

PART 2

Measurement, Mechanics, and Use of Financial Statements

General Motors was the dominant automobile manufacturer throughout the world for decades. The company's car line spanned several brand names and its dealer network was ubiquitous in the United States. Annually, the company's market share for new car sales in the U.S. was well ahead of rival firms, both domestic and international. However, in the latter part of the first decade of this century, sales dropped while expenses, often locked in at contractual rates, grew substantially. Competition from the likes of Toyota and Honda eroded market share and profitability, while GM and its dealers became dependent on offering steep rebates to move cars. Eventually, the company's losses grew so much that the U.S. government, in an unprecedented move, took over ownership of the firm and negotiated GM into and then out of bankruptcy court. Only recently is GM beginning to rebound and reduce the government's ownership stake.

How do you measure profit margins? How can profits turn quickly into losses? How does management affect the financial statements? And how do investors respond to the present success but the future uncertainty of changing markets and competition? These kinds of questions are addressed in Part 2 of this textbook.

CHAPTER 3

The Measurement Fundamentals of Financial Accounting

CHAPTER 4

The Mechanics of Financial Accounting

CHAPTER 5

Using Financial Statement Information

CHAPTER 3

The Measurement Fundamentals of Financial Accounting

KEY POINTS

The following key points are emphasized in this chapter:

- **Four basic assumptions of financial accounting.**
- **The markets in which business entities operate and the valuation bases used on the balance sheet.**
- **The principle of objectivity and how it determines the dollar values that appear on the financial statements.**
- **The principles of matching, revenue recognition, and consistency.**
- **Two exceptions to the principles of financial accounting measurement: materiality and conservatism.**
- **Fundamental differences between U.S. GAAP and IFRS.**

Apple, Inc. has led the market for so-called smart phones with its iPhone, while competitors crowd the market daily with products such as the Pre from Palm and the Droid from Motorola. Manufacturers that sell these products are producing both hardware and software for their customers, selling the phone but also providing services to make the phone as functional as possible. Historically, the companies would record the revenue from the sale over the assumed life of the product, typically two years. Recently, however, the FASB approved changes that allow these companies to record more of the revenue in earlier periods of the phone's use. How do companies recognize revenue, and how are the financial statements affected? What might motivate management to recognize revenue early, and how might a company's stock price react to such behavior? This chapter covers the measurement fundamentals of financial accounting, which consists of the basic assumptions, principles, and exceptions underlying the financial statements. The principles of revenue recognition are an important part of these fundamentals.

ASSUMPTIONS OF FINANCIAL ACCOUNTING

There are four basic assumptions of financial accounting: (1) economic entity, (2) fiscal period, (3) going concern, and (4) stable dollar. These assumptions are important because they form the building blocks on which financial accounting measurement is based. Some are reasonable representations of the real world, and others are not. As each assumption is discussed, try to understand why it has evolved, and be especially aware of those that fail to capture the world as it really is.

Economic Entity Assumption

The most fundamental assumption of financial accounting involves the object of the performance measure. Should the accounting system provide performance information about countries, states, cities, industries, individual companies, or segments of individual companies? While it is important that each of these entities operate efficiently, financial accounting has evolved in response to a demand for company-specific measures of performance and financial position. Consequently, financial accounting reports provide information about individual, profit-seeking companies.

The process of providing information about profit-seeking entities implicitly assumes that they can be identified and measured. Individual companies must be entities in and of themselves, separate and distinct from both their owners and all other entities. This statement represents the **economic entity assumption**, the first basic assumption of financial accounting. This assumption provides an important foundation on which the financial accounting system is built, and in certain situations it plays a critical role in determining the scope of financial statements.

For example, after Walt Disney acquired the common stock of Capital Cities/ABC, Inc., a major broadcasting company, it included all of ABC's assets and liabilities on its consolidated balance sheet. For financial reporting purposes, therefore, ABC, which publishes its own separate financial statements, is included within the economic entity referred to as The Walt Disney Company. In fact, the consolidated balance sheet of Disney includes the assets and liabilities of many other companies, called *subsidiaries*, each of which prepares its own financial statements. NBC, another major broadcasting company, is owned by General Electric and the cable giant Comcast.



Fortune Brands, Inc. is an entity called a holding company, consisting of many businesses, including Titleist, Master Brand Cabinets, Moen Faucets, and Clos du Bois Wines. The company reports separate financial statements for each business as well as a set of consolidated financial statements. Why might it be useful to maintain separate accounting records for each company? Might there be some difficulties maintaining separate records?

Fiscal Period Assumption

Once the object of measurement has been identified (i.e., the economic entity), we must recognize that to be useful, measures of performance and financial position must be available on a timely basis. Investors, creditors, and other users of financial information need periodic feedback if they are to monitor the performance of management as well as control and direct its decisions.

The need for timely performance measures underlies the **fiscal period assumption**, which states that the operating life of an economic entity can be divided into time periods over which such measures can be developed and applied. Most corporations, for example, prepare annual financial statements, providing yearly feedback and performance measures to their shareholders. The Securities and Exchange Commission requires that publicly traded companies provide financial statements (called *Form 10-Q*) to their shareholders on a quarterly basis.

TIMELY VS. OBJECTIVE FINANCIAL INFORMATION

The fiscal period assumption introduces a trade-off between the timeliness of accounting information and its objectivity. Users need timely information, and thus, they generally prefer fiscal periods that are relatively short. However, as the fiscal period becomes shorter, the applications of certain accounting methods become more arbitrary and subjective. The quarterly accounting reports published by major U.S. corporations, for example, are not audited and are generally more subjective than the audited annual reports. To illustrate, the Form 10-Q report published by Amazon.com, Inc., for the third quarter of 2009, contained the following statement:

We have prepared the accompanying consolidated financial statements pursuant to the rules and regulations of the Securities and Exchange Commission for interim financial reporting. These consolidated financial statements are unaudited.



Cisco Systems and Alcoa have real-time financial information used exclusively for internal decision making. Cisco, for example, has hourly information on revenues, bookings, discounts, and product margins. While certainly there are advantages associated with real-time information systems, can you think of a possible disadvantage?

A CALENDAR YEAR OR FISCAL YEAR?

Another consequence of the fiscal period assumption is that companies must choose the dates of their reporting cycles. Most major U.S. corporations report on the calendar year. That is, they publish an annual report each year as of December 31, and their quarterly statements cover periods ending March 31, June 30, September 30, and

December 31. However, a number of companies report on twelve-month periods, called **fiscal years**, that end on dates other than December 31.¹ In most cases a company chooses a fiscal reporting cycle because its operations are seasonal, and the financial statements are more meaningful if the reporting period includes the entire season.

Large retailers, like Target, Wal-Mart, and Kohl's, for example, often end their fiscal years on January 31, after the completion of the Christmas season. Many companies in the food industry, such as General Mills, prepare annual financial statements in May or June, just after the winter grain crops are harvested. Companies in the farm machinery industries, such as Deere & Co., close their books in September or October, following the summer season when sales are heaviest. Universal Leaf Tobacco, a major processor in the tobacco industry, ends its fiscal year on June 30, immediately after the previous year's tobacco crop has been cured.

