardless of whether the company's accounting records are main-

tained manually or by computer. By applying the double-entry accounting, accountants can locate many types of errors which might be made while maintaining accounting records. Nowadays, the double-entry accounting is almost used in the world widely.

3.1.1 Double-entry Rules

The double-entry accounting is based on the accounting equation:

$$\text{Assets} = \text{Liabilities} + \text{Owners' Equity}$$

It requires the recording of increases in assets to the debit sides of asset accounts; the recording of decreases to the credit sides. Increases in liabilities and owner's equity are to be recorded to credit side, decreases-debit side, since liabilities and owners' equity are the opposite to assets. The increases and decreases in all accounts would have to be recorded as follows:

Assets		=	Liabilities		+	Owner's Equity	
Debit for	Credit for		Debit for	Credit for		Debit for	Credit for
Increases	Decreases		Decreases	Increases		Decreases	Increases

Recording of accounting transactions under double-entry system may be formulated in the following four rules:

(1) Increases in assets are debited to asset accounts, consequently, decreases must be credited.

(2) Increases in liability and owners' equity items are credited to liability and owners' equity accounts, consequently, decreases must be debited.

(3) Revenues will eventually increase owners' equity and are credited in each case to a revenue account, decreases of revenue are debited in each case to a revenue account.

(4) Expenses will eventually decrease owners' equity and are debited in each case to an expense account, decreases of expense are credited in each case to an expense account.

3.1.2 An Illustration of Double-entry Accounting

The following is an illustration of accounting entries in a commercial enterprise—AB Co.

(1) AB Co. issued on Dec. 1, 2004 capital stock with a total of par value \$ 50 000 and sold for cash. The entry is:

Cash	\$ 50 000
------	-----------

Capital Stock	\$ 50 000
(2) Dec. 2, purchased for cash a piece of land as long-term investment	\$ 20 000.
Land	\$ 20 000
Cash	\$ 20 000
(3) Purchased on Dec. 3 office equipment for cash	\$ 10 000.
Office Equipment	\$ 10 000
Cash	\$ 10 000
(4) Purchased on Dec. 3 a lot of merchandise on account, amounting	\$ 120 000.
Merchandise Inventory	\$ 120 000
Accounts Payable	\$ 120 000
(5) Made sales of merchandise on account for \$ 162 000 on Dec. 4.	
Accounts Receivable	\$ 162 000
Sales	\$ 162 000
(6) Dec. 10, collection from customers \$ 140 000, \$ 120 000 of which cash, \$ 20 000—a one-month-period note, with 10.8% interest rate.	
Notes Receivable	\$ 20 000
Cash	\$ 120 000
Accounts Receivable	\$ 140 000
(7) Paid on Dec. 12 cash \$ 80 000 for accounts payable.	
Accounts Payable	\$ 80 000
Cash	\$ 80 000
(8) Dec. 15, paid cash \$ 1 600 for 2 months rent expenses in advance (from Dec. 16, 2004, to Feb. 15, 2005).	
Prepaid Rent	\$ 1 600
Cash	\$ 1 600
(9) Dec. 16, paid other expenses \$ 10 400 in cash.	
Other Expenses	\$ 10 400
Cash	\$ 10 400
(10) Dec. 18, paid employees' salaries \$ 32 000 for the first four weeks of this month (1~28 Dec.).	
Salary Expenses	\$ 32 000
Cash	\$ 32 000
(11) Dec. 20, Payment of cash dividend	\$ 4 000.
Dividends	\$ 4 000

Cash \$ 4 000

(12) Dec. 21, leased a part of land to S Co. with monthly rent \$ 300. On signing the contract received from this company two months rent \$ 600 in advance.

Cash \$ 600

Unearned Rent Income \$ 600

(13) Dec. 31, issued a one-month-period note \$ 40 000 for the payment of accounts payable.

Accounts Payable \$ 40 000

Notes Payable \$ 40 000

3.2 Journalizing and Posting

In practice, according to the double-entry accounting, accountants record transactions first in a journal, which is a chronological record of each business transaction in order of date. Since the journal is the accounting record in which transactions are first recorded, it is sometimes called the book of original entry. To record the entire effects of a business transaction in a journal in terms of debit and credit is referred as to making a journal entry or journalizing. After recording the above entries, the journal should be as follows.

Exhibit 3—1

AB COMPANY

JOURNAL

Date	Account Title & Explanation	Ref.	Debit	Credit
12. 1	Cash		\$ 50 000	
	Capital Stock			\$ 50 000
2	Land		\$ 20 000	
	Cash			\$ 20 000
3	Office Equipment		\$ 10 000	
	Cash			\$ 10 000
3	Purchases		\$ 120 000	
	Accounts Payable			\$ 120 000
4	Accounts Receivable		\$ 162 000	
	Sales			\$ 162 000
10	Cash		\$ 120 000	
	Notes Receivable		\$ 20 000	
	Accounts Receivable			\$ 140 000

Date	Account Title & Explanation	Ref.	Debit	Credit
12	Accounts Payable		\$ 80 000	
	Cash			\$ 80 000
15	Prepaid Rent		\$ 1 600	
	Cash			\$ 1 600

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(Continued)

Date	Account Title & Explanation	Ref.	Debit	Credit
16	Other Expenses		\$ 10 400	
	Cash			\$ 10 400
18	Salary Expenses		\$ 32 000	
	Cash			\$ 32 000
20	Dividends		\$ 4 000	
	Cash			\$ 4 000
21	Cash		\$ 600	
	Unearned Rent Income			\$ 600
31	Accounts Payable		\$ 40 000	
	Notes Payable			\$ 40 000
	Total		\$ 670 600	\$ 670 600

After the transaction has been recorded in the journal, the debit and credit changes in the individual accounts are entered in the corresponding ledger accounts, both in subsidiary ledger and general ledger accounts (details for explanation are here omitted) and then preparing an unadjusted trial balance. The trial balance proves the equality of the debit and credit entries in the company's accounting system. A trial balance is a two-column schedule listing the names and balances of all the accounts in the order in which they appear in the ledger, the debit balances are listed in the left-hand column and the credit balances in the right-hand column. The totals of the two columns should agree.

3.3 End-of-period Adjusting Entries

According to the accrual-basis accounting principle and the matching principle, all revenues earned and all expenses incurred during the same period must be reported regardless whether cash relating to revenues or expenses is received or paid. Therefore, it is necessary to make the adjusting entries at the end of an accounting period. Generally speaking, The company need to make the adjusting entries in the following aspects:

3.3.1 Accrued Revenues (or Accrued Assets)

Accrued revenues are revenues that have been earned but have not been recorded in the accounts. Including the fee for services that an attorney has provided but has not billed to the client at the end of the period, unbilled commissions by a travel agent, accrued interest on notes receivable, and accrued rent on property rented to others and so

on. In this situation, we should make adjusting entries to increase assets in debit and to increase revenues in credit.

(14) At the end of the year, AB Co. had already realized interest income \$ 120. The adjusting entry is:

Interest Receivable	\$ 120
Interest Income	\$ 120

3.3.2 Accrued Expenses(or Accrued Liabilities)

Accrued expenses or accrued liabilities are expenses that have been incurred but have not been recorded in the accounts. Including an accrued interest on notes payable at the end of a period, accrued utility expenses and taxes, amortization of deprecation and so on. In this situation, we should make adjusting entries to increase expenses in debit and to increase liabilities or accumulated depreciation in credit. For example, at the end of the year:

(15) The employees' salaries in AB Co. were paid up to Dec 28, so those from Dec. 29 to 31 have accrued on Dec. 31 and should be adjusted as follows:

Salary Expenses	\$ 4 000
Salary Payable	\$ 4 000

(16) The office equipment of AB Co. is estimated to be used for 10 years. The method for calculating depreciation is "Straight-line Method" or "Service-life Method". Suppose no scrap value can be drawn from that office equipment, then the depreciation amount for Dec. should be \$ 84:

$$\text{Annual depreciation amount} = \$ 10\,000 / 10 = \$ 1\,000$$

$$\text{Monthly depreciation amount} = \$ 1\,000 \div 12 = \$ 84$$

The accounting entry is as follows:

Depreciation Expenses	\$ 84
Accumulated Depreciation	\$ 84

(17) Suppose that AB Co. has no beginning inventory, it has ending inventory \$ 20 000. The entry is:

Cost of Goods Sold	\$ 120 000
Purchases	\$ 120 000
Merchandise Inventory	\$ 20 000
Cost of Goods Sold	\$ 20 000

3.3.3 Unearned Revenues

Unearned revenues are revenues that are recorded before and have become actual as time passed. This part of revenues must be assigned to the current period, in the period in which it realized.

(18) AB Co. received on Dec. 21 (unearned) rent income for two months \$ 600 (Dec. 21 2004 ~ Feb. 20, 2005). On Dec. 31 2004, ten day's rent revenue has realized and must be adjusted as real revenue of the current period. We should make adjusting entries to decrease liability in debit and to increase revenue in credit.

Unearned Rent Income	\$ 100
Rent Income	\$ 100

3.3.4 Prepaid Expenses

Prepaid Expenses are expenses that are paid before and have become actual expenses as time passed. Like unearned revenue, this part of prepaid expenses must be assigned to the current period—the period in which it realized. Including prepaid insurance, prepaid rent, office supplies and so on. In this situation, we should make adjusting entries to increase expenses in debit and to decrease asset in credit.

(19) AB Co. paid rent \$ 1 600 for two months beginning from Dec. 15, 2004. On Dec. 31, half month's rent expenses has realized and must be adjusted to the current period.

Other Expenses	\$ 400
Prepaid Rent	\$ 400

After the end-of-period adjusting entries have been made, we should post them to corresponding accounts and prepare the adjusted trial balance.

3.4 Work Sheet

Work Sheet includes the trial balance (before adjustment), adjusting entries, trial balance(after adjustment) and income statement and balance sheet (with a Dr. column and a Cr. column each). All the accounting items on the adjusted trial balance are divided into 2 groups, those on income statement and those on balance sheet and respectively copied in the right columns of the two statements involved in the Work Sheet. Then the formal income statement and balance sheet are to be prepared.

Work Sheet isn't a necessary step in the accounting cycle. It is an informal statement. However quite many concerns make the work sheet since it contains all the necessary items in one sheet and is helpful in making the financial statements. The work sheet is as exhibit 3-2:

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Item	Trial Balance		Adj. Entries		Adj. Trial Balance		Income St.		Balance Sheet	
	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.	Dr.	Cr.
Cash	\$ 12 600				\$ 12 600				\$ 12 600	
Notes Receivable	20 000				20 000				20 000	
Accounts Receivable	22 000				22 000				22 000	
Prepaid Rent	1 600			\$ 400	1 200				1 200	
Office Equipment	10 000				10 000				10 000	
Land	20 000				20 000				20 000	
Notes Payable		\$ 40 000				\$ 40 000				\$ 40 000
Unearned Rent Income		600	\$ 100			500				500
Capital Stock		50 000				50 000				50 000
Dividends	4 000				4 000				4 000	
Sales		162 000				162 000		\$ 162 000		
Purchases	120 000			120 000						
Salary Expenses	32 000		4 000		36 000		36 000			
Other Expenses	10 400		400		10 800		10 800			
Total	\$ 252 600	\$ 252 600								
Interest Receivable			120		120				120	
Interest Income				120		120		120		
Salary Payable				4 000		4 000				4 000
Rent Income				100		100		100		
Depreciation Expenses			84		84		84			84
Accumulated Depreciation										
Cost of Goods Sold			120 000		100 000		100 000			
Merchandise Inventory			20 000		20 000				20 000	
Total			\$ 144 704	\$ 144 704	\$ 256 804	\$ 256 804	\$ 146 884	\$ 162 220	\$ 109 920	\$ 94 584
Income Before Tax							15 336			15 336
							\$ 162 220	\$ 162 220	\$ 109 920	\$ 109 920

3.5 Closing Entry

The balance sheet accounts are called real or permanent accounts in the sense that they are not closed to a zero balance at the end of the accounting period. In contrast, the income statement accounts are called nominal or temporary accounts because they are closed out to a zero balance at the end of each accounting period. The income statement accounts are the revenue and expenses accounts. At the end of the period, the balance of each nominal account is closed to the account called “Income Summary” and in turn the net effect of the income summary (i. e. , net income or net loss) is transferred from “Income Summary” account to owners’ equity account. These transferring process is called “closing entries”. The process is to close the nominal accounts to a zero balance so they will be ready for reuse the next accounting period. For example, at the end of the year:

(20) Closing the revenue accounts to the Income Summary accounts.

Sales	\$ 162 000
Interest Income	120
Rent Income	100
Income Summary	\$ 162 220

(21) Closing the expenses accounts and the Cost of Goods Sold account.

Income Summary	\$ 146 884
Cost of Goods Sold	\$ 100 000
Salary Expenses	36 000
Depreciation Expenses	84
Other Expenses	10 800

(22) Closing the Income Summary to Retained Earning account.

Up to now, Income Summary account shows a credit balance \$ 15 336. This is the amount for calculating the income tax payable for the period. It must be transferred to Retained Earnings account.

Income Summary	\$ 15 336
Retained Earnings	\$ 15 336

(23) Suppose that the tax rate is 50%. The entry is:

Retained Earnings	\$ 7 668
Income Tax Payable	\$ 7 668

(24) Paying dividends is the distribution of Retained Earnings. Suppose the divi-

dends are \$4 000. The following entry should be made:

Retained Earnings	\$4 000
Dividends	\$4 000

Finally the Retained Earnings account shows a credit balance \$3 668—a net increase of stockholders’ equity. After closed, the “Income Summary” balance is zero.

After the revenue and expense accounts have been closed, it is desirable to prepare an after-closing trial balance that consists solely of balance sheet accounts. There is always the possibility that an error in posting the closing entries may have upset the equality of debits and credits in the ledger. The after-closing trial balance, or post-closing trial balance is prepared from the ledger. It gives assurance that accounts are in balance and ready for recording transactions in the new accounting period.

3.6 Preparing Financial Statements

The income statement and balance sheet can be prepared based on the adjusted trial balance in the work sheet or the balances in all the ledger accounts.

Exhibit 3—3 AB COMPANY Income Statement
For Year Ended December 31, 2004

Sales		\$162 000
Less: Cost of Goods Sold		
Purchases	\$120 000	
Beginning Inventory	0	
Ending Inventory	<u>20 000</u>	<u>100 000</u>
Gross Profits on Sales		\$62 000
Operating Expenses:		
Salary Expenses	\$36 000	
Depreciation Expenses	84	
Other Expenses	<u>10 800</u>	
Total		<u>46 884</u>
Operating Income		\$15 116
Other Income:		
Interest Income	\$120	
Rent Income	<u>100</u>	<u>220</u>
Net Income Before Tax		\$15 336
Income Tax Payable		<u>7 668</u>
Net Income After Tax		<u><u>7 668</u></u>

Exhibit 3—4

AB COMPANY Balance Sheet

December 31, 2004

<u>Assets</u>		
Cash		\$ 12 600
Notes Receivable		20 000
Accounts Receivable		22 000
Interests Receivable		120
Merchandise Inventory		20 000
Prepaid Rent		1 200
Office Equipment	\$ 10 000	
Less: Accumulated Depreciation	<u>84</u>	9 916
Land		<u>20 000</u>
Total Assets		<u>\$ 105 836</u>
<u>Liabilities</u>		
Notes Payable		40 000
Income Tax Payable		7 668
Salary Payable		4 000
Unearned Rent Income		<u>500</u>
Total Liabilities		52 168
<u>Owners' Equity</u>		
Capital Stock		50 000
Retained Earnings		3 668
Total Liabilities and Owners' Equity		<u>\$ 105 836</u>

ADJUSTMENT FOR TAXES IN UNPROFITABLE PERIODS

Extending Your Knowledge

What happens to income taxes expense when losses are incurred? In these situations, the company recognizes a “negative amount” of income taxes expense. The adjusting entry to record income taxes at the end of an unprofitable accounting period consists of a debit to Income Taxes Payable and a credit to Income Taxes Expense.

“Negative” income taxes expense means that the company may be able to recover from some of the income taxes recognized as expense in prior periods. If the Income Taxes Payable account has a debit balance at year-end, it is reclassified as an asset, called

“Income Tax Refund Receivable”. A credit balance in the Income Taxes Expense account is offset against the amount of the before-tax loss, as shown in Exhibit 3—5.

Exhibit 3—5 Partial Income Statement—for an Unprofitable Period

Income (loss) before income taxes	\$ (20 000)
Income tax benefit {recovery of previously recorded taxes}	8 000
Net loss	\$ (12 000)

We already seen that income taxes expense reduces the amount before-tax profits.

Notice now that income tax benefits—in the form of tax refunds—can reduce the amount of a pretax loss. Thus, income taxes reduce the size of both profits and losses.

Key words, phrases, and special terms

accounting cycle

会计循环

accounting entry

会计分录

accounting equation

会计等式

ledger account

分类账

adjusted trial balance

调整后试算表

after-closing trial balance

结账后试算表

balance sheet account

资产负债表账户

book of original entry

原始分录账簿

chronological record

序时记录

closing entry

结账分录

closing the accounts

结账

credit balance

贷方余额

debit balance

借方余额

depreciation expense

折旧费用

double-entry accounting

复式记账制

end-of-period adjusting entries

期末调整分录

income statement account

利润表账户

income summary account

收益汇总账户

nominal account

虚账户

permanent account

永久性账户

temporary account

临时性账户

unadjusted trial balance

调整前试算表

MULTIPLE-CHOICE QUESTIONS

1. According to the rules of debit and credit for balance sheet accounts:
 - a. Increases in asset, liability, and owners' equity accounts are recorded by debit.
 - b. Decreases in asset and liability accounts are recorded by credits.
 - c. Increases in asset and owners' equity accounts are recorded by debits.
 - d. Decreases in liability and owners' equity accounts are recorded by debits.
2. Indicate all of the following statements that correctly describe net income. Net income:
 - a. Is equal to revenue minus expenses.
 - b. Is equal to revenue minus the sum of expenses and dividends.
 - c. Increases owners' equity.
 - d. Is reported by a company for a specific period of time.
3. Which of the following is provided by a trial balance in which total debits equal total credits?
 - a. Proof that no transaction was completely omitted from the ledger during the posting process.
 - b. Proof that the correct debit or credit balance has been computed for each account.
 - c. Proof that the ledger is in balance.
 - d. Proof that transactions have been correctly analyzed and recorded in the proper accounts.
4. Which of the following explains the debit and credit rules relating to the recording of revenue and expenses?
 - a. Expenses appear on the left side of the balance sheet and are recorded by debits; revenue appears on the right side of the balance sheet and is recorded by credits.
 - b. Expenses appear on the left side of the income statement and are recorded by debits; revenue appears on the right side of the income statement and is recorded by credits.
 - c. The effects of revenue and expenses on owners' equity.

- d. The realization principle and the matching principle.
- 5. Indicate all correct answers. In the accounting cycle:
 - a. Transactions are posted before they are journalized.
 - b. A trial balance is prepared after journal entries have been posted.
 - c. The Retained Earnings account is not shown as an up-to-date figure in the trial balance.
 - d. Journal entries are posted to appropriate ledger accounts.
- 6. Indicate all correct answers. Dividends
 - a. Decrease owners' equity.
 - b. Decrease net income.
 - c. Are recorded by debiting the Dividend account.
 - d. Are a business expense.

EXERCISES

1. J. Linda began a public accounting practice and completed these transactions during November of the current year:

- Nov. 1 Invested \$ 3 500 cash in a public accounting practice begun this day.
 - 1 Paid cash for three months' office rent in advance \$ 900.
 - 2 Purchased office supplies, \$ 60, and office equipment, \$ 2 000, on credit.
 - 3 Paid the premium on two insurance policies, \$ 375.
 - 8 Completed accounting work for Jack Hall and collected \$ 15 cash there-fore.
 - 13 Completed accounting work for Sun Bank on credit, \$ 350.
 - 15 Purchase additional office supplies on credit, \$ 25.
 - 23 Received \$ 350 from Sun Bank for the work completed on November 13.
 - 24 Made a \$ 250 installment payment on the supplies and equipment purchased on November 2.
 - 29 Linda wrote a \$ 45 check on the bank account of the accounting practice to pay the electric bill of her personal residence.
 - 30 Completed accounting work for Evans Company on credit, \$ 300.
 - 30 Paid the monthly utility bills of the accounting office, \$ 30.

Required:

(1) Open following accounts:

Cash; Accounts Receivable; Prepaid Rent; Prepaid Insurance; Office Supplies; Office Equipment; Accounts Payable; J. Linda Capital; Accounting Revenue; Utility Expenses; J. Linda, personal.

(2) Prepare general journal entries to record the transactions, post to the accounts, and prepare a trial balance. Head the trial balance J. Linda, CPA.

2. Nice began a new business and during a short period completed these transactions:

(1) Began business by investing \$20 000 in cash and office equipment having a \$1 000 fair value.

(2) Purchased for \$10 000 land to be used as an office site and for parking equipment paid \$5 000 in cash and signed a promissory note for the balance.

(3) Completed a work for ABC Co. \$5 000, on credit.

(4) Paid the wages of the equipment operator \$900.

(5) Received \$5 000 from ABC Co. for the work of transaction.

(6) Paid the monthly utility bills of the business, \$100.

(7) Nice wrote a \$120 check on the bank account of the business to pay the electric bill of her personal.

(8) Paid cash for three months office rent in advance, \$300.

Required:

Make the entries to record the above transactions.

3. The following trial balance was taken from the ledger of White Incorporated, at the end of its annual accounting period.

Required:

Prepare a work sheet form and copy the trial balance on the work sheet. Then complete the work sheet using the following information:

a. Ending merchandise inventory, \$60.

b. Ending store supplies inventory, \$10.

c. Estimated depreciation of store equipment, \$10.

d. Accrued sales salary payable, \$20.

e. Beginning inventory \$50 to be transferred to Cost of Goods Sold account.

f. Purchase, Purchase Discount and Freight-in to be transferred to Cost of Goods Sold account.

- g. Make closing entries and post relative amount to Income Summary account.
- h. Finish the work sheet.
- i. Prepare an Income Statement and a Balance Sheet.

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White Inc.
Trial Balance
Dec. 31, 2000

Cash	\$ 30	
Accounts receivable	20	
Merchandise inventory	50	
Store supplies	40	
Store equipment	90	
Accumulated depreciation, store equipment		\$ 20
Accounts payable		20
Salary payable		—
Common stock, \$ 1 par value		100
Retained earnings		60
Income summary	—	—
Sales		310
Sales returns	10	
Purchases	120	
Purchase discounts		10
Freight-in	10	
Salary expenses	60	
Rent expenses	70	
Advertising expenses	20	
Depreciation expenses, store equipment	—	
Store supplies expenses	—	
Total	\$ 520	\$ 520

CASES

1. When you deposit money in your bank account, the bank credits your account. Is the bank misusing the word credit? Why does the bank use the credit to refer to your deposit, and not debit?

2. One of your friend asks, “When revenues increase assets and expenses decrease assets, why are revenues credits, and expenses debits and not the other way around?” Explain to your friend why revenues are credits, and expenses are debits.

CHAPTER 4

BASIC FINANCIAL STATEMENTS

Financial statements are the end product of the accounting process, giving a concise report of the profitability and financial position of an enterprise. The financial statements are the means conveying to the management and to the interested outsider a concise picture of the profitability and financial position of a business. The basic financial statements include the income statement, the balance sheet, and the statement of cash flows. In this chapter, we introduce the former two financial statements. The statement of cash flows will be discussed in Chapter 11.

4.1 Balance Sheet

The balance sheet reports a company's financial condition as of a point in time. Sometimes, it is called the statement of financial condition. This is in contrast to the income statement, the retained earnings statement, and the statement of cash flows, which report changes in financial condition.

4.1.1 The Form of Balance Sheet

The financial condition of a business as of a point in time is measured by its total assets and claims or rights to those assets. Thus, the financial condition of a business can be represented as follows:

$$\text{Assets} = \text{Claims (Rights to the Assets)}$$

The claims on the assets of a business consist of rights of creditors who have loaned money to the business and the rights of stockholders who have invested in the business. As we discussed earlier, the rights of creditors are liabilities. The rights of stockholders are referred to as stockholders' equity or owner's equity. Thus, the assets and the claims on those assets can be presented in equation form as follows:

Assets = Liabilities + Stockholders' Equity

This equation is called the accounting equation. As you will discover in this and later chapters, accounting information systems are developed using this equation as their foundation.

The balance sheet is prepared using the framework of the accounting equation. That is, assets are listed first and added to arrive at total assets. Liabilities are then listed and added to arrive at total liabilities. Stockholders' equity items are listed next and added to arrive at total stockholders' equity. Finally, the total assets must equal the combined total liabilities and stockholders' equity. In other words, the accounting equation must balance, because it is a product of the double-entry system.

The balance sheet for ONLINE Co. as of December 31, 2005, is shown in Exhibit 4—1.

A balance sheet may take either one of the two forms, the account form and the report form. Both are acceptable. The account form requires that all items of assets be listed on the left side of the statement and those of liabilities and owners' equity on the right. The report form is a one-column statement.

Exhibit 4—1

**ONLINE Co.
Balance Sheet
December 31, 2005**

Assets			
Current assets:			
Cash		\$ 52 950	
Accounts receivable		76 080	
Merchandise inventory		62 150	
Office supplies		480	
Prepaid insurance		<u>2 650</u>	
Total current assets			\$ 194 310
Property, plant, and equipment:			
Store equipment	\$ 27 100		
Less accumulated depreciation	<u>5 700</u>	\$ 21 400	
Office equipment	\$ 15 570		
Less accumulated depreciation	<u>4 720</u>	10 850	
Land		<u>20 000</u>	
Total property, plant, and equipment			<u>52 250</u>
Total assets			\$ 246 560

Liabilities

Current liabilities:

Accounts payable	\$ 22 420
Notes payable (current portion)	5 000

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(Continued)

Salaries payable	1 140	
Unearned rent	<u>1 800</u>	
Total current liabilities		\$ 30 360
Long-term liabilities:		
Notes payable (final payment due 2017)		<u>20 000</u>
Total liabilities		\$ 50 360
Stockholders' Equity		
Capital stock	\$ 25 000	
Retained earnings	<u>171 200</u>	<u>196 200</u>
Total liabilities and stockholders' equity		\$ 246 560

The balance sheet items are generally classified in the way to facilitate analysis and interpretation of financial data. Information of primary concern to all parties is the liquidity of the assets owned by the business unit and its ability to meet current and long-term obligations. Accordingly, assets and liabilities are classified into:

- (1) current or short-term items.
- (2) non-current, long-term, or fixed items.