Going Concern Assumption

The **going concern assumption** follows logically from the fiscal period assumption. If we assume that an entity's life can be divided into fiscal periods, we must further assume that its life extends beyond the current period. In other words, we assume that the entity will not discontinue operations at the end of the current period over which its performance is being measured. Taken to the extreme, this assumption states that the life of the entity will continue indefinitely.

The role of the going concern assumption in financial accounting is as fundamental as the definition of an asset. Recall that assets are defined to have *future* economic benefit, that is, benefits that extend beyond the current period. The cost of equipment, for example, is placed on the balance sheet because the equipment is expected to provide benefits in the future. The Financial Accounting Standards Board invoked the going concern assumption when, in Statement of Financial Concepts No. 3, it defined assets as "probable *future* economic benefits obtained or controlled by a particular entity as a result of past transactions or events."²



MarketWatch reported in April 2007 that Carrington Labs, Inc. had received a "going concern" opinion from its auditors. The opinion was rendered because the company had recorded substantial losses and was in need of additional financing. Why would auditors be concerned about a company's losses and its future prospects? What does financing have to do with a company's ability to operate as a going concern? Why do investors need to know an auditor's opinion about the future viability of a company?

Stable Dollar Assumption

To measure the dimensions, quantity, or capacity of anything requires a unit of measurement. Height and distance, for example, can be measured in terms of inches, feet, centimeters, or meters; volume can be measured in gallons or liters; and weight can be

1. According to a survey conducted by the American Institute of Certified Public Accountants, 37 percent of the merchandising and industrial companies in the United States close their books on dates other than December 31.

2. Financial Accounting Standards Board, "Elements of Financial Statements of Business Enterprises," *Statement of Financial Concepts No. 3* (Stamford, Conn.: FASB, December 1980), xi and xii.

measured in pounds or kilograms. Mathematical operations, such as addition or subtraction, on any such measure require that the unit of measurement maintain a constant definition.

To illustrate, suppose that you weighed yourself at the beginning of the year and found that your weight was 120 pounds. At the end of the year, you weighed yourself again and noted that your weight was 128 pounds. You conclude that you gained 8 pounds during the year, but implicit in this conclusion is the assumption that the definition of a pound was the same at the beginning and the end of the year. Had a pound at the beginning of the year equaled 16 ounces, but at the end of the year 15 ounces, for example, you would actually have gained no weight at all. You would have weighed 1,920 ounces at both points in time.

The logical unit of measurement for the financial performance and condition of a company is the monetary unit used in the economic transactions entered into by that company. In the United States, for example, the monetary unit is the dollar. Consequently, the financial statements of U.S. companies are expressed in terms of dollars.

The measures of financial performance and position on the financial statements all involve the addition, subtraction, or division of dollar amounts. Total assets on the balance sheet, for example, represent the addition of the dollar values of all the individual assets held by a company at a particular point in time. The ratio of current to total assets and the debt/equity ratio involve dividing certain balance sheet dollar amounts by other balance sheet dollar amounts. As with the measures discussed previously, valid use of these mathematical operations requires that the definition of the dollar be constant. Thus, a **stable dollar assumption** is implicit in the measures of performance and financial condition used to evaluate and control management's decisions.

INFLATION: THE DOLLAR'S CHANGING PURCHASING POWER

A dollar's value is defined in terms of its **purchasing power**, the amount of goods and services it can buy at a given point in time. During inflation, which has come to be a fact of life, the purchasing power of the dollar decreases steadily. Therefore, financial statements, which are based on the assumption that the purchasing power of the dollar is constant (i.e., no inflation), can be seriously misstated.

Suppose, for example, that on January 1 you have \$1,000, and at that time the cost of rice is \$1 per bag. You could purchase 1,000 bags of rice, but you decide instead to use the money to purchase (invest in) a small tract of land. During the year, the inflation rate is 10 percent. At year-end, the price of the rice is \$1.10 per bag, and the value of the land is \$1,100. You decide to sell the land, and on your income statement you recognize a gain on the sale of \$100 (\$1,100 – \$1,000). You read your income statement and count the cash in your hand and conclude that your economic wealth has increased by \$100. However, you use the \$1,100 to buy rice and you are surprised to learn that it buys only 1,000 bags, the exact amount you could have purchased at the beginning of the year. Consequently, your wealth has not increased at all, even though your income statement indicates otherwise.



Johnson & Johnson reported that sales increased from \$61 billion in 2007 to \$64 billion in 2008, claiming roughly a 5 percent jump. Yet, during 2008 the consumer price index rose by 4 percent, meaning that on average the prices of goods and services increased in 2008 by 4 percent. Comment on Johnson & Johnson's claim.

A LIMITATION IN THE FINANCIAL STATEMENTS

The stable dollar assumption is one instance in which the financial statements are based on an unrealistic assumption. Financial accounting standard-setting bodies have recognized this problem for many years and have attempted to solve it many times. The most recent effort occurred in 1979, when the FASB required certain large U.S. companies to provide information about the effects of inflation in their annual reports. However, this requirement was subsequently rescinded. Companies complained that the disclosures were costly, and financial statement users showed little interest in them, probably because they believed them to be unreliable. It is important that financial statement users at least recognize that this limitation exists and, in some cases, learn how to adjust financial statements for the effects of inflation. Indeed, in some countries inflation continues to be a problem, and under international financial reporting standards (IFRS) financial statements should be restated for the effects of inflation.



JCPenney's 2008 annual report lists as assets merchandise inventory that was purchased in 2008 and property, plant, and equipment, much of which was acquired many years before 2008 when the dollar's purchasing power was significantly different. Discuss the implications to the users of JCPenney's financial statements.

Summary of Basic Assumptions

Our discussion of the basic assumptions of financial accounting is now complete. In summary, we have assumed the existence of a separate, measurable business entity (economic entity), whose infinite life (going concern) can be broken down into fiscal periods (fiscal period) and whose transactions can be measured in stable dollars (stable dollar). Each of these assumptions is briefly defined in Figure 3–1.

FIGURE 3–1
The basic assumptions of financial accounting

Assumption	Definition
Economic entity	Profit-seeking entities, which are separate and distinct from their owners and other entities, can be identified and measured.
Fiscal period	The life of the economic entity can be divided into fiscal periods, and the performance and financial position of the entity can be measured during each of those periods.
Going concern	The life of the economic entity will extend beyond the current fiscal period.
Stable dollar	The performance and financial position of the entity can be measured in terms of a monetary unit that maintains constant purchasing power across fiscal periods.

Now that the basic assumptions of financial accounting have been established, we can explain how dollar amounts are attached to the assets, liabilities, equities, revenues, expenses, and dividends of economic entities. In the course of this explanation, we consider (1) valuations on the balance sheet and (2) the principles of financial accounting measurement.



While we refer to the fourth assumption as the stable dollar assumption, keep in mind that non-U.S. companies normally prepare their financial statements using a currency other than the dollar. Daimler, a German auto maker, prepares its statements in euros, while Mitsubishi Motors publishes statements expressed in Japanese yen. Comment on how this difference might affect how an analyst would conduct a comparison between the two companies.