The arrangement of balance sheet is as following:

4.1.2 Assets

Current Assets

Current assets are expected to be converted to cash or sold or used up within one year or less, through the normal operations of the business. The current assets normally include:

- (1) cash, cash available items;
- (2) accounts receivables;
- (3) inventories;
- (4) marketable securities intend to be hold in short term;
- (5) prepaid items, such as prepaid insurance, interests, rents, taxes, and other pre-paid items.

Fixed Assets

Fixed assets have relatively permanent character and are used in normal business operations, which are reported under the heading “land, building, and equipment”. Fixed assets include equipment, machinery, building, and land. They are normally re-

ported at cost less accumulated depreciation. In some western countries, land is the only tangible fixed asset that does not need depreciating. While in china, land is treated as intangible asset because the owner only has the right of using it.

Intangible Assets

Intangible assets represent right, such as patent rights, copyrights, and goodwill. Goodwill arises from factors such as name recognition, location, product quality, reputation, and managerial skill. Intangible assets are normally reported at cost minus the amounts previously amortized.

Normally, the assets are measured at book value on the balance sheet. That is to say, it is the acquisition cost less accumulated write-offs to date.

4.1.3 Liabilities

Liabilities are amounts owed to outsiders, it measure the economic obligations of an enterprise to its creditors, and may call for settlement by cash payment or the settlement through providing goods or rendering services in the future.

Liabilities are normally divided into two classes on a classified balance sheet: (1) current liabilities and (2) long-term liabilities.

Current Liabilities

Liabilities that are due within a short time (usually one year or less) and that are to be paid out of current assets are called current liabilities. Current liabilities include the following short-term items:

- (1) accounts payable, payables;
- (2) short-term loan;
- (3) received unearned revenue;
- (4) the long-term debts that will be due within one year.

Long-term Liabilities

Liabilities that are not due for a long time (usually more than one year) are called long-term liabilities. Long-term liabilities are reported after the current liabilities. As long-term liabilities come due and are to be paid within one year, they are reported as current liabilities.

Liabilities are measured on the balance sheet at their current cash equivalent or discounted present value.

4.1.4 Owners' Equity

Owners' equity presents the interest of the ownership group in the net resource of the enterprise, which arises from investments by owners, and will increase or decrease with the changes of operation results. But it never calls for settlement. It represents a residual claim for the assets. For corporations, there are two kinds of accounts used for recording the owners' equity, under the heading as:

Contributed Capital

including capital stocks and contributed capital in excess of capital stocks.

Retained Earnings

including appropriated and un-appropriated retained earnings.

Because owners' equity is a residual amount, it does not report current fair market value of the business; rather, it is the net difference between total assets and total liabilities.

The balance sheet, as a part of the financial statement, is very important because it tells, on a special date, the types, the sources and the amounts of the assets, the obligations, and the owners' equity held by a company.

4.2 Income Statement

Income statement shows whether or not the enterprise achieved or failed to achieve its primary objective—earning a net income. A net income is earned when revenues exceed expenses; otherwise a net loss is incurred. Revenues are inflows of cash or other properties received in exchange for goods or services provided to customers. Costs and expenses are expenditures incurred in creating revenues—sales of goods and services—and operating an enterprise.

There are two approaches to prepare the income statement in general use: the single-step approach and multiple-step approach.

4.2.1 Single-step Income Statement

An alternate form of income statement is the single-step income statement. As shown in Exhibit 4-2:

The single-step form emphasizes total revenues and total expenses as the factors that determine net income. A criticism of the single-step form is that amounts such as

gross profit and income from operations are not readily available for analysis.

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Exhibit 4—2**Single-step Income****Statement**

ONLINE Co.
Income Statement
For Year Ended December 31, 2005

Revenue		
Net sales		\$ 708 255
Expenses:		
Cost of merchandise sold	\$ 525 305	
Operating expenses	105 710	
Income taxes	15 000	
Other income and expense (net)	<u>1 840</u>	<u>(647 855)</u>
Net income		<u><u>\$ 60 400</u></u>

4. 2. 2 Multiple-step Income Statement

The 2005 income statement for ONLINE Co. as an Internet retailer is shown in Exhibit 4—3. This form of income statement, called a multiple-step income statement, contains several sections, subsections, and subtotals.

Exhibit 4—3**Multiple-step Income****Statement**

ONLINE Co.
Income Statement
For Year Ended December 31, 2005

Net sales	\$ 708 255
Cost of merchandise sold	<u>(525 305)</u>
Gross profit	\$ 182 950
Operating expenses	<u>(105 710)</u>
Operating income	\$ 77 240
Other income and expense (net)	<u>(1 840)</u>
Operating income before taxes	\$ 75 400
Income taxes	<u>(15 000)</u>
Net income	<u><u>\$ 60 400</u></u>

Net sales for ONLINE Co. is determined as follows:

(Continued)

Sales		\$ 720 185
Less: sales returns and allowances	\$ 6 140	
Less: sales discounts	<u>5 790</u>	<u>(11 930)</u>
Net sales		<u>\$ 708 255</u>

Sales is the total amount charged customers for merchandise sold, including cash sales and on account. Both sales returns and allowances and sales discounts are subtracted in arriving at net sales.

Exhibit 4 — 3 shows that ONLINE Co. reported gross profit of \$182 950 in 2005. Operating income, sometimes called income from operations, is determined by subtracting operating expenses from gross profit. Most merchandising businesses classify operating expenses as either selling expenses or administrative expenses. Expenses that are incurred directly in the selling of merchandise are selling expenses. They include expenses such as salespersons' salaries, depreciation of store equipment, and advertising. Expenses incurred in the administration or general operations of the business are administrative expenses or general expenses. Examples of these expenses are office salaries, depreciation of office equipment, and office supplies used. Although selling and administrative expenses can be reported separately, many companies report operating expenses as a single item, as shown in Exhibit 4—3.

ONLINE Co.'s income statement in Exhibit 4—3 also reports other income and expense. Revenue from sources other than the primary operating activity of a business is classified as other income. In a merchandising business, these items include income from interest, rent, and gains resulting from the sale of fixed assets. Expenses that cannot be traced directly to operations are identified as other expense. Interest expense that results from financing activities and losses incurred in the disposal of fixed assets are examples of these items.

Other income and other expense are offset against each other on the income statement and are reported as a net amount, as shown in Exhibit 4—3. If the total of other income exceeds the total of other expense, the difference is added to income from operations. If the reverse is true, the difference is subtracted from income from operations.

Deducting income taxes from income before taxes yields the net income. Net income or loss is closed to Retained Earnings at the end of the period.

4. 2. 3 Retained Earnings Statement

A retained earnings statement is usually presented with the other corporate financial statements. It is an analysis of the retained earnings accounts for the accounting period.

An example of a retained earnings statement is shown below:

Exhibit 4—4

ONLINE Co.
Retained Earnings Statement
For the Year Ended December 31, 2005

Retained earnings, January 1, 2005		\$ 128 800
Net income for the year	\$ 60 400	
Less dividends	<u>18 000</u>	
Increase in retained earnings		<u>42 400</u>
Retained earnings, December 31, 2005		<u>\$ 171 200</u>

The form of this statement is not standardized, and sometimes it is combined with the income statement.

COMBINED STATEMENT OF INCOME AND RETAINED EARNINGS

Extending Your Knowledge

Some companies combine their income statement and statement of retained earnings into one statement. An advantage of this approach is that it clearly demonstrates the relationship between net income and retained earnings. Also, it displays all items that affect income and loss, including prior period adjustments, in one statement. A disadvantage is that the net income figure is buried in the statement rather than appearing as a total at the bottom. A combined statement of income and retained earnings is presented in Exhibit 4—5, which is excerpted from a recent annual report of Avon Products, Inc.

Exhibit 4—5

Avon Products, Inc. , and Subsidiaries
Combined Statement of Income
And Retained Earnings
From 2000 Annual Report

(in millions of dollars, except per share amounts)

Net sales	
United States	\$ 1 332.1
International	<u>1 237.0</u>

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(Continued)

	\$ 2 569. 1
Cost of goods sold	<u>(959. 9)</u>
Gross profit	\$ 1 609. 2
Marketing, distribution, and administrative expenses	<u>(1 169. 4)</u>
Operating profit	\$ 439. 8
Interest income	39. 8
Other income (deductions), net	<u>(7. 3)</u>
Earnings before taxes	\$ 472. 3
Taxes on earnings	<u>(231. 0)</u>
Net earnings	\$ 241. 3
Cash dividends	<u>(177. 5)</u>
Addition to retained earnings	\$ 63. 8
Retained earnings, January 1	<u>768. 1</u>
Retained earnings, December 31	<u>\$ 831. 9</u>
Earnings per share of capital stock	
Net earnings	\$ 4. 01
Cash dividends	2. 95

Key words, phrases, and special terms

financial statement	财务报表
financial condition	财务状况
balance sheet	资产负债表
income statement	利润表
statement of cash flows	现金流量表
retained earnings	留存收益
single-step approach	单步法
multiple-step approach	多步法
cost of goods sold	销货成本
gross profit	毛利
operating profit	营业利润
sales returns and allowances	销售退回与折让
selling expenses	销售费用
administrative expenses	管理费用

other income (expense)	其他收入(支出)
offset	抵消
yield	产生
combined statement	合并报表

MULTIPLE-CHOICE QUESTIONS

1. A set of financial statements:
 - a. Is intended to assist users in evaluating the financial position, profitability, and future prospects of an entity.
 - b. Is intended to assist the government in determining the amount of income taxes owed by a business organization.
 - c. Includes notes disclosing information necessary for the proper interpretation of the statements.
 - d. Is intended to assist investors and creditors in making decisions involving the allocation of economic resources.
2. Waterworld Boat Shop purchased a truck for \$12 000, making a down payment of \$5 000 cash and signing a \$7 000 note payable due in 60 days. As a result of this transaction:
 - a. Total assets increased by \$12 000.
 - b. Total liabilities increased by \$7 000.
 - c. From the viewpoint of a short-term creditor, this transaction makes the business more liquid.
 - d. This transaction had no immediate effect on the owners' equity in the business.
3. A transaction caused a \$15 000 decrease in both total assets and total liabilities. This transaction could have been:
 - a. Purchase of a delivery truck for \$15 000 cash.
 - b. An asset with a cost of \$15 000 was destroyed by fire.
 - c. Repayment of a \$15 000 bank loan.
 - d. Collection of a \$15 000 account receivable.
4. Which of the following is (are) correct about a company's balance sheet?
 - a. It displays sources and uses of cash for the period.
 - b. It is an expansion of the basic accounting equation: $\text{Assets} = \text{Liabilities} + \text{Own-}$

ers' Equity.

c. It is sometimes referred to as a statement of financial position.

d. It is unnecessary if both an income statement and statement of cash flow are available.

5. Which of the following would you expect to find in a correctly prepared income statement?

a. Cash balance at the end of the period.

b. Revenues earned during the period.

c. Contributions by the owner during the period.

d. Expenses incurred during the period to earn revenues.

EXERCISES

1. Single-step Income Statement

The following items relate to the current year's operations of Johnson Equipment Company:

Inventory, beginning of year	\$ 69 126 500
Depreciation	5 032 200
Sales	293 621 000
Purchases	198 735 600
Inventory, end of year	63 433 500
Sales returns and allowances	4 111 700
Freight in	33 007 200
Income taxes	11 813 000
Purchase discounts, returns, and allowances	27 234 500
Miscellaneous income	2 364 000
Selling, general, and administrative expenses	46 045 300
Interest expense	4 952 200
Other expenses	670 100

Required:

(1) Prepare in good form a single-step income statement.

(2) Discuss the advantages and disadvantages of the single-step income statement.

2. Single-step and Multiple-step Income Statement

The following income statement items were taken from the accounts of Comfy Computer Corporation (in millions of dollars):

Sales	\$ 2 845.7
Interest expenses	39.3
Research and development costs	187.2
Gain on sale of fixed assets	16.7
Cost of sales	2 239.3
Computer rental and service revenue	702.1
Income taxes	140.7
Tax benefit of operating loss carryforward	19.9
Selling, general, and administrative expenses	794.0
Interest income	17.5

Required:

- (1) Prepare a single-step income statement.
- (2) Prepare a multiple-step income statement.
- (3) Which format do you prefer? Why?

3. The balance sheet items to The Oven Bakery (arranged in alphabetical order) were as follows at August 1, 2005. (You are to compute the missing figure for retained earnings.)

Accounts Payable	\$ 16 200	Capital Stock	\$ 80 000
Accounts Receivable	11 260	Land	67 000
Building	84 000	Notes Payable	74 900
Cash	6 940	Salaries Payable	890
Equipment and Fixtures	44 500	Supplies	7 000

Required:

Prepare a balance sheet at August 1, 2005.

CASES

1. (Combined Statement of Income and Retained Earnings)

Sun Devil Company accumulated the following items during 2000 (in thousands of dollars):

Interest expenses	\$ 1 350
-------------------	----------

Net sales	326 846
Depreciation and amortization	2 791
Cost of sales	226 758
Provision for income taxes	12 665
Bad debt expense	1 177
Other income	160
Contribution to employees' profit-sharing plan	2 695
Advertising, selling, administrative, and general expenses	26 681
Cash dividends	1 017
Beginning retained earnings	33 913
Average number of common shares outstanding	18 474 000

How to prepare a combined single-step statement of income and retained earnings for Sun Devil Company for the year ended December 31, 2000?

2. Joe Franklin, sole owner of Franklin Mattress Company, has an ownership interest in the company of \$ 80 000 at the beginning of the year 2007. During that year, he invested an additional \$ 20 000 in the company and the company reported a net income of \$ 45 000.

Determine the balance of owners' equity that will appear in the balance sheet at the end of 2007, and explain how the amount of net income articulates with that figure in the balance sheet.

3. The information presented below represents selected data from the December 31, 2008, balance sheets and income statements for the year then ended for three firms.

	Firm A	Firm B	Firm C
Total assets, December 31, 2008	?	\$ 435 000	\$ 520 000
Total liabilities, December 31, 2008	\$ 80 000	?	205 000
Paid-in capital, December 31, 2008	55 000	59 000	140 000
Retained earnings, December 31, 2008	?	186 000	?
Net income for 2008	68 000	110 000	81 000
Dividends declared and paid during 2008	12 000	?	28 000
Retained earnings, January 1, 2008	50 000	124 000	?

Required:

Calculate the missing amounts for each firm.

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PART THREE

ACCOUNTING ELEMENTS(ASSETS)

—RECOGNITION AND MEASUREMENT

CHAPTER 5

CURRENT ASSETS

—CASH, TEMPORARY INVESTMENTS, RECEIVABLES

Current assets are expected to be converted to cash or sold or used up within one year or less, through the normal operations of the business. The current assets normally include: cash, temporary investments, receivables, inventories and so on. In this chapter, we will discuss firstly cash, temporary investments, receivables.

5.1 Cash

Cash includes coins, currency (paper money), checks, money orders, and money on deposit that is available for unrestricted withdrawal from banks and other financial institutions.

Cash is listed first in the balance sheet, because it is the most liquid of all current assets. Various ledger accounts are used to record cash transactions; some common examples are cash on hand, petty cash, and cash in banks. A business that carries checking accounts with several banks will maintain a separate ledger account for each bank account. On the balance sheet, the entire amount of all cash accounts will be shown under a single heading, cash.

5.1.1 Internal Control over Cash

It is especially necessary to control the handling and recording of cash because it is so susceptible to misappropriation. An adequate system of internal control over cash would include the following features:

(1) Cash is handled separately from the recording of cash transactions. Employees who handle cash should not have access to the accounting records, and accounting personnel should not have access to cash.

(2) Prepare for each department within the organization a cash budget of planned cash receipts, cash payments, and cash balance, scheduled month-by-month for the coming year.

(3) All cash receipts are deposited intact in the bank each day.

(4) Make all payment by check. The only exception should be for small payment to be made in cash from a petty cash fund.

(5) Require that the validity and amount of every expenditure be verified before a check is issued in payment. Separate the function of approving expenditures from the function of signing checks.

(6) Promptly reconcile bank statements with the accounting records.

5.1.2 Bank Reconciliation

For effective control, the reasons for the difference between the cash balance on the bank statement and the cash balance in the accounting records should be determined by preparing a bank reconciliation. A bank reconciliation is a listing of the items and amounts that cause the cash balance reported in the bank statement to differ from the balance of the cash account in the ledger.

Certain transactions recorded by the depositor may not have been records by the bank. The most common examples are:

(1) Outstanding checks: Checks issued and recorded by the company but not yet presented to the bank for payment.

(2) Deposits in transit: Cash receipts recorded by the depositor but which reached the bank too late to be included in the bank statement for the current month. In addition, certain transaction appearing in the bank statement may not have been recorded by the depositor. For example: 1) service charges; 2) charges for depositing NSF checks.

(3) Credits for interest earned by the depositor.

(4) Miscellaneous bank charges and credits.

To determine the reasons for any difference and to correct any errors that may have been made by the bank or the depositor, the depositor's own records should be reconciled with the bank statement.

A bank reconciliation is usually divided into two sections. The first section begins with the cash balance according to the bank statement and ends with the adjusted balance. The second section begins with the cash balance according to the depositor's records and ends with the adjusted balance. The two amount designated as the adjusted

balance must be equal.

To illustrate a bank reconciliation, we use the bank statement for ABC Co. This bank statement for ABC Co. shows a balance of \$3 359.78 as of July 31. The cash balance in ABC Co. 's ledger as of the same date is \$2 549.99. The reconciling items are revealed as follows:

Deposit of July 31, not recorded on bank statement	\$ 816.20
Checks outstanding: No. 812, \$1 061.00; No. 878, \$435.39;	
No. 883, \$48.60	\$ 1 544.99
Note plus interest of \$8 collected by bank (credit memorandum),	
not recorded in the accounting records	408.00
Check from customer (Thomas) returned by bank because of	
insufficient funds (NSF)	300.00
Bank service charges (debit memorandum), not recorded in the	
accounting records	18.00
Check No. 879 for \$732.26 to Taylor Co., recorded as \$723.26	9.00

The bank reconciliation based on the bank statement and the reconciling items is shown as follows:

ABC Co.			
Bank Reconciliation			
July 31, 2005			
Cash balance according to bank statement	\$ 3 359.78	Cash balance according to depositor's records	\$ 2 549.99
Add deposit of July 31, not recorded by bank	<u>816.20</u>	Add note and interest collected by bank	<u>408.00</u>
	\$ 4 175.98		\$ 2 957.99
Deduct outstanding checks:		Deduct:	
No. 812 \$1 061.00		Check returned because of insufficient funds	\$ 300.00
No. 878 435.39		Bank service charge	18.00
No. 883 <u>48.60</u>	<u>1 544.99</u>	Error in recording Check	
		No. 879	<u>9.00</u>
Adjusted balance	<u>\$ 2 630.99</u>	Adjusted balance	<u>\$ 2 630.99</u>

Adjusting Entries after the Reconciliation. To make ABC company's records up-to-date and accurate, adjusting entries are necessary to make up the difference between the \$2 549.99 balance per company's records and adjusting balance of \$2 630.99.

These entries are as follows:

Cash	\$ 408
------	--------

Notes Receivable	\$ 400
Interest Income	8

To record the note receivable collected by the bank.

Accounts Receivable	\$ 300
Cash	\$ 300

To record as a receivable from a customer the amount of the NSF check returned by the bank.

Miscellaneous Expense	\$ 18
Cash	\$ 18

To record bank service charges.

Accounts Payable	\$ 9
Cash	\$ 9

To correct the error in recording check No. 879.

After the foregoing entries are posted, the cash account will have a debit of \$ 2 630. 99 which agrees with the adjusted balance show on the bank statement reconciliation. This is also the amount of cash available for use as of July 31 and the amount reported on the balance sheet on that date.

5. 1. 3 Petty Cash

Most business firms find it inconvenient and expensive to write checks for small expenditures. Therefore, since there are times when cash is needed to pay for such items as postage, delivery service and small purchases and supplies, these expenditure are most conveniently handled by establishing a petty cash fund. The size of the petty cash fund depends on the number and amount of minor expenditure. Many firms maintain funds that will last three or four weeks.

Establishing the Petty Cash Fund. Assume that one company has decided to establish a petty cash fund of \$ 400. A check should be written and exchanged at the bank for currency and coin. The money is kept on hand in a petty cash box or drawer in the office. The entry for the issuance of the check is:

Petty Cash	\$ 400
Cash	\$ 400

To establish a petty cash fund.

Making Disbursements from the Petty Cash Fund. Whenever disbursements are made from the fund, a petty cash voucher should be filled out by the custodian of the fund to

show amount paid, the purpose of the expenditure, the date, and the signature of the person receiving the money. The petty cash box should always contain cash and/or vouchers totaling the exact amount of the fund.

Replenishing the Petty Cash Fund. To replenish a petty cash fund means to replace the amount of money that has been spent, thus restoring the fund to its original amount. At this time, a check is drawn to Petty Cash for the exact amount of the expenditures. The custodian of the fund will cash the replenishment check at the bank and place the cash in the petty cash box. For example, assume that a petty cash fund of \$ 400 was established on October 1 and that payments totaling \$ 205 were made from the fund during the next two weeks. The expenditures are: Office Expense, \$ 120; Transportation-in, \$ 35; and Postage Expense, \$ 50. The journal entry is as follows:

Office Expense	\$ 120
Transportation-in	35
Postage Expense	50
Cash	\$ 205

Note that expense accounts are debited each time the fund is replenished. The petty cash account is debited only when the fund is first established. There ordinarily will be no further entries in the Petty Cash account after the fund is established, unless the fund is discontinued or a decision is made to change its size from the original amount. The petty cash fund is usually replenished at the end of an accounting period, so that all vouchers in the fund are charged to expense accounts before these accounts are closed and financial statements prepared.

5.1.4 Cash Over and Short

Regardless of care exercised in operations customers are sometimes given too much change or are shortchanged. A small quantity of difference between actual cash and cash journals often happens, which is a normal thing. The difference is recorded in the “Cash Over and Short” account. For example, assume that the total cash sales for the day amount to \$ 3 500 as recorded by the cash register, but that the cash in the drawer is only \$ 3 470. The following entry would be needed to record the day’s sale and the cash shortage of \$ 30.

Cash	\$ 3 470
Cash Over and Short	30
Sales	\$ 3 500

Cash Over and Short account is debited with shortages and credited with overages. If there is a debit balance in the Cash Over and Short account at the end of the fiscal period, it is an expense and may be included in “Miscellaneous Expense” on the income statement. If there is a credit balance, it is a revenue and may be listed in “Miscellaneous Revenue”.

5.1.5 Balance Sheet Presentation for Cash

Cash is the first current asset listed on the balance sheet of most companies. Even small businesses have several bank accounts, but companies usually combine all cash amounts into a single total called “Cash and Cash Equivalents” on the balance sheet. Cash equivalents include liquid assets such as time deposits and certificates of deposit, which are interest-bearing accounts that can be withdrawn with no penalty after a short period of time. Although they are slightly less liquid than cash, they are sufficiently similar to be reported along with cash. For example, the balance sheet of Intel Corporation, maker of the Pentium family of processors, recently reported the following:

INTEL CORP.

Balance Sheet

December 31, 2005 and December 31, 2004

(In Millions)	2005	2004
Assets		
Current assets:		
Cash and cash equivalents	\$ 1 463	\$ 1 180
Short-term investments	995	1 230
Accounts receivable	3 116	1 978
Inventories	2 004	1 169
Other current assets	<u>519</u>	<u>610</u>
Total current assets	<u>\$ 8 097</u>	<u>\$ 6 167</u>

5.2 Temporary Investments

5.2.1 The Definition of Temporary Investments

A challenge for management is to strike a balance between having too much cash available and running short of cash (thus unable to pay its bills). To manage cash well,

companies use a budgeting process to determine cash inflows and outflows during each period.

One way of employing idle cash is to put the cash in temporary investments. Temporary investments consist of surplus cash invested in government or corporate debt obligations, or in shares (equity securities) that can be readily sold (marketable) and are held as a source of cash to satisfy current operating needs. These temporary investments do not have to mature or be sold within the next year or operating period to be classified as current assets, although it is probable that they will. Temporary investments are considered current assets if (1) they are marketable, and (2) management's intent is to hold them as a ready source of cash. If an organization acquires securities with the intent of holding them for a longer period, they should be classified as long-term investments in securities.

5.2.2 Accounting for Temporary Investments

Accounting for temporary investments is similar to that of other assets. For example, acquisitions of temporary investments are recorded at historical cost. The cost should include any broker's commissions. For example, if A Company purchases temporary investments in B Company for \$1 000 and pays \$100 to the broker, the entry would be:

Temporary Investments	\$ 1 100
Cash	\$ 1 100

Any costs incurred to acquire an asset are part of the cost of that asset (in accordance with the cost principle). The \$100 paid to the broker is debited to temporary investments because the \$100 cost was necessary to acquire the asset.

Interest earned on debt obligations and dividends earned on equity securities are credited to revenue accounts such as Interest earned and Dividends earned.