VALUATIONS ON THE BALANCE SHEET

The dollar values attached to the accounts on a company's balance sheet are largely determined by the markets in which the company operates. To understand these markets, it is helpful to view a business entity in the following way.



A business entity operates in two general markets: an **input market**, where it purchases inputs (e.g., materials, labor) for its operations, and an **output market**, where it sells its outputs (services or inventories). Input market values (prices) are normally less than output market values (prices). For example, local automobile dealers purchase automobiles from manufacturers, such as Toyota, Daimler, and Ford Motor Company, and sell them to consumers. The prices paid for automobiles by dealers in their input market are generally less than the prices paid by consumers in the output market. A new Honda, for example, may cost a dealer \$19,000 in the input market and may be sold to you, a customer, for \$23,000 in the output market.

Moreover, input and output markets are defined in terms of specific entities: one entity's output market may be another entity's input market. DuPont, for example, supplies complete front and back assemblies for the General Motors cars produced at a GM plant near Kansas City, Missouri. When GM purchases these assemblies, the transaction takes place in the output market of DuPont and the input market of GM.

Viewing a business entity in terms of both its input and output markets introduces a number of different ways to value the accounts on the balance sheet. Should assets, for example, be valued in terms of prices from the input market or prices from the output market—or is there a way to reflect both input and output prices in their valuations? For example, should the value of the Honda on the dealer's balance sheet be expressed in terms of the dealer's input cost (\$19,000) or the selling price in the output market (\$23,000)?

Four Valuation Bases

Four different **valuation bases** are used to determine the dollar amounts attached to the accounts on the balance sheet. They are (1) present value, (2) fair market value, (3) replacement cost, and (4) original cost. **Present value**, the computation of which is discussed and illustrated in Appendix A at the end of the text, represents the discounted future cash flows associated with a particular financial statement item. The present value of a note receivable, for example, is calculated by determining the amount and timing of its future cash inflows and then adjusting the dollar amounts for the time value of money. **Fair market value (FMV)**, or sales price, represents the value of the item in the output market. **Replacement cost**, or current cost, is the current price paid for an item in the input market. **Original cost** represents the input price paid when the item was originally purchased. Figure 3–2 provides definitions of the four valuation bases in terms of an entity's input and output markets.

FIGURE 3-2
Markets and
valuation bases

Valuation Bases

1. **Present value**—discounted future cash flows from input and output markets
2. **Fair market value**—current sales price in output market
3. **Replacement cost**—current cost to replace in input market
4. **Original cost**—historical cost in input market

To illustrate, assume that on January 1, Watson Land Developers purchased an apartment building for \$100,000, which an outsider recently offered to buy for \$140,000. Watson estimates that if it continues to manage the apartment, it would produce net cash flows for the next ten years at a rate of \$25,000 per year. The company also recently investigated replacing the apartment building with a comparable structure and learned that it would cost \$175,000. The present value, fair market value, replacement cost, and original cost of the apartment building are provided in the following list. In other words, Watson purchased an apartment building for \$100,000 that could now be sold for \$140,000 and/or replaced for \$175,000. Continuing to manage the apartment would produce cash flows of \$25,000 per year, which is equivalent to a present value of \$153,614.

Present value = \$153,614 ($\$25,000 \times 6.14457^*$)

Fair market value = \$140,000

Replacement cost = \$175,000

Original cost = \$100,000

*Present value factor (ten-year ordinary annuity, 10 percent discount rate)



Avis Budget Group, Inc., the parent company of Avis Rental Cars, reports over \$7.1 billion worth of vehicles on its balance sheet. Which of the four valuation bases does the \$7.1 billion represent? Discuss how Avis could compute the present value, the fair market value, and the replacement cost of its fleet of vehicles, and describe how these different valuations might be considered useful information.

Valuation Bases Used on the Balance Sheet

All four of the valuation bases described in the previous section are contained in balance sheets prepared under generally accepted accounting principles. This point is illustrated in Figure 3-3, which provides a balance sheet with the valuation base for each account indicated in parentheses. The code for each valuation base is located below the balance sheet.



During the financial crisis of 2008–2009, banks and other investment firms had a difficult time establishing the balance sheet value of investment securities made up of subprime home mortgage loans. Regulators and investors wanted the securities shown at “market value,” though many of the securities could not be sold for any price due to the underlying uncertainty of the subprime mortgages that comprised the investments. These “toxic assets,” as they became known, were difficult to value in the market because, in effect, no market existed for their sale. In this situation, should the bank’s balance indicate a value of zero for these investments, or would it be better to value them on the balance sheet at what the bank paid for the investments?

FIGURE 3-3
Valuation bases
on the
balance sheet

Harbour Island Company
Balance Sheet
December 31, 2011

ASSETS		
Current assets:		
Cash	\$ 220 (FMV)	
Short-term investments	150 (FMV)	
Accounts receivable	345 (FMV)	
Inventory	600 (LCM)	
Prepaid expenses	<u>100 (OC)</u>	
Total current assets		\$ 1,415
Long-term investments:		
Long-term notes receivable	\$1,000 (PV)	
Land	500 (OC)	
Securities	<u>2,500 (OC)</u>	
Total long-term investments		4,000
Property, plant, and equipment:		
Property	\$6,000 (OC)	
Plant	2,900 (OC)	
Equipment	<u>2,600 (OC)</u>	
Total property, plant, and equipment		11,500
Intangible assets:		
Patent	\$1,000 (OC)	
Trademark	<u>700 (OC)</u>	
Total intangible assets		1,700
Total assets		<u>\$18,615</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 200 (FMV)	
Wages payable	150 (FMV)	
Interest payable	30 (FMV)	
Short-term notes payable	200 (FMV)	
Other payables	60 (FMV)	
Unearned revenues	30 (FMV)	
Dividends payable	<u>70 (FMV)</u>	
Total current liabilities		\$ 740
Long-term liabilities:		
Long-term notes payable	\$1,500 (PV)	
Bonds payable	3,500 (PV)	
Mortgage payable	<u>1,940 (PV)</u>	
Total long-term liabilities		6,940
Shareholders' equity		10,935
Total liabilities and shareholders' equity		<u>\$18,615</u>

Valuation base code: FMV = fair market value; LCM = lower of cost or market; OC = original cost; PV = present value.

Cash and all current liabilities are valued using a specific form of fair market value called **face value**. This valuation reflects the cash expected to be received or paid in the near future. The statement of cash flows, which explains changes in the cash account, is completely expressed in terms of face value. Short-term investments are valued at fair market value. Accounts receivable are valued at **net realizable value**, another form of fair market value reflecting the amount of cash expected to be collected from the outstanding accounts. Inventories are valued at original cost or replacement cost, whichever is lower. This example of the conservative **lower-of-cost-or-market rule**, which ensures that the dollar value of this account is not overstated, illustrates that under certain circumstances replacement costs are found on the balance sheet.