Sales of temporary investments may generate a gain or a loss representing the difference between cost (including commissions) and proceeds (net of commissions). For example, if the temporary investment in B Company purchased for \$1 100 is later sold for \$950, the entry would be:

Cash	\$ 950
Loss on Sale of Temporary Investments	150
Temporary Investments	\$ 1 100

In contrast, if the temporary investment were sold for \$1 200 instead, a gain

would result, and the entry would be:

Cash	\$ 1 200
Temporary Investments	\$ 1 100
Gain on Sale of Temporary Investments	100

Gains or losses are created by the difference between the cash proceeds and the cost of the asset recorded in the accounting records (book value). These relationships can be described as:

Cash proceeds > Book value of the asset → Difference is a gain

Cash proceeds < Book value of the asset → Difference is a loss

5. 2. 3 Balance Sheet Presentation

In China, it requires that temporary investments include holdings of marketable securities and that these holdings be reported on the balance sheet at an amount not to exceed market value. This recommendation is the basis for reporting temporary investments in marketable securities on the balance sheet at the lower of cost or market (LCM). The international accounting standard (IAS) is more explicit. IAS 24 requires that current investments be carried at LCM, determined on an aggregate or individual investment basis, or at market value. Note that the conservatism principle takes precedence over the cost principle in this case.

To determine if a write-down of temporary investments is necessary, it is common to compare the total aggregate cost of the entire portfolio of marketable securities with their total market value. Declining in market value is debited to Loss on Temporary Investments and credited to Allowance to reduce temporary investments to market. The Loss account appears on the income statement, thereby reducing net income for the period (conservatism principle). The Allowance account is a contra asset account; it is subtracted from the cost of the temporary investments on the balance sheet. During the accounting period, LCM is not considered; it is part of the adjusting entry process at year end.

Loss:

Loss on Temporary Investment	× ×
Allowance to Reduce Temporary Investments	× ×

The Allowance account is adjusted on the balance sheet date by the amount needed to reduce the temporary investments to LCM. This entry is made at year end based on a comparison of the total portfolio market value. A more conservative approach would be

to compare temporary investments on an item-by-item basis, but this is not the general practice. If there is a balance in the Allowance account from a prior period, the account is adjusted to the desired balance only at year end. Note, also, that the Allowance account is not permitted to have a debit balance because this would result in reporting the temporary investments at a cost more than their original.

5.3 Accounts Receivable

5.3.1 Classification of Receivables

Many companies sell on credit in order to sell more services or products. The receivables that result from such sales are normally classified as accounts receivable or notes receivable. These receivables are usually a significant portion of the total current assets.

Accounts Receivable

The most common transaction creating a receivable is selling merchandise or services on credit. The receivable is recorded as a debit to the receivable account. Accounts receivable are normally expected to be collected within a relatively short period, such as 30 or 60 days. They are classified on the balance sheet as a current asset.

Notes Receivable

Notes receivables are amounts that customers owe, for which a formal, written instrument of credit has been issued. As long as notes receivable are expected to be collected within a year, they are normally classified on the balance sheet as a current assets.

Notes may be used to settle a customer's account receivable. Notes and accounts receivable that result from sales transactions are sometimes called trade receivables. Unless we indicate, otherwise, we will assume that all notes and accounts receivable in this chapter are from sales transactions.

Other Receivables

Other receivables are normally listed separately on the balance sheet. If they are expected to be collected within one year, they are classified as current assets. If collection is expected beyond one year, they are classified as non-current assets and reported under the caption Investments. Other receivables include interest receivable, taxes receivable, and receivables from officers or employees.

5.3.2 Accounting for Accounts Receivable

Regardless of the care used in granting credit and the collection procedures used, a part of the credit sales will not be collectible. The operating expense incurred because of the failure to collect receivables is called uncollectible accounts expense, bad debts expense, or doubtful accounts expense.

When does an account or a note become uncollectible? There is no general rule for determining when an account becomes uncollectible. The fact that a debtor fails to pay an account according to a sales contract or fails to pay a note on the due date does not necessarily mean that the account will be uncollectible. The debtor's bankruptcy is one of the most significant indications of partial or complete uncollectible. Other indications include the closing of the customer's business and the failure of repeated attempts to collect.

There are two methods of accounting for receivables that appear to be uncollectible. The direct write-off method recognizes the expense only when accounts are judged to be worthless. The other procedure, called the allowance method provides an expense for uncollectible receivables in advance of their write-off. We will discuss each of these methods next.

Direct Write-off Method of Accounting for Bad Debts

Under direct write-off method, bad debt expense is recorded when an account is determined to be uncollectible; no adjusting entry is recorded at the end of the period to estimate uncollectible. This method mismatches revenues and expenses unless the write-off occurs in the same period as the related sale. Although this method is not conceptually sound, it is justified under the materiality principle.

The following entry shows the general format to record bad debt expense using the direct write-off method:

Bad Debt Expense	× × ×
Accounts Receivable—X Co.	× × ×

A subsequent recovery is recorded by reversing the write-off and recording the cash receipt:

Accounts Receivable—X Co.	× × ×
Bad Debt Expense	× × ×
Cash	× × ×
Accounts Receivable—X Co.	× × ×

Allowance Method of Accounting for Bad Debts

The allowance method estimates the total bad debts that are expected to result from the current period's sales, and records the expense during the same period as the related sale. This is the conceptually correct method. It's preferred because it matches collection losses with revenues in the period in which the sales were made. Also, the accounts receivable appear on the balance sheet at the amount of cash proceeds that are expected from their collection (realizable value). For example, the company estimated that \$1 000 of the accounts receivable will be uncollectible. Therefore, a debit of \$1 000 is made to Bad Debt Expense and a credit of \$1 000 is made to Allowance for Doubtful Accounts.

The Allowance for Doubtful Accounts is a contra asset account. Accounts Receivable is not credited because the Allowance is an estimate. It is not yet known which customers will not pay, therefore, the amount of accounts receivable cannot be removed from the subsidiary accounts receivable ledger. The credit to the Allowance account is an application of the conservatism principle, while the debit to Bad Debt Expense is an application of the matching principle. Bad Debt Expense normally appears as an administrative expense because granting credit is not the responsibility of the sales department.

Writing off a Bad Debt

Under the allowance method, the bad debt expense is recorded in the year of sale. A contra asset account is used because an estimate is used and the specific accounts that will be uncollectible are not yet known.

When the specific account that is uncollectible is determined, the appropriate amount of the contra asset account is transferred to its asset account. It therefore writes off with a debit to the Allowance for Doubtful Accounts, and a credit to Accounts Receivable. Writing off an account against the Allowance for Doubtful Accounts does not affect the total estimated realizable value of Accounts Receivable.

It is unlikely that the accounts written off during an accounting period will equal the allowance provided for bad debts. As a result, the allowance account may have a credit or debit balance prior to adjusting at year end. A debit balance in the allowance would indicate that write-offs during the period were greater than what was allowed for; a credit balance would mean that write-offs were less than what was estimated to occur.

Bad Debt Recoveries

Generally, accounts are not written off until all revenues of collection have been exhausted. If a subsequent collection is made, the account is reinstated, and the receipt is

recorded. First, the account is reinstated by debiting Accounts Receivable and crediting Allowance for Doubtful Accounts. The second entry records the receipt of the full payment by making a debit to Cash and a credit to Accounts Receivable.

Estimating the Amount of Bad Debts

There are two general methods to estimating the required balance of the Allowance for Doubtful Accounts: (1) the income statement method, and (2) the balance sheet method. We should be familiar with both methods and note the different entries for each.

(1) Income Statement Method

The income statement method is based on historical data and future expectations. A percentage of credit sales is used to estimate the amount of bad debts. This method, which is an application to the income statement method, emphasizes the matching of revenues and expenses. The amount calculated is the amount of the entry and thus the amount of bad debt expense for the year.

To illustrate, On December 31, 2004, at the end of its annual accounting period, a company estimated its bad debts as half of 1% of its \$1 000 000 of credit sales made during the year, and made an addition to its Allowance for Doubtful Accounts equal to that amount. On March 16, 2005 management decided the \$2 500 account of A Company was uncollectible and prepared an entry to write it off.

The following journal entries record these events:

On December 31, 2004, the company records the estimation of its bad debt expense as a percentage of its credit sales:

Dec. 31 Bad Debt Expense	\$ 5 000
Allowance for Doubtful Accounts	\$ 5 000
$0.5 \% \times \$1\,000\,000 = \$5\,000$	

On March 16, 2005, the company prepares the entry to write off the amount that is determined to be uncollectible:

Mar. 16 Allowance for Doubtful Accounts	\$ 2 500
Accounts Receivable—A Company	\$ 2 500

(2) Balance Sheet Method

Rather than estimating a percentage of sales to be uncollectible, the balance sheet method is based on a percentage of total outstanding receivables estimated to become uncollectible (this is called the simplified balance sheet method). The balance sheet method focuses on the total estimated uncollectible receivables, which is the balance in Allowance

for doubtful accounts. A sounder method of applying the balance sheet method is to prepare an aging schedule, which classifies outstanding accounts receivable in terms of how long each has been outstanding. The aging of accounts receivable method applies a percentage to each class to estimate the amount of total receivables that will not be collected. Most computerized accounting packages automatically prepare an aging schedule of receivables to assist management in collecting their receivable.

To illustrate, an analysis of accounts receivable based on past experience indicates that the following bad debt losses are likely to occur for each age group:

Age	Percent Uncollectible
0~30 days	2%
31~60 days	5%
61~90 days	10%
over 90 days	20%

On December 31, 2004, the following aged accounts receivable information is available:

Age of Receivable	Amount Accounts Receivable	Percent	Allowance
0~30 days	\$ 30 000	2%	\$ 600
31~60 days	20 000	5%	1 000
61~90 days	10 000	10%	1 000
over 90 days	5 000	20%	1 000
Total	<u>\$ 65 000</u>		<u>\$ 3 600</u>

Assume that the existing unadjusted balance in the allowance for doubtful accounts is \$ 1 000 (credit).

Adjusting journal entry required:

Dec. 31 Bad Debt Expense	\$ 2 600
Allowance for Doubtful Accounts	\$ 2 600

To increase the allowance from \$ 1 000 to \$ 3 600.

Extracts from the balance sheet on December 31, 2004:

Current Assets:

Accounts Receivable	\$ 65 000	
Less: Allowance for Doubtful Accounts	<u>3 600</u>	\$ 61 400

The previous example indicates that \$ 65 000 is legally owed to the business, but the best estimate is that only \$ 61 400 will be collected (or realized). Note that the focus of the balance sheet approach is not on the bad debt expense account but rather on the balance in the allowance for doubtful accounts.

The aging of accounts receivable method emphasizes the net realizable amount of the Accounts receivable. The amount calculated to be uncollectible is the amount needed to reduce the total accounts receivable to the estimated realizable value. The Allowance for Doubtful Accounts is adjusted to the desired balance.

5.4 Notes Receivable

5.4.1 Characteristics of Notes Receivable

A claim supported by a note has some advantages over a claim in the form of an account receivable. By signing a note, the debtor recognizes the debt and agrees to pay it according to the terms listed. A note is therefore a stronger legal claim if there is a court

action.

Notes have several characteristics that affect how they are recorded and reported in the financial statements.

Due Date and Interest

The date a note is to be paid is called the due date or maturity date.

A note normally specifies that interest be paid for the period between the issuance date and the due date. Notes covering a period of time longer than one year normally provide that the interest be paid semiannually, quarterly, or at some other stated interval. When the term of the note is less than one year, the interest is usually payable at the time the note is paid.

The basic formula for computing interest is as follows:

$$\text{Face Amount (or Principal)} \times \text{Rate} \times \text{Time} = \text{Interest}$$

In computing interest for a period of less than one year, to simplify computations, we will use 360 days.

Maturity Value

The amount that is due at the maturity or due date is called the maturity value. The maturity value of a note is the sum of the face amount and the interest.

5.4.2 Accounting for Notes Receivable

To illustrate, assume that a 30-day, 12% note dated November 30, 2004, is accepted in settlement of the account of A Company, which is past due and has a balance of \$ 6 000. The entry to record the transaction is as follows:

Nov. 30, 2004

Notes Receivable	\$ 6 000
Accounts Receivable—A Company	\$ 6 000

When the note matures, the entry to record the receipt of \$ 6 060 (\$ 6 000 principal plus \$ 60 interest) is as follows:

Dec. 30, 2004

Cash	\$ 6 060
Notes Receivable	\$ 6 000
Interest Revenue	60(6 000×12%×1/12)

If the maker of a note fails to pay the debt on the due date, the note is a dishonored note receivable. When a note is dishonored, the face value of the note plus any interest due is transferred to the accounts receivable account. For example, assume that the \$ 6 000, 30-day, 12%

note received from A Company and recorded on November 30, 2004 is dishonored at maturity. The entry to transfer the note and the interest back to the customer's account is as follows:

Dec. 30, 2004

Accounts Receivable—A Company	\$ 6 060
Notes Receivable	\$ 6 000
Interest Revenue	60

The interest of \$ 60 has been earned, even though the note has been dishonored. If the account receivable is uncollectible, the amount of \$ 6 060 will be written off against the Allowance for Doubtful Accounts.

5.4.3 Discounting

Notes receivable are negotiable instruments, which mean they can be to a bank or to other companies. This practice is known as discounting. When the bank “buys” the receivable, the bank is buying the right to collect the maturity value of the note at the maturity date. The formula of calculating bank discount is shown below.