Land, securities held as long-term investments,³ and property used in a company's operations are all valued at original cost unadjusted for amortization or depreciation. Prepaid expenses, plant and equipment, and all intangible assets are carried on the balance sheet at their original costs (**historical costs**), reduced by accumulated amortization or depreciation. This adjusted cost dollar value is often referred to as *net book value*.⁴

Long-term notes receivable and long-term liabilities are valued at present value. The dollar amount attached to each of these accounts is calculated by determining the amount and timing of the future cash flows associated with the account and adjusting the dollar amounts for the time value of money (see Appendix A).

Technically, the shareholders' equity section of the balance sheet is not valued in terms of any valuation base. It represents the residual interests of the shareholders or the book value of the company, or the total investment made by the shareholders in the business. The shareholders' equity section can be viewed as the difference between the total balance sheet value of the company's assets and the total balance sheet value of the company's liabilities.

So far we have assumed that economic entities can be identified and measured, their infinite lives can be divided into fiscal periods, and their performance and financial position can be measured in terms of stable dollars. We have also observed that a number of different valuation bases (present value, fair market value, replacement cost, and original cost) are used to determine the dollar amounts of the accounts on the balance sheet. The next section presents the principles of financial accounting measurement, which explain why particular valuation bases are used for some accounts and not for others and how the valuation bases are used to measure net income.



Take a quick look at the 2009 balance sheet published by NIKE in Appendix C. Note the asset items and consider the valuation base used in each case.

THE PRINCIPLES OF FINANCIAL ACCOUNTING MEASUREMENT

There are four basic principles of financial accounting measurement: (1) objectivity, (2) matching, (3) revenue recognition, and (4) consistency.

3. A special method, called the equity method, is used to value certain long-term equity investments on the balance sheet. This method is based on the original cost of the investment, but certain additional adjustments to original cost are made periodically. This method is discussed and illustrated in Chapter 8, which covers long-term investments.

4. Net book value can be applied to an individual balance sheet item, or to the company as a whole, where it is equal to total assets less total liabilities.

The Principle of Objectivity

Financial accounting information provides useful measures of performance and financial position. In doing so, financial accounting statements must provide information about value: the value of entire companies, the value of company assets and liabilities, and the value of the specific transactions entered into by companies.

The economic value of an entity, an asset, or a liability is its present value, which reflects both the future cash flows associated with the entity, asset, or liability and the time value of money.⁵ There is, however, one critical problem with the present value calculation: It assumes that future interest rates and future cash flows are perfectly predictable. This assumption presents no problems in theory, but users of accounting measures of performance and financial position need reliable measures that can be audited at reasonable costs.

For example, Union Carbide Corporation, a subsidiary of the Dow Chemical Company, annually invests millions in new plant assets. Reporting this investment on the company's balance sheet at present value would require an estimate of the net future cash flows generated by the new facilities, as well as an estimate of future interest rates. Such estimates, which would be the responsibility of the company's management, are simply too subjective for the financial statements. Auditors would be unwilling and unable to verify these subjective judgments, and the legal liability faced by both managers and auditors would make such verification potentially very costly.

The principle of **objectivity**, which is perhaps the most important and pervasive principle of accounting measurement, states that financial accounting information must be verifiable and reliable. It requires that the values of transactions and of the assets and liabilities created by them be objectively determined and backed by documented evidence. Although it ensures that the dollar amounts disclosed on the financial statements are reasonably reliable, the principle of objectivity also precludes much relevant and useful information from ever appearing on the financial statements.



Many companies are valuable because they have knowledge not possessed by other companies, often referred to as intellectual property rights. While most believe that these assets have value, they do not appear on the companies' balance sheets. Why not?

PRESENT VALUE AND THE FINANCIAL STATEMENTS

The principle of objectivity ensures that present value cannot be used as the valuation base for all assets and liabilities. In some cases, however, the future cash flows associated with certain assets and liabilities are predictable enough to allow for sufficiently objective present value calculations. Suppose, for example, that on December 31, The Boeing Company received payment from United Airlines for an order of jumbo jets in the form of a note receivable. The note states that United will pay Boeing \$1 million at the end of each year for the next two years. Certainly, this note should appear as an asset (receivable) on Boeing's December 31 balance sheet and as a payable on the balance sheet of United, but at what dollar amount should it be reported?

If we assume a discount rate of 10 percent and realize that the note is actually a two-period \$1 million cash flow, we can use the present value calculation to

5. The following discussion assumes that you understand the present value calculation. If not, refer to Appendix A at the end of the text.

place a value on the note (\$1.735 million = \$1 million \times 1.735 [Table 5: $n = 2$, $i = 10\%$]).⁶ Furthermore, the auditors of Boeing and United would be willing to attest to this valuation because the future cash flows are objectively determined in a legal contract, entered into and signed by both Boeing and United in an *arm's-length transaction*. The auditors for the most part are protected from legal liability because the responsibility to provide the contractual payments rests with United. The result is that a \$1.735 million note receivable would appear on Boeing's balance sheet and a \$1.735 million note payable would appear on United's balance sheet. In this case, present value would be used to provide a balance sheet value for both an asset and a liability.

In general, present value is used on the financial statements only in those cases where future cash flows can be objectively determined. As illustrated, contractual agreements like notes receivable and payable represent cases that meet this criterion. Mortgages, bonds, leases, and pensions are other examples of contracts that underlie cash flows and remove much of the subjectivity associated with cash flow prediction.

Refer again to the balance sheet in Figure 3-3, and note that present value is used as the valuation base for long-term notes receivable, long-term notes payable, bonds payable, and mortgages payable.



The FASB has issued a standard that sets the parameters for deciding when and how to use present value to determine the fair market value of an asset or a liability when the amount or timing of future cash flows is uncertain. Comment on trade-offs that might be introduced by such a standard.

MARKET VALUE AND THE FINANCIAL STATEMENTS

Using market value (i.e., fair market value or replacement cost) as a valuation base for the accounts on the financial statements can be attractive because, in many cases, market value represents the best estimate of present value. If, for example, buyers and sellers in a given market use their individual estimates of present value when bidding on an asset, the resulting market price of the asset should approximate its actual present value. In addition, fair market value is often more objective than present value. Market prices for the equity securities of major U.S. companies, for example, are listed on public stock exchanges and can therefore be objectively verified. To illustrate, the market price of a share of DuPont common stock as of the end of trading on January 10, 2010, was \$34.01.

Unfortunately, while market values are sometimes objectively determinable, in most situations they are not objective enough for use in the financial statements. The market values of securities that are not traded on the major stock exchanges, most inventories, long-term investments, property, plant, and equipment, and intangible assets are not easily determined. The market values of such items may be very informative, but they fail to meet the principle of objectivity.

Refer again to the balance sheet in Figure 3-3, and note that market values are used in the valuation of relatively few accounts. Short-term investments are valued at fair market value, accounts receivable are valued at net realizable value, which approximates fair market value, and inventories are valued at original cost or market value, whichever is lower.

6. Table 5 appears at the end of Appendix A, located at the end of the text.

ORIGINAL COST AND THE FINANCIAL STATEMENTS

Note also in Figure 3–3 that the remaining accounts on the balance sheet (prepaid expenses, land, securities, property, plant, and equipment, and intangible assets) are valued at original cost, the price paid when the asset was originally acquired, or net book value, which is original cost adjusted for depreciation or amortization. Original costs can be objectively verified and supported by documented evidence. They are reliable, can be audited at reasonable cost, and do not violate the principle of objectivity.