Bank Discount Amount = Maturity Value \times Bank Discount Rate \times Discount Period

maturity value—principal plus interest

discount period—the numbers of days between the date of sale to the bank and maturity date

Proceeds of Discounted Note = Maturity Value — Bank Discount Amount

Note that the bank discount is based on maturity value, not on the principal. For example, assume that a 90-day, 8% note dated April 1, 2004, was received from C Company to settle its account, which has a balance of \$ 2 000. But this note is sold to a bank with 10% rate on May 1, 2004.

Interest = \$ 2 000 \times 8% \times 90/360 = \$ 40

Maturity Value = \$ 2 000 + \$ 40 = \$ 2 040

Bank Discount Amount = \$ 2 040 \times 10% \times (90—30) / 360 = \$ 34

Proceeds of Discounted Note = \$ 2 040 — \$ 34 = \$ 2 006

The entry to record this transaction would be:

Cash	\$ 2 006
Interest Income	\$ 6
Notes Receivable Discounted	2 000

All receivables that are expected to be realized in cash within a year are presented in the Current Assets section of the balance sheet. It is normal to list the assets in the order

of their liquidity. The allowance for doubtful accounts is subtracted from the accounts receivable. Alternatively, the accounts receivable may be listed on the balance sheet at its net realizable value, with a note showing the amount of the allowance. If the allowance account includes provisions for doubtful notes as well as accounts, it should be deducted from the total of Notes Receivable and Accounts Receivable.

FACTORING ACCOUNTS RECEIVABLE

Extending Your Knowledge

The term factoring describes transactions in which a business either sells its accounts receivable to a financial institution (often called a factor) or borrows money by pledging its accounts receivable as collateral (security) for a loan. In either case, the business obtains cash immediately instead of having to wait until the receivables can be collected.

Factoring accounts receivable is a practice limited primarily to small business organizations that do not have well-established credit. Large and liquid organizations usually are able to borrow money using unsecured lines of credit, so they need not factor their accounts receivable.

Key words, phrases, and special terms

aging schedule
allowance for doubtful accounts
allowance method
allowance
bad debt recovery
bad debt expense
bank charges
bank credit memorandum
bank debit memorandum
bank reconciliation
bank statement

账龄分析表
坏账准备
备抵法
备抵, 减值准备
已确认坏账的收回
坏账费用
银行手续费
银行贷款通知
银行借项通知
银行存款调节表
银行对账单

cash over and short	现金溢缺
cashier	出纳员
check	支票
collect	收款
deposit in transit	在途存款
direct write-off method	直接转销法
discount	贴现
dishonored note receivable	无法兑现的应收票据
doubtful account expense	坏账费用
face value	面值
IAS(International Accounting Standard)	国际会计准则
IOU(I owe you)	欠条
LCM(Lower of Cost or Market rule)	成本与市价孰低原则
marketable security	有价证券
merchandise	商品; 存货
miscellaneous expense(income)	杂项费用(收入)
money order	汇款单
NSF(no sufficient funds)	存款不足
notes receivable discounted	应收票据贴现
outstanding check	未兑现支票
payee	收款人
petty cash	备用金
principal	本金
proceeds	现值
promissory note	本票
realizable value	可实现价值, 可变现价值
receivable	应收款项
sell on credit	赊销
temporary investments	短期投资
turn over	报销
write-off	转销; 冲销
on credit	赊账

MULTIPLE-CHOICE QUESTIONS

1. In general terms, financial assets appear in the balance sheet at:
 - a. Face value.
 - b. Current value.
 - c. Cost.
 - d. Estimated future sales value.
2. Which of the following practices contributes to efficient cash management?
 - a. Never borrow money—maintain a cash balance sufficient to make all necessary payments.
 - b. Record all cash receipts and cash payments at the end of the month when reconciling the bank statements.
 - c. Prepare monthly forecasts of planned cash receipts, payments, and anticipated cash balances up to a year in advance.
 - d. Pay each bill as soon as the invoice arrives.
3. Each of the following measures strengthens internal control over cash receipts except:
 - a. The use of a petty cash fund.
 - b. Preparation of a daily listing of all checks received through the mail.
 - c. The deposit of cash receipts in the bank on a daily basis.
 - d. The use of cash registers.
4. Puget Sound Co. sold marketable securities costing \$80 000 for \$92 000 cash. In the company's income statement and statement of cash flows, respectively, this will appear as:
 - a. A \$12 000 gain and a \$92 000 cash receipt.
 - b. A \$92 000 gain and an \$8 000 cash receipt.
 - c. A \$12 000 gain and an \$80 000 cash receipt.
 - d. A \$92 000 sale and a \$92 000 cash receipt.
5. Under the direct write-off method of accounting for uncollectible accounts:
 - a. The current year uncollectible accounts expense is less than the expense that would be under the allowance approach.
 - b. The relationship between the current period net sales and current period uncol-

lectible accounts expense illustrates the matching principle.

c. The Allowance for Doubtful Accounts is debited when specific accounts receivable are determined to be worthless.

d. Accounts receivable are not stated in the balance sheet at net realizable value, but at the balance of the Accounts Receivable control account.

6. October 1, 2005, Coast Financial loaned Bart Corporation \$300 000, receiving in exchange a nine-month, 12 percent note receivable. Coast ends its fiscal year on December 31 and makes adjusting entries to accrue interest earned on all notes receivable. The interest earned on the note receivable from Bart Corporation during 2005 will amount to:

- a. \$9 000. b. \$18 000. c. \$27 000. d. \$36 000.

EXERCISES

1. Preparing a Bank Reconciliation

Valley Co. received a bank statement on Oct. 31. The bank balance as shown by the statement was \$2 050 and the cash balance according to the accounting records was \$1 373, there is a difference \$677 between them. The company found the following difference:

(1) Check NO. 124 for \$150 and check NO. 126 for \$200 were outstanding—the receivers of them haven't cashed them or deducted them for their back accounting.

(2) A \$145 deposit placed in bank after bank hours on Oct. 31 was not recorded by the bank on the very day.

(3) The bank had collected a note receivable for the company on Oct. 31, crediting the proceeds \$500 less a \$5 collection fee to the company's account. The credit memorandum was sent out together with the statement on Nov. .

(4) Together with the statement, two debit memorandums were sent out to the company: (a) A NSF check for \$20, the check had been received from a customer on Oct. 25 and had been included in that day's deposit. (b) A \$3 debit memorandum for checks printed by the bank.

Required:

- (1) Prepare a bank reconciliation according to the above case.
- (2) Make the related entries.

2. Estimating Uncollectible Accounts Expense

Nike Cup Co. had the following accounts receivable and allowance for uncollectible accounts balances at the end of 2004 before any expense adjustment:

Accounts Receivables	\$ 66 000 Dr
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Allowance for Uncollectible Accounts	3 200 Cr
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Sales in 2004 totaled \$ 530 000 (10 percent of sales were for cash), and write-offs of customer accounts totaled \$ 3 200.

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Required:

- (1) Calculate the balance in the allowance account at the beginning of 2004.
- (2) Prepare the adjusting entry to record uncollectible accounts expense under the following assumptions:
 - (a) 1 percent of credit sales will prove uncollectible.
 - (b) 10 percent of ending accounts receivable are uncollectible.
 - (c) Aging of the receivables indicates that \$ 6 400 is probably uncollectible.

3. Uncollectible Accounts Expense; Customer Collections

The following year-end information relates to Seminole Co. 's credit sales for 2003, 2004, 2005:

Year	Accounts Receivable	Allowance for Uncollectible Accounts	Accounts Written off
2003	\$ 78 000	\$ 3 400	\$ 1 600
2004	83 000	3 600	1 900
2005	74 000	3 000	1 200

Required:

- (1) Calculate the uncollectible accounts expense for 2004 and 2005.
- (2) Assume that in 2004 and 2005, sales (all credit) total \$ 250 000 each year. Calculate the customer collections for these years.

4. Determining the Amount of the Adjusting Entry

At the end of the current year, the accounts receivable account has a debit balance of \$ 80 000, and sales for the year total \$ 950 000.

Required:

Determine the amount of adjusting entry to record the provision for doubtful accounts under each of the following assumptions:

- (1) The allowance accounts before adjustment has a credit balance of \$ 950.
 - (a) Uncollectible accounts expense is estimated at 1/2 of 1% net sales.
 - (b) Analysis of the accounts in the customer ledger indicates doubtful accounts of \$ 6 750.
- (2) The allowance account before adjustment has a debit balance of \$ 300:
 - (a) Uncollectible accounts expense is at 1% of net sales.
 - (b) Analysis of the accounts in the customer ledger indicates doubtful accounts of \$ 7 100.

5. Discounting Notes Receivable

The following transactions deal with discounting of customer notes:

(a) A two-month 10 percent note receivable for \$8 000 dated Nov. 1, 2004.

(b) A six-month noninterest-bearing note for \$20 000 dated Oct. 1, 2004. The market rate of interest was 12 percent on Oct. 1.

(c) A one-month 12 percent note receivable for \$500 000 dated Dec. 1, 2004.

(d) A one-year 4 percent note receivable for \$160 000 dated Sep. 1, 2004. The market rate of interest on Sep. 1 was 10 percent.

Required:

Prepare the appropriate entries to record the above transactions, under the assumptions that no interest accruals were made before discounting, that the notes were discounted at a bank on Dec. 1, 2004, and that the discount rate was 12 percent. Use monthly intervals, not days.

CASES

1. Assume you purchased a car from John's Used Cars for \$500 down and 24 payments of \$150 per month. After making three months of payments to John's Used Cars, you are notified that John's plans to factor your account receivable to the Barb Smith Collection Agency. You are concerned about owing money to this particular collection agency because you have heard it uses very aggressive tactics to collect overdue payments. You call the car lot and speak directly with John. You question the legality and ethics of factoring accounts receivable. You state that you entered into a contract to him and not a collection agency. You state that you did not give permission to sell your receivable and that selling the receivable to another organization eliminates your obligation to pay it. John says factoring accounts receivable is legal and suggests that you consult the related code. What would you do?

2. Dell Company paid \$98 000 for trading investment in the stock of Boston Corporation on November 16, 2007. On December 12, Dell Company received a \$500 cash dividend from Boston Corporation. It is now December 31, and market value of the Boston Corporations, stock is \$101 000. For this investment, show what Dell Company should report in its income statement and balance sheet.

3. Annual credit sales of Nice Co. total \$340 million. The firm gives a 2% cash discount for payment within 10 days of the invoice date; 90% of Nice's accounts receiv-

able are paid within the discount period.

What is the total amount of cash discounts allowed in a year?

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CHAPTER 6

CURRENT ASSETS (CONTINUED) —INVENTORIES

Inventory refers to various assets that are stocked for the purpose of sale, production or consumption during the process of the production for a business. In a merchandising company, inventory consists of all goods owned and held for sale to customers. Since inventories will typically be converted into cash within a year, or during a firm's normal operating cycle if it should be longer than a year, inventories are classified as current assets. In the balance sheet, inventory is listed immediately after receivables.

6.1 Inventory Systems

The two major alternative accounting systems for determining the value of inventory and the cost of goods sold are called the perpetual inventory system and the periodic inventory system.

6.1.1 Perpetual Inventory System

In a perpetual inventory system, merchandising transactions are recorded immediately as they occur. The system draws its name from the fact that the accounting records are kept perpetually up-to-date. Purchases of merchandise are recorded by debiting an asset account entitled Inventory. When merchandise is sold, two entries are necessary: one to recognize the revenue earned and the second to recognize the related cost of goods sold. This second entry also reduces the balance of the Inventory account to reflect the sale of some of the company's inventory. Companies that sell products of high unit value such as automobiles and television sets usually maintain a perpetual inventory system.

When the perpetual inventory system is used, there is a continuous record of changes in inventory and the inventory account balance. The inventory account is debited to re-

cord inventory acquisitions. Sales of inventory are recorded by debiting the cost of goods sold account and crediting the inventory account for the cost of merchandise sold. Thus the perpetual inventory system provides a continuous record of the balances in both the inventory account and the cost of goods sold account. If the company has a computerized bookkeeping system, it is possible to record additions to and withdrawals from inventory almost instantaneously. Moreover, development and growth of computerized bookkeeping systems have made the perpetual inventory system cost-effective for an increasing number of companies.

Even though a physical inventory count is not required in order to report inventory on hand when the perpetual inventory system is used, all inventory items should be counted at least once each year in order to verify the amount reported as inventory. Since the purpose of this physical count is simply to verify the perpetual inventory records, however, the count needs not to be made at a single point in time and it needs to take place only at or near the end of the accounting period. Counts of the various inventory items can be staggered throughout the accounting period, thus reducing the inconvenience and cost that often are associated with a shutdown of operations for a complete inventory count.