Under IFRS, unlike U.S. GAAP, companies are allowed in certain situations to value property, plant, and equipment and intangible assets at fair market value. What does this difference imply about the role of the principle of objectivity under the two systems?

The Principles of Matching and Revenue Recognition

Objectivity is the most pervasive principle of financial accounting. It affects all areas of measurement, including operating performance, which is the focus of the matching and revenue recognition principles.

The **matching** principle, which states that the efforts of a given period should be matched against the benefits that result from them, underlies the measures of operating performance. It is initiated when a company incurs a cost (e.g., pays wages, purchases equipment, invests in a security) to generate benefits, normally in the form of revenues.⁷ If the revenues are generated immediately, the cost is treated as an expense, appearing on the income statement of the current period. If the revenues are expected to be realized in future periods, the cost is considered an asset, or capitalized, and appears on the balance sheet. In future periods, as the revenues are realized, the assets are converted to expenses appearing on the income statements of the future periods. Thus, costs incurred to generate revenues are matched against those revenues in the time periods in which the revenues are realized. This process produces a periodic measure of net income, or company performance.

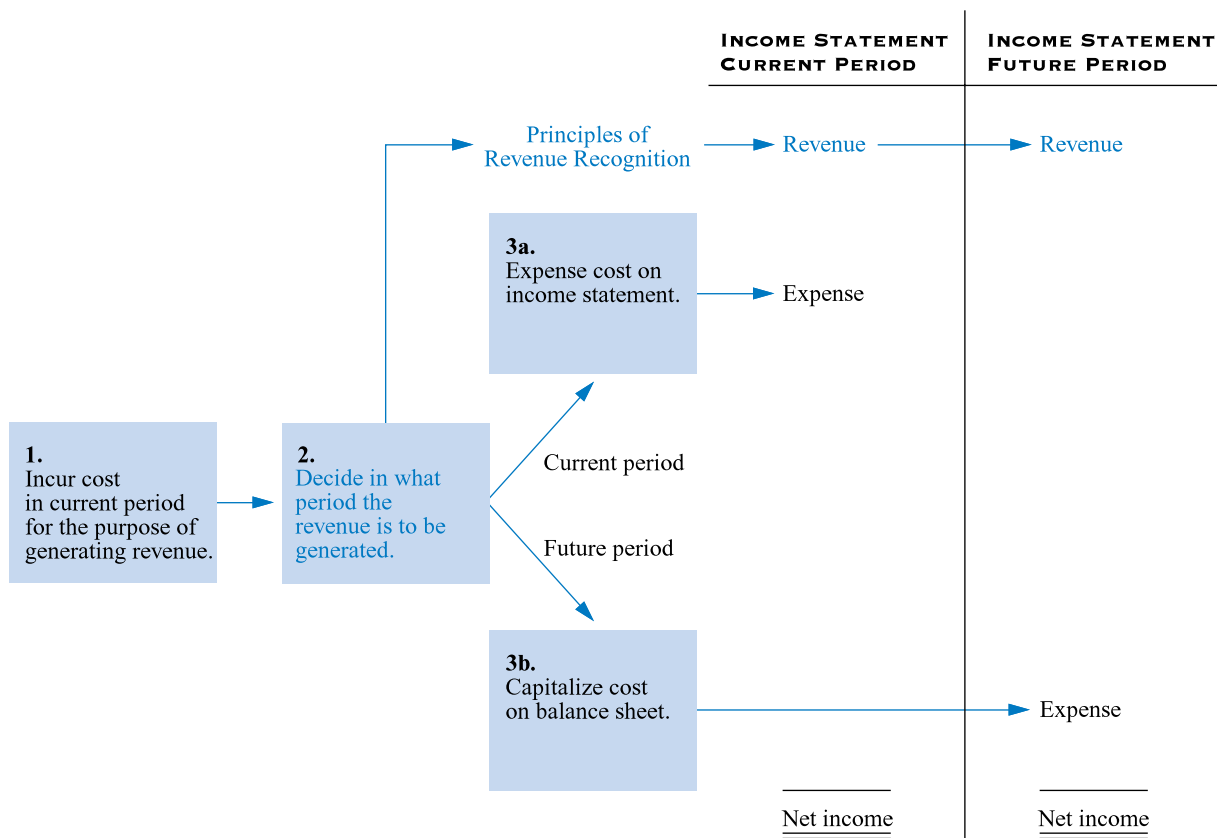
The most critical question in the matching process, as described in Figure 3–4, occurs at Step 2: In what time period will the revenue be realized? The cost incurred in Step 1 cannot be treated as an expense, and the matching principle cannot be applied until this question is answered. The answer, unfortunately, is not always obvious because there are many possibilities. The principle of **revenue recognition** provides the guidelines for answering this question.

To understand the principle of revenue recognition, it is helpful to view the selling of a good or a service as involving the four steps illustrated in Figure 3–5. A good or service is (1) ordered, (2) produced, (3) transferred to the buyer, and then (4) paid for by the buyer. These four steps make a complete production/sales cycle.

The principle of revenue recognition helps to determine at which of these four points the revenue from the sale of a good or service should be recognized on the income statement. The most common point of revenue recognition is Step 3, when the good or service is transferred to the buyer. At this point, a company has normally completed the earning process and is entitled to recognize the revenue. Yet, there are times when each of the other steps may be the point at which revenue should be

7. Benefits can also be in the form of cost savings.

FIGURE 3-4 Income measurement via revenue recognition and matching



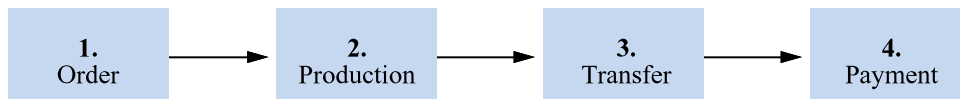
recognized. The principle of revenue recognition states that four criteria must be met before revenue can be included in the income statement:

1. The company has completed a significant portion of the production and sales effort.
2. The amount of revenue can be objectively measured.
3. In the case of physical goods, if the title has transferred; and in the case of a service, if the service has been performed.
4. The eventual collection of the cash is reasonably assured.

While these guidelines are helpful, defining the point in time when all four criteria are met still requires much judgment and can be very important because it often dramatically affects the dollar amounts on the financial statements.

In a story reported in the *Wall Street Journal*, for example, the SEC investigated Gemstar-TV Guide International, Inc. for improperly booking revenue. The investigation

FIGURE 3-5
The production sales cycle



alleges that the company recorded “phantom revenue under expired contracts,” among other abuses.



MicroStrategy, a prominent software company, provides software services for clients on contracts that extend over several years. At first, the company recorded the entire amount of revenue from these multiyear contracts in the first year. Later, its auditors forced the company to spread the recognition of the revenue over the lives of the contracts. How did the change affect MicroStrategy's reported income? Which of the two methods is a better example of the matching process?