The physical inventory count may yield an inventory balance that differs from the balance in the perpetual inventory records because of accounting or counting errors or because of inventory shrinkages resulting from losses, thefts, or waste. Should a difference occur, the balance of the inventory account should be adjusted to agree with the physical count. If the physical count was greater than the perpetual records by \$500, adjustment of the inventory account would be as follows:

Inventory	\$ 500
Inventory overage	\$ 500

If the physical count was less than the perpetual records by \$300, the following entry would be made:

Inventory shortage	\$ 300
Inventory	\$ 300

Any inventory overage or shortage recorded as shown above should be closed to the income summary. Although an inventory overage or shortage usually is reported as a separate line item in income statements prepared for internal use, as an aid in management's efforts to control inventory, these accounts are often combined with cost of goods sold for external reporting purposes. Illustrative entries for the perpetual inventory

ry system are shown in the right-hand column of Exhibit 6—1.

6.1.2 Periodic Inventory System

In a periodic inventory system, no effort is made to keep up-to-date records of either the inventory or the cost of goods sold. Instead, these amounts are determined only periodically—usually at the end of each year. When merchandise is purchased, its cost is debited to an account entitled Purchases, rather than the Inventory account. When merchandise is sold, an entry is made to recognize the sales revenue, but no entry is made to record the cost of goods sold or to reduce the balance of the Inventory account. As the inventory records are not updated as transactions occur, there is no inventory subsidiary ledger. The periodic inventory system is likely applied to a business that sells a variety of merchandise with low unit price, such as a drugstore, groceries or hardware store.

When the periodic inventory system is used, the amount of inventory on hand is determined only periodically. All inventory acquisitions during an accounting period are recorded by debiting a purchases account. The dollar amount in the purchases account at the end of the accounting period is added to the cost of the inventory on hand at the beginning of the period to determine the total cost of goods available for sale. The inventory on hand at the end of the accounting period is determined by a physical count, and the cost of this ending inventory is deducted from the cost of goods available for sale to determine the cost of goods sold. As a result, when the periodic inventory system is used, a physical inventory count is essential, and cost of goods sold is a residual amount that is dependent on ending inventory:

Beginning inventory	\$ 100 000
Plus: Net inventory purchases during the period	<u>80 000</u>
Cost of goods available for sale	\$ 180 000
Less: Ending inventory	<u>(15 000)</u>
Cost of goods sold	<u>\$ 165 000</u>

The balance in the inventory account is not adjusted until a physical count is made. Once the inventory on hand has been determined by physical count at the end of an accounting period, the inventory account is credited for the beginning inventory balance and the purchases account is closed with a credit. The sum of the dollar amounts of beginning inventory and purchases is the cost of merchandise that was available for sale during the accounting period. This merchandise either has been sold during the period or

is still on hand at the end of the period. Therefore, the inventory account is debited for the dollar amount of ending inventory, based on the physical count, and cost of goods sold is debited for the dollar amount of inventory that was available for sale and that is not included in the ending inventory balance. The usual entries made under the periodic inventory system are illustrated in the left-hand column of Exhibit 6—1.

Exhibit 6—1 Entries Under the Periodic and Perpetual Inventory Systems

Periodic inventory system		Perpetual inventory system	
1. To record purchase of television sets for sale:			
Purchases	\$ 32 000	Inventory	\$ 32 000
Accounts payable		Accounts payable	
	(80× \$ 400) \$ 32 000		(80× \$ 400) \$ 32 000
2. Entries made as sales occur:			
(No entry for inventory withdrawal or to record cost of goods sold)		Cost of goods sold	\$ 29 600
		Inventory	(74× \$ 400) \$ 29 600
Accounts receivable	\$ 37 000	Accounts receivable	\$ 37 000
Sales revenue	(74× \$ 500) \$ 37 000	Sales revenue	(74× \$ 500) \$ 37 000
3. Year-end adjusting and closing entries:			
Cost of goods sold(residual)	\$ 30 000	Inventory shortage	\$ 400
Ending inventory	(30× \$ 400) 12 000	Inventory	(1× \$ 400) \$ 400
Beginning inventory	(25× \$ 400) \$ 10 000		
Purchases	(80× \$ 400) \$ 32 000		
		Income summary	\$ 30 000
Income summary	\$ 30 000	Inventory shortage	\$ 400
Cost of goods sold	\$ 30 000	Cost of goods sold	\$ 29 600

Physical inventory at fixed periods must be taken under either perpetual inventory system or periodic inventory system. Taking a physical inventory means making a systematic count of all merchandise on hand. It usually consists of (1) taking the inventory, namely, determining the quantity of each kind of merchandise on hand, and (2) pricing the inventory, namely, multiplying the quantity by the cost per unit.

6.2 Inventory Measurement

In general, inventories are priced at their cost. The cost of an item of inventory is made up of the purchase price, minus any discount, plus all expenditures incurred on acquiring such merchandise, including import duties, transportation-in, storage, insur-

ance of goods being shipped or stored, and cost of receiving and inspecting the goods.

6.2.1 Inventory Valuation Methods

Inventory valuation is quite simple when acquisition price remain constant. When prices for like items change during the accounting period, it is not always apparent which price should be used to measure the ending inventory. The four inventory valuation methods to be used usually are known as (1) specific identification; (2) average cost; (3) first-in, first-out; (4) last-in, first-out.

In order to compare the inventory methods more easily, we shall illustrate them with identical data. Assume the data shown below:

	Number of Unit	Cost per Unit	Total
Beginning inventory	50	\$ 10	\$ 500
First purchase	60	20	1 200
Second purchase	70	30	2 100
Third purchase	<u>80</u>	40	<u>3 200</u>
Goods available for sale	260		<u>\$ 7 000</u>
Less: Units sold	<u>160</u>		
Units in ending inventory	<u>100</u>		

By assigning cost we are simply dividing the cost of the goods available for sale between cost of goods sold and ending inventory. Therefore, we can compute by:

- (A) pricing out either the cost of goods sold or the ending inventory;
- (B) subtracting the amount determined in step (A) from the cost of goods available for sale;

(C) assigning the residual to the element not priced in step (A).

It usually will be advantageous to price out the ending inventory (and assign the residual amount to the cost of goods sold) because the ending inventory will involve fewer units than the cost of goods sold. Here we also compute ending inventory first.

Although each of the four inventory methods will produce a different answer as to the cost of goods sold and the cost of the ending inventory, the valuation of inventory in each case is said to be at “cost”.

Specific Identification Method

The specific identification method is best suited to inventories of high-priced, low-volume items. New automobiles and construction equipment are good examples. The method of pricing inventory is required to identify the units in the ending inventory as

coming from specific purchases. If the units in the ending inventory can be identified as coming from specific purchases, they may be priced at the amounts listed on the purchase invoices.

Using the above data already presented, assume that the ending inventory of 100 units can be identified as 10 units from the beginning inventory, 20 units from the first purchase, 30 units from the second purchase, and 40 units from the third purchase, the cost of the ending inventory may be computed as follows:

10 units from the beginning inventory @ \$10	\$ 100
20 units from the first purchase @ \$20	400
30 units from the second purchase @ \$30	900
40 units from the third purchase @ \$40	<u>1 600</u>
Ending inventory, 100 units (at specific identification cost)	<u>\$ 3 000</u>

The cost of goods sold during the period is determined by subtracting the ending inventory from the cost of goods available for sale:

Cost of goods available for sale	\$ 7 000
Less: Ending inventory	<u>3 000</u>
Cost of goods sold (specific identification method)	<u>\$ 4 000</u>

Average Cost Method

The average cost method sometimes called the weighted average method, is based on the assumption that cost should be charged against revenue according to the weighted average unit costs of the goods sold. The weighted average unit cost is computed by dividing the total cost of goods available for sale by the number of units available for sale. Using the same data as in the preceding illustrations, the cost of 100 units in the ending inventory is determined as follows:

Cost of goods available for sale	\$ 7 000
Number of units available for sale	<u>260</u>
Average unit cost	\$ 26. 92
Ending inventory (at average cost, 100 units @ \$26. 92)	<u>\$ 2 692</u>

Note that this method, compared with the specific identification method, leads to a different amount for cost of goods sold as well as a different amount for the ending inventory.

Cost of goods available for sale	\$ 7 000
Less: Ending inventory	<u>2 692</u>
Cost of goods sold (average cost method)	<u>\$ 4 308</u>

The average cost method is best suited to operations that involve a large volume of undifferentiated goods stored in common areas. The weighted average cost represents, to some degree, the various costs experienced in accumulating the goods currently on hand. Therefore, weighted average costs fall between the extreme cost figures that can result from other methods. A common criticism on this method is that it attaches no more significance to current prices than to prices that prevailed several months earlier.

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First-in, First-out Method (FIFO)

The first-in, first-out method, which is often referred to as FIFO, is based on the assumption that costs should be charged against revenue in the order in which they were incurred. Hence the ending inventory consists of the most recently acquired goods. Using the same data as in the preceding illustrations, the cost of 100 units in the ending inventory is determined as follows:

80 units from the third purchase @ \$ 40	\$ 3 200
20 units from the second purchase @ \$ 30	<u>600</u>
Ending inventory, 100 units (at FIFO cost)	<u>\$ 3 800</u>

The cost of goods sold is computed as follows:

Cost of goods available for sale	\$ 7 000
Less: Ending inventory	<u>3 800</u>
Cost of goods sold (FIFO method)	<u>\$ 3 200</u>

Note that the FIFO method of determining inventory cost may be adopted by any business regardless of whether or not the physical flow of merchandise actually corresponds to this assumption of selling the oldest units in stocks first. To some extent, the FIFO method approximates the results that would be obtained by specific identification of costs.

Last-in, First-out Method (LIFO)

The last-in, first-out method, commonly known as LIFO, is based on the assumption that the most recent costs incurred should be charged against revenue. Hence the ending inventory consists of old goods in the earliest purchase. Using the same data as in the preceding illustrations, the cost of 100 units in the ending inventory is determined as follows:

50 units from the beginning inventory @ \$ 10	\$ 500
50 units from the first purchase @ \$ 20	<u>1 000</u>
Ending inventory, 100 units (at LIFO cost)	<u>\$ 1 500</u>

The cost of goods sold is computed as follows:

Cost of goods available for sale	\$ 7 000
Less: Ending inventory	<u>1 500</u>
Cost of goods sold (LIFO method)	<u>\$ 5 500</u>

Although LIFO presents the least plausible flow of goods for most businesses, many firms use it. LIFO better matches current costs against current revenues because the costs assigned to the cost of goods sold are relatively current. However, it conse-

quently prices the ending inventory at the older, less realistic unit price.

6.2.2 Comparison of Inventory Valuation Methods

By comparing the results obtained from the four methods illustrated above, especially during a period of rapid price increase, let us summarize the amounts computed for ending inventory, cost of goods sold and gross profit on sales under each of the four methods. Suppose that sales for the period amounted to \$ 6 000.

	Specific Identification	Average Cost Method	FIFO	LIFO
	Method			
Sales	\$ 6 000	\$ 6 000	\$ 6 000	\$ 6 000
Cost of goods sold				
Beginning inventory	500	500	500	500
Purchases	<u>6 500</u>	<u>6 500</u>	<u>6 500</u>	<u>6 500</u>
Cost of goods available for sale	\$ <u>7 000</u>	\$ 7 000	\$ 7 000	\$ 7 000
Less: Ending inventory	<u>3 000</u>	<u>2 692</u>	<u>3 800</u>	<u>1 500</u>
Cost of goods sold	<u>\$ 4 000</u>	<u>\$ 4 308</u>	<u>\$ 3 200</u>	<u>\$ 5 500</u>
Gross profit on sales	<u>\$ 2 000</u>	<u>\$ 1 692</u>	<u>\$ 2 800</u>	<u>\$ 500</u>

From the above, we can see the method that yields the lowest figure for the cost of goods sold will yield the highest figure for gross profit reported on the income statement. It will also yield the highest figure for the inventory reported on the balance sheet. On the other hand, the method that yields the highest figure for the cost of goods sold will yield the lowest figure for gross profit and lowest figure for inventory.

During a period of inflation or rising prices, the use of FIFO will result in greater profits than the other inventory valuation methods. But the use of LIFO will yield lower reported profits and lower income taxes. Perhaps for this reason, many businesses change from FIFO to LIFO. However, on the other hand, the use of LIFO during a period of inflation is apt to produce a balance sheet figure for inventory that is far below the current replacement cost of the goods on hand.

During a period of deflation or declining prices, the effect described above is reversed. The LIFO method will cause the reporting of relatively large gross profit as compared with FIFO, which will hold reported gross profit to minimum.

The average cost method is a compromise between LIFO and FIFO. The effect of price trends is averaged, both in the determination of profits and inventory cost. The specific identification method best presents actual physical flow of merchandise. But it may lead to faulty pricing decision by implying that identical items of merchandise have different economic values.

From the comparison of inventory valuation methods, we can see that all four methods are regarded as acceptable accounting practices. We choose the most suitable method only according to the different situation. But once a method has been selected, it should be followed consistently from year to year.

6.2.3 The Lower of Cost or Market Rule

Although cost is the primary basis for valuation of inventories, circumstances may arise under which inventory may properly be valued at less than cost. When the replacement cost of goods held by a firm declines, there is a loss in the utility of the inventory. This loss may appropriately be recognized as a loss of the current period by reducing the accounting value of the inventory from cost to current replacement cost, rather than in a subsequent period of sale.