IBM, which has for years enjoyed a reputation as the epitome of financial conservatism, has been cited “for booking revenue when its products were shipped to dealers who could return them and sometimes even to its own warehouses.” Many famous accounting frauds (e.g., Regina Vacuum Cleaners, Phar-Mor, MiniScribe, and Knowledge Ware) were based on exaggerating revenue and profit numbers by creating fictitious sales. Blockbuster Video has also been cited for aggressive revenue recognition practices.



Under both U.S. GAAP and IFRS, revenue is recognized basically at the completion of the earnings process. Differences arise, however, because U.S. GAAP provides extensive and specific guidance about how revenue should be recognized that applies only to specific industries, while IFRS relies primarily on the discretion of management to apply the general principles of revenue recognition in specific cases.

The Principle of Consistency

Generally accepted accounting principles allow a number of different, acceptable methods to be used to account for the assets, liabilities, revenues, expenses, and dividends on the financial statements. For example, several acceptable methods may be used to account for each of the following assets: accounts receivable, inventories, long-term investments, and fixed assets. Such variety exists for two reasons: (1) No method is general enough to apply to all companies in all situations and (2) generally accepted accounting principles are the result of a political process in which interested parties who face widely different situations are allowed and encouraged to provide input.

The principle of **consistency** states that, although there is considerable choice among methods, companies should choose a set of methods and use them from one period to the next. Its primary economic rationale is that consistency helps investors, creditors, and other interested parties to compare measures of performance and financial position across time periods. Comparability across time is critical to effective financial analysis. Presumably, if a company does not change its accounting methods, outside parties can more easily identify trends. In addition, management rarely wishes to change accounting methods; it had reasons for choosing the existing methods in the

first place, and changing from one method to another could be viewed by outsiders as an attempt to manipulate the financial statements, reducing credibility.

Although consistency is important, it does not mean that companies never change accounting methods. If management can convince the independent auditor that the environment facing the company has changed to the point that an alternative accounting method is appropriate, the company is allowed to switch. However, such changes are not easily granted, and when approved, the effects of the change on the financial statements are clearly disclosed. The change is described in the footnotes and mentioned in the auditor's report, and prior years' financial standards are restated to maintain comparability. It also happens that the FASB mandates certain accounting method changes. In such cases the FASB provides guidelines regarding how the change should be implemented.

In 2005 Boeing, Duke Energy, and Amazon.com made accounting changes for a variety of items. In each case, (1) the financial effect of the change was reported on the income statement; (2) the change was described in the footnotes; and (3) an entire paragraph in the audit report was devoted to describing the changes.



During America Online's period of tremendous growth, the company, previously part of Time Warner, capitalized (treated as assets) all costs associated with acquiring new customers. The company subsequently changed its treatment to expense all such costs. This accounting change had a dramatic effect on the financial statements. Where in the annual report could an investor find information about this accounting change?

TWO EXCEPTIONS TO THE BASIC PRINCIPLES: MATERIALITY AND CONSERVATISM

Under certain circumstances, the costs of applying the principles of accounting exceed the benefits. In these situations, management is allowed (and, in some cases, required) to depart from the principles. All rules have exceptions, even the measurement principles of financial accounting. Two important exceptions are materiality and conservatism.

Materiality

Materiality states that only those transactions dealing with dollar amounts large enough to make a difference to financial statement users need be accounted for in a manner consistent with the principles of financial accounting. The dollar amounts of some transactions are so small that the method of accounting has virtually no impact on the financial statements and, thus, no effect on the related evaluations and control decisions. In such cases, the least costly method of reporting is chosen, regardless of the method suggested by the principles of accounting measurement. The dollar amounts of these transactions are referred to as immaterial, and management is allowed to account for them as expediently as possible.

For example, the matching principle indicates that the cost of a wastebasket should be included on the balance sheet and converted to expense over future periods because its usefulness is expected to extend beyond the current period. However, the cost of an individual wastebasket is probably immaterial, and it is costly in terms of management's

time and effort to carry such items on the books. For practical reasons, therefore, the purchase price is immediately treated as an expense. Granted, such treatment misstates income for both the current period and the future periods of the wastebasket's useful life. This misstatement, however, is extremely small (i.e., immaterial) and would have no bearing on the decisions of those who use the financial statements. In this case, the costs of capitalizing and depreciating the purchase price of the wastebasket simply exceed the benefits it would provide.

While materiality is practical, it represents a major problem area in accounting because it requires judgments that can differ considerably among investors, creditors, managers, auditors, and others. The U.S. Supreme Court has provided one of the few guidelines, defining a material item as one to which "there is substantial likelihood that a reasonable investor would attach importance in determining whether to purchase a security."



For many years, companies used *quantitative* (objective) methods to determine the materiality of a financial statement item (e.g., 5 percent of net income). The SEC has issued a statement eliminating that practice, requiring instead the use of *qualitative* analysis when determining whether a reported item is material. In this context, what is the difference between quantitative and qualitative analysis?

In determining materiality, the size of an item is always considered, but whether it would affect the decisions of an investor or creditor is often unclear. A dollar amount that is too small to make a difference in a large company may be very significant in a small company, and not only must the size of an item be considered, but its nature can also be important. A small adjustment to the inventory account, for example, may be far more significant to financial statement users than a large adjustment to an account in the shareholders' equity section of the balance sheet. What about a very small accounting adjustment that allows a company to just achieve its earnings forecast? Would that be considered immaterial? Finally, the user must be considered. A creditor's definition of materiality, for example, may be very different from that of an investor.

In summary, materiality is an important and practical exception to the principles of financial accounting measurement. The standard unqualified auditor's report states that "the financial statements are free of material misstatement." Materiality is, nonetheless, very ambiguous. As stated in *Forbes*, "Too often, investors miss important information because companies deem it 'immaterial.' What does this mean? Nobody knows—and that's a big problem." The article goes on to report that Rockwell International, a multibillion-dollar conglomerate, chose not to disclose a loss that could have been as large as \$220 million because it was considered "immaterial."



The principle of consistency and the concept of materiality are treated very similarly under U.S. GAAP and IFRS.

Conservatism

Another important exception to the principles of financial accounting measurement is conservatism. Like materiality, conservatism is practical and has evolved over time in response to cost/benefit considerations. In its simplest form, **conservatism** states that, *when in doubt*, financial statements should understate assets, overstate liabilities, accelerate the recognition of losses, and delay the recognition of gains.

Conservatism does not suggest, however, that the financial statements should be intentionally understated. When objective and verifiable evidence about a material transaction is given, the principles of accounting measurement should be followed, and no attempt should be made to intentionally understate assets or overstate liabilities. Only when there is significant uncertainty about the value of a transaction should the most conservative alternative be chosen.

The economic rationale for conservatism is partially driven by the liability associated with overstating incorrectly the financial condition and performance of a company. Jeffrey Block, a well-known attorney, has observed many lawsuits against firms that have overstated earnings. As he stated for the *Boston Globe*, “The lesson from all these cases is for executives to be more upfront and disclose negative news to shareholders a lot earlier.”