If the replacement cost of an item in the inventory is lower than its cost, the use of the lower of cost or market rule provides two advantages: (1) the gross profit and the net income are reduced for the period in which the decline occurred, and (2) an approximately normal gross profit is realized during the period in which the item is sold.

In recent years, the LCM rule has undergone some modifications and is qualified in the following aspects: (1) If the inventory can probably be sold at prices which will yield a normal profit, the inventory should be carried at cost even though current replacement cost is lower; (2) Inventory should never be carried at an amount greater than net realizable value, which may be defined as prospective selling price minus anticipated selling expenses.

6.3 Estimating Inventories

When the periodic inventory is being used, a physical inventory must be taken to determine the amount of the ending inventory. However, it is often impractical to take physical inventory counts when interim financial statements are prepared. So it will be useful for us to examine some methods for estimating inventories. One method of esti-

mating inventory is the gross profit method; the other is called the retail inventory method.

6.3.1 Gross Profit Method

The gross profit method is a quick, simple technique for estimating inventories that can be used in almost all types and sizes of business. If the rate of gross profit is known, the amount of net sales for a period can be divided into two components that are the gross profit and the cost of goods sold. Then, the cost of goods sold may be deducted from the cost of goods available for sale to yield the estimated ending inventory.

To illustrate the gross profit method, assume that the beginning inventory on January 1 is \$50 000. During the month, net purchases amount to \$250 000 and net sales total \$200 000. Assume that the gross profit rate is 40%. The inventory on January 31 may be estimated as follows:

Beginning inventory, January 1		\$ 50 000
Net purchases		<u>250 000</u>
Cost of goods available for sale		\$ 300 000
Deduct: Estimated cost of goods sold		
Net sales	\$ 200 000	
Deduct: Estimated gross profit		
(\$ 200 000 × 40%)	<u>80 000</u>	<u>120 000</u>
Estimated ending inventory, January 31		<u>\$ 180 000</u>

The estimated of the rate of gross profit is ordinarily based on the actual rate for the preceding year, adjusted for any changes made in the cost and sales prices during the current period. This method is very useful in preparing interim statements and also in establishing an estimate of the cost of merchandise destroyed by fire or other disasters.

6.3.2 Retail Inventory Method

The retail inventory method is widely used by department stores and other types of retail businesses that are likely to keep periodic inventory records. Such firms typically mark each item of merchandise with the retail price and record purchases at both cost and retail price. A firm can estimate its ending inventory at retail price merely by subtracting the net sales for the month from the retail price of goods available for sale. The ending inventory at retail is then converted to cost on the basis of the ratio of cost to selling retail price for the current period. Determination of ending inventory by the retail

method is illustrated as follows:

	Cost	Retail Selling Price
Beginning inventory, January 1	\$ 20 000	\$ 30 000
Net purchases	<u>60 000</u>	<u>70 000</u>
Goods available for sale	<u><u>\$ 80 000</u></u>	<u><u>\$ 100 000</u></u>

(Continued)

	Cost	Retail Selling Price
Ratio of cost to selling retail price ($\$80\,000/\$100\,000=80\%$)		
Deduct: Net sales		<u>80 000</u>
Ending inventory at retail selling price, January 31		<u>\$ 20 000</u>
Ending inventory at cost, January 31 ($\$20\,000\times 80\%$)	<u>\$ 16 000</u>	

One of the major advantages of the retail method is that it provides inventory figures for use in preparing interim statements. In addition, a comparison of the computed inventory total with the physical inventory total, both at retail prices, will show the extent of inventory shortages and the consequent need for corrective measures.

LIFO RESERVES

Extending Your Knowledge

We have stated that a significant shortcoming in the LIFO method is that the asset inventory is valued at the company's oldest inventory acquisition costs. After a period of years, these outdated costs may significantly understate the current replacement cost of the inventory. The difference between the LIFO cost of an inventory and its current replacement cost often is called a LIFO reserve.

In a recent balance sheet, Ford Motor Company reported inventories of approximately \$5.7 billion valued by the LIFO method. A note accompanying the balance sheet, however, explained that the current replacement cost of these inventories exceeded \$6.9 billion. Therefore, Ford had a LIFO reserve of more than \$1.2 billion.

The Significance of a LIFO Reserve

Users of financial statements should understand the implications of a large LIFO reserve.

A LIFO reserve indicates that the company's inventory is undervalued in terms of its current replacement cost and the valuation that would have resulted from use of the FIFO method. Thus the inventories of compare using LIFO are not directly comparable to those of companies using FIFO. Fortunately, this problem is solved in the notes to the financial statements: Companies using LIFO disclose the current replacement cost

(or FIFO cost) of their inventories.

Liquidation of a LIFO Reserve

The existence of a LIFO reserve may cause a company's profits to rise dramatically if inventory falls to an abnormally low level at yearend. As the company reduces its inventories, the costs transferred to the cost of goods sold come from older—and lower—cost layers. The inclusion of these old and low costs in the cost of goods sold can cause the company's gross profit rate to soar. This situation is often referred to as a liquidation of a LIFO reserve.

Many factors may cause the liquidation of a LIFO reserve. For example, the company may be unable to make the purchases necessary to replenish its inventory because of shortages or strikes. Often a company discontinues a particular product line and sells its entire inventory of this merchandise. Also, management deliberately may delay making normal year-end purchases to liquidate a portion of the company's LIFO reserve.

Users of financial statements should recognize that the abnormal profits that result from the liquidation of a LIFO reserve do not represent an improvement in financial performance. Rather, these profits are a one-time occurrence, resulting from old and relatively low unit costs temporarily being used in measuring the cost of goods sold.

Users of financial statements easily can determine whether a company's reported earnings are affected by the liquidation of a LIFO reserve. This liquidation occurs whenever a company using LIFO ends its fiscal year with its inventory at a substantially lower level than at the beginning of the year. If material in dollar amount, the financial impact of this liquidation should be disclosed in notes accompanying the financial statements.

Assessing the Income Tax Benefits of Using LIFO

A LIFO reserve represents the amount by which a company has reduced its taxable income over the years through use of the LIFO method. Referring to a previous Case in point, Ford Motor Company has reduced its taxable income (over a long span of years) by more than \$1.2 billion. If we assume that Ford pays income taxes at a rate of 33 percent, using LIFO has saved the company about \$400 million in income taxes.

Key words, phrases, and special terms

actual physical count

实地盘点

average cost method	平均成本法
contra account	抵销账户
cost of goods available for sale	可供销售的商品成本
current replacement cost	现时重置成本
deflation	通货紧缩
ending inventory	期末存货
FIFO(first-in, first-out method)	先进先出法
finished goods	产成品
freight-in	运费
goods in process of manufacture	在产品
goods in transit	在途存货
goods on hand	库存商品
inflation	通货膨胀
LIFO(last-in, first-out method)	后进先出法
periodic inventory system	定期盘存制
perpetual inventory system	永续盘存制
physical inventory system	实地盘存制
preceding year	以前年度
purchases returns and allowances	购货退回及折让
raw materials	原材料
retail price	零售价格
specific identification method	个别辨认法
transportation-in (out)	进(销)货运费
weight average	加权平均

MULTIPLE-CHOICE QUESTIONS

- The primary purpose for using an inventory flow assumption is to:
 - Parallel the physical flow of units of merchandise.
 - Offset against revenue an appropriate cost of goods sold.
 - Minimize income taxes.
 - Maximize the reported amount of net income.
- T-Shirt City uses a periodic inventory system. During the first year of opera-

tions, the company made four purchases of a particular product. Each purchase was for 500 units and the prices paid were \$9 per unit in the first purchase, \$10 per unit in the second purchase, \$12 per unit in the third purchase, and \$13 per unit in the fourth purchase. At year-end, 650 of these units remained unsold. Compute the cost of goods sold under the FIFO method and LIFO method, respectively.

- a. \$13 700 (FIFO) and \$16 000 (LIFO).
- b. \$8 300 (FIFO) and \$6 000 (LIFO).
- c. \$16 000 (FIFO) and \$13 700 (LIFO).
- d. \$6 000 (FIFO) and \$8 300 (LIFO).

3. Allied Products maintains a large inventory. The company has used the LIFO inventory method for many years, during which the purchase costs of its products have risen substantially. (More than one of the following answers may be correct.)

- a. Allied would have reported a higher net income in past years if it had been using the average-cost method.
- b. Allied's financial statements imply a lower inventory turnover rate than they would if the company were using FIFO.
- c. If Allied were to let its inventory fall far below normal levels, the company's gross profit rate would decline.
- d. Allied would have paid more income taxes before if it had been using the FIFO method.

4. An item of inventory purchased in 1996 for \$25.00 has been incorrectly written down to a current replacement cost of \$17.50. The item is currently selling in 1997 for \$50.00, its normal selling price. Which one of the following statements is correct?

- a. The income for 1996 is overstated.
- b. The cost of sales for 1997 will be overstated.
- c. The income for 1997 will be overstated.
- d. The closing inventory of 1996 is overstated.

5. The following FCL Corporation inventory information is available for the year ended December 31, 1997:

	Cost	Retail
Beginning inventory at Jan. 1, 1997	\$ 35 000	\$100 000
Net purchases	55 000	110 000
Net markups		15 000
Net markdowns		25 000

Net sales

150 000

The December 31, 1997 ending inventory at cost using the conventional (lower of average cost or market) retail inventory method equals

- a. \$17 500. b. \$20 000. c. \$27 500. d. \$50 000.

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EXERCISES

1. Calculating Cost of Goods Available for Sale and Purchase

The following information is available for Grant, Inc. , for 2004:

Freight in	\$ 20 000
Purchase returns	80 000
Selling expense	200 000
Ending inventory	90 000

The cost of goods sold is equal to 70 percent of selling expense.

Required:

Calculate the cost of goods available for sale and purchase.

2. Periodic vs. Perpetual Inventory

Waxon Co. started year 3 with 100 units of inventory costing \$ 10 per unit. During year 3 the summary transactions listed below affected Waxon’s inventory. Waxon uses the FIFO cost flow assumption in accounting for it inventory.

4/30/yr. 3	Purchases (200× \$ 11)	\$ 2 200
9/20/yr. 3	Purchases (150× \$ 12)	1 800
5/10/yr. 3	Sales (220 sold for \$ 15 each)	3 300
11/15/yr. 3	Sales (100 sold for \$ 16 each)	1 600
	Ending Inventory 120 units	

Required:

- (1) Make summary journal entries, including adjusting and closing entries, for Waxon Co. under (a) the periodic inventory system and (b) the perpetual inventory system.
- (2) Compare the advantages and disadvantages of the periodic and perpetual inventory systems.

3. Computing Ending Inventory and the Cost of Goods Sold

ABC Co. ’s inventory records indicate the following at Oct. 31:

	Number of unit	Cost per unit	Total
Beginning inventory	10	\$ 100	\$ 1 000
First purchase	30	120	3 600
Second purchase	20	110	2 200
Third purchase	<u>40</u>	130	<u>5 200</u>
Goods available for sales	100		<u>\$ 12 000</u>
Less: Units sold	<u>80</u>		
Units in ending inventory	<u>20</u>		

Required:

Compute ending inventory and cost of goods sold, using each of the following methods:

- (1) Specific identification method, assuming 2 units from beginning inventory, 6 units from the first purchase, 5 units from the second purchase, and 7 units from the third purchase.
- (2) Average cost method.
- (3) First-in, first-out method (FIFO).
- (4) Last-in, first-out method (LIFO).

CASES

1. Assume that you have been using the LIFO inventory method in your building supply business for the past 10 years. Each year, your accountant brings to your attention the significant tax savings that have resulted from your decision to use LIFO instead of FIFO.

During December, a major supplier was unable to make deliveries due to a strike by the truck drivers' union. As a consequence, inventory levels at year-end were nearly depleted. You have just received a call from your accountant informing you that taxable income for the year ended December 31 was unexpectedly high, and that the estimated tax payments made throughout the year fell far short of the company's actual tax liability.

The news from your accountant made you angry and confused, as you were certain that LIFO always results in the lowest possible taxable income during periods of rising prices. While the past year was inflationary, income taxes were much higher than ex-

pected. What happened?

2. Suppose Microsoft Co. inventory records for a particular software program show the following on Oct. 31:

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Oct. 1	Beginning inventory	5 units @ \$ 160
8	Purchase	4 units @ \$ 160
15	Purchase	11 units @ \$ 170
26	Purchase	5 units @ \$ 180

On Oct. 31, eight of these software programs are on hand.

Use the above data to illustrate Microsoft income tax advantage from using LIFO over FIFO. Assume sales revenue is \$ 6 000, operating expenses are \$ 1 100, and the income tax rate is 35%. How much in taxes would Microsoft Co. save by using the LIFO method?

3. Proponents of the LIFO inventory cost-flow assumption argue that this costing method is superior to the alternatives because it results in better matching of revenue and expense.

Required:

(1) Explain why “better matching” occurs with LIFO.

(2) What is the impact on the carrying value of inventory in the balance sheet when LIFO rather than FIFO is used during periods of inflation?