There are many examples of conservatism in the financial statements. The lower-of-cost-or-market rule, which is used to value inventories, has already been mentioned in this chapter and is perhaps the most evident example. Others are discussed as they arise later in the text.



There is evidence that extreme forms of conservatism were practiced for many years by non-U.S. companies, and that specific-country reporting rules in some cases actually encouraged intentional understatements of earnings and assets as well as overstatements of obligations. While such practices are more difficult now that IFRS is being used, many believe that the additional discretion available to management under IFRS, relative to U.S. GAAP, is still used to reduce reported earnings, especially in high-performing years. Consider, for example, Unilever (see financial statements at the end of Chapter 2), which booked a special expense in each of fiscal 2007, 2008, and 2009 (called restructuring), totaling over 2.5 billion euros. In the footnotes, Unilever explains that these charges relate in many cases to plant closings and employee layoffs that will be implemented in the future. Comment.

INTERNATIONAL PERSPECTIVE: FUNDAMENTAL DIFFERENCES BETWEEN U.S. GAAP AND IFRS

The assumptions, principles, and exceptions discussed in this chapter that form the basis for U.S. GAAP also underlie IFRS. Economic entity, objectivity, matching, revenue recognition, consistency, and conservatism, as well as the others, are all important in the preparation of IFRS-based financial reports, and the overlap between the two systems is much greater than the departures. However, some important differences do exist, and they tend to result from differences in how these concepts are applied to individual situations.

U.S. GAAP and IFRS differ in two fundamental ways. First, IFRS is more “principles-based” while U.S. GAAP tends to be more “rules-based.” U.S. GAAP is

characterized by more “bright line” rules. Under U.S. GAAP, for example, there are different rules for revenue recognition for different industries, while IFRS tends to rely on a single basic revenue recognition standard. Similarly, accounting for leases under U.S. GAAP contains specific criteria for the recognition of assets and liabilities; under IFRS, the lease standard is much more general and open-ended. This basic difference leads to greater levels of required disclosure under U.S. GAAP, and most managers would agree that it is more difficult and costly to comply with the reporting requirements under U.S. GAAP. IFRS, on the other hand, generally leaves more discretion to management when choosing how to account for transactions, and relies on management’s judgment to find the method resulting in financial statements that depict the company’s financial performance and condition in a “true and fair” manner.

A second fundamental way in which the two systems differ is related to the manner in which asset values are carried on the balance sheet. Under U.S. GAAP, the principle of objectivity ensures that fair market values are not used unless they can be objectively determined. Thus, assets such as inventory, long-term investments, property, plant, and equipment, and intangibles tend to be carried on the balance sheet at historical cost. When the values of these assets change, the concept of conservatism dictates that fair market value is used only if it is below historical cost, which means that the balance sheet values of these assets can be reduced when their fair market values drop, but they are never increased—even when their fair market values rise.

IFRS seems less dependent on the principle of objectivity and the concept of conservatism. In many more situations, IFRS allows adjustments to the balance sheet values of assets like long-term investments, property, plant, and equipment, inventories, and certain intangible assets. In addition, under IFRS these assets can be adjusted to reflect changes in market value both downward and upward. Combined with the additional discretion available under IFRS, being able to adjust assets to their market values gives management more power to subjectively influence the financial statements, power that can be used to either enlighten or confuse investors. This fact helps to explain why the SEC has been relatively slow to accept IFRS-based financial statements.

The differences described above reflect general tendencies, and there are some instances where they may not be completely descriptive. We will address those cases as they arise in the text.

SUMMARY OF KEY POINTS

- *Four basic assumptions of financial accounting.*

The four basic assumptions of financial accounting are (1) the economic entity assumption, (2) the fiscal period assumption, (3) the going concern assumption, and (4) the stable dollar assumption. The economic entity assumption states that a company is a separate economic entity that can be identified and measured. The fiscal period assumption states that the life of an economic entity can be broken down into fiscal periods. The going concern assumption states that the life of an economic entity is indefinite. The stable dollar assumption states that the value of the monetary unit used to measure an economic entity’s financial performance and position is stable across time.
- *The markets in which business entities operate and the valuation bases used on the balance sheet.*

A business entity operates in two general markets: an input market, where it purchases inputs for its operations; and an output market, where it sells the outputs that result from its operations. The four valuation bases (present value, fair market value, replacement cost, and original cost) can be defined in terms of these two markets.

The present value of an asset or liability represents the discounted future cash flows associated with the asset or liability. Fair market value represents the sales price in the output market. Replacement costs (or current costs) are the current prices paid in the input market. Original costs are the input prices paid when the input was originally purchased.

The financial statements contain a wide variety of valuation bases. Face value is used to value cash and short-term liabilities. Short-term investments are carried at fair market value, and inventories are valued at the lower of cost or market. Accounts receivable are valued at net realizable value, a form of market value. Notes receivable, notes payable, and most long-term liabilities are valued at present value. Prepaid expenses, fixed assets, and intangible assets are valued at original cost less an adjustment for depreciation or amortization.

● *The principle of objectivity and how it determines the dollar values that appear on the financial statements.*

The principle of objectivity requires that the values of transactions and the assets and liabilities created by them be verifiable and backed by documentation. It ensures that present value is reported on the financial statements only in cases, such as contracts, where future cash flows can be objectively determined. It also ensures that market values such as fair market value and replacement costs, which are often difficult to objectively determine, are rarely reported on the financial statements (e.g., marketable securities and the lower-of-cost-or-market rule applied to inventories). Objectivity also ensures that many accounts on the financial statements are valued at original costs.

● *The principles of matching, revenue recognition, and consistency.*

The matching principle states that the efforts of a given period should be matched against the benefits they generate. In determining net income, benefits are usually represented as revenues, and efforts are represented by expenses, which cannot be matched against revenues until the revenues have been recognized. The principle of revenue recognition determines when revenues can be recognized. In short, the principle of revenue recognition triggers the matching principle, which in turn is necessary for determining the measure of performance. The principle of consistency states that accounting methods should be consistent across time.

● *Two exceptions to the principles of financial accounting measurement: materiality and conservatism.*

Two important exceptions to the principles of financial accounting measurement are materiality and conservatism. Materiality suggests that the principles of financial accounting measurement can be violated if the dollar amount involved in a particular transaction is so small that it would not affect the decisions of financial statement users. Conservatism guides accountants, when in doubt, to understate assets, overstate liabilities, accelerate the recognition of losses, and delay the recognition of gains. These two exceptions guide departures from the principles of financial accounting measurement when the costs of following them exceed the benefits. Conservatism, in particular, makes economic sense because the legal liability facing auditors and managers imposes a high potential cost on errors due to overstating assets or understating liabilities.

● *Fundamental differences between U.S. GAAP and IFRS.*

U.S. GAAP and IFRS differ in two fundamental ways. IFRS is more “principles-based” while U.S. GAAP tends to be more “rules-based.” This basic difference leads to greater levels of required disclosure under U.S. GAAP, and it is more difficult and costly to comply with the reporting requirements under U.S. GAAP. IFRS generally leaves more discretion to management when choosing how to account for transactions. In addition, under U.S. GAAP, the principle of objectivity ensures that fair market values are not used unless they can be objectively determined, and the concept of conservatism dictates that fair market value is used only if it is below historical cost. IFRS allows adjustments to the balance sheet values of assets for changes in market value, and these adjustments can be upward or downward.

KEY TERMS

Note: Definitions for these terms are provided in the glossary at the end of the text.

Conservatism (p. 95)	Materiality (p. 93)
Consistency (p. 92)	Net realizable value (p. 87)
Economic entity assumption (p. 79)	Objectivity (p. 88)
Face value (p. 87)	Original cost (p. 84)
Fair market value (FMV) (p. 84)	Output market (p. 84)
Fiscal period assumption (p. 80)	Present value (p. 84)
Fiscal years (p. 81)	Purchasing power (p. 82)
Going concern assumption (p. 81)	Replacement cost (p. 84)
Historical costs (p. 87)	Revenue recognition (p. 90)
Input market (p. 84)	Stable dollar assumption (p. 82)
Lower-of-cost-or-market rule (p. 87)	Valuation bases (p. 84)
Matching (p. 90)	

ETHICS in the Real World

Microsoft Corporation changed its accounting for the sale of operating systems when it released Vista in 2007. The company now recognizes all revenue when a copy of Vista is sold; in previous years the company withheld a portion of revenue to be recognized in

future periods when software updates were made available to customers. Historically, Microsoft lobbied the FASB and SEC to support strict guidelines for revenue recognition for software companies, but the company now has adopted some of the aggressive policies it had previously decried.

ETHICAL ISSUE Is Microsoft acting ethically when it changes its position on an important financial accounting principle? Discuss the implication of market forces on Microsoft's decisions.

INTERNET RESEARCH EXERCISE

Find the most recent Form 10-K filed by Microsoft with the Securities and Exchange Commission. Briefly describe the contents of the form, and identify the net income, total assets, and net cash from operations reported by the company. Begin your search at www.sec.gov and use the EDGAR Database provided by the SEC. The database offers a complete listing of the filings required by the SEC for publicly traded companies.

BRIEF EXERCISES

REAL DATA

BE3-1

Accounting assumptions, principles, and exceptions

The following excerpts were taken from the annual reports of a variety of companies:

1. The company's reporting period ends on the Saturday closest to January 31 (The Limited).
2. The consolidated financial statements include the accounts of Federal Express and its wholly owned subsidiaries (Federal Express).

3. Inventories are valued primarily at the lower of cost or market value (JCPenney).
4. Certain reclassifications have been made for prior years to conform with this year's presentation (Wendy's International).
5. Revenues from the distribution of motion pictures are recognized when motion pictures are exhibited (Walt Disney).
6. In an ongoing investigation, the Antitrust Division of the U.S. Department of Justice requested information from Microsoft concerning various issues. Management currently believes that resolving these matters will not have a material adverse impact on the company's financial position or operations (Microsoft).
7. Flight equipment is depreciated on a straight-line basis over a 20-year useful life (Delta Air Lines).
8. Intangible assets are carried on the balance sheet at cost (Merck).
9. Property and equipment are recorded at cost (Apple, Inc.).
10. Inflation rates, even though moderate in many parts of the world, continue to have an effect on worldwide economies but have had no effect on the company's reported financial position and performance (Johnson & Johnson).

Match each of the ten assumptions, principles, and exceptions below with one of the ten excerpts.

Assumptions	Principles	Exceptions
Economic entity	Objectivity	Materiality
Stable dollar	Matching	Conservatism
Fiscal period	Revenue recognition	
Going concern	Consistency	

EXERCISES

REAL DATA

E3-1

The effects of inflation on holding cash

Recently Boeing has maintained a cash balance of over \$6 billion. At an annual inflation rate of about 2 percent, does cash have more or less purchasing power at the end of a given year than at the beginning? By how much? Is such a gain or loss reflected on the company's financial statements? Why or why not? Why would Boeing want to keep its cash balance as low as possible? Why doesn't the company reduce its cash balance to zero?

E3-2

The effects of inflation on holding land

Palomar Paper Products purchased land in 1993 for \$15,000 cash. The company has held the land since that time. In 2011 Palomar purchased another tract of land for \$15,000 cash. Assume that prices in general increased by 60 percent from 1993 to 2011.

- a. Assuming that Palomar made only these two land purchases, what dollar amount would appear in the land account on Palomar's balance sheet as of December 31, 2011?
- b. Palomar used \$15,000 cash to make each land purchase. Would \$15,000 in 1993 buy the same amount of goods and services as \$15,000 in 2011? If not, how much more or less, and why?
- c. Explain how one could adjust the dollar amount reported in the land account as of December 31, 2011, if the stable dollar assumption were dropped.

E3-3

Valuation bases on the balance sheet

Name the valuation base(s) that are used for each of the asset and liability accounts shown here. Some assets and liabilities can use more than one valuation base.

	Original Cost	Fair Market Value (FMV)	Present Value	Replacement Cost
Cash				
Short-term investments				
Inventories				
Prepaid expenses				
Long-term investments				
Notes receivable				
Machinery				
Equipment				
Land				
Intangible assets				
Short-term payables				
Long-term payables				

REAL DATA

E3-4

Fundamentals of inventory valuation

The 2009 annual report for Cisco Systems contains the following information (dollars in millions):

	7/25/2009	7/26/2008
Inventory	\$1,074	\$1,235

On the income statement Cisco reported that the cost of sales related to the inventory was \$10.5 billion (\$11.7 billion for the year ending 7/26/2008). Based on these dollar amounts, inventory is an important investment for Cisco’s business cycle. In the notes to the financial statements the company reports, “Inventories are stated at the lower of cost or market. . . . The Company provides inventory write-downs based on excess and obsolete inventories determined primarily by future demand forecast. The write-down is measured as the difference between the cost of the inventory and market based upon assumptions about future demand and charged to . . . cost of sales.”

- Explain what would happen to the balance sheet value of inventory (\$1.074 billion in the year ending 7/25/2009) if the company determined that a portion of its inventory was “obsolete.”
- Who is ultimately responsible for determining the forecast for future demand for the company’s inventories?
- Discuss how the concepts of objectivity, conservatism, and market value enter into how Cisco values its inventory on the balance sheet.

E3-5

Revenue recognition

Cascades Enterprises ordered 4,000 brackets from McKey and Company on December 1, 2011, for a contracted price of \$40,000. McKey completed manufacturing the brackets on January 17 of the next year and delivered them to Cascades on February 9. McKey received a check for \$40,000 from Cascades on March 14.

- Assume that McKey and Company prepares monthly income statements. In which month should McKey recognize the \$40,000 revenue from the sale?
- Justify your answer in (a) in terms of the four criteria of revenue recognition.
- Are there conditions under which the revenue could be recognized in a different month than the month you chose in (a)?
- Provide several reasons why McKey’s management might be interested in the timing of the recognition of revenue.

E3-6

The effects on income of different methods of revenue recognition

Lahmont Bridge Builders built a bridge for the state of Maryland over a two-year period. The contracted price for the bridge was \$600,000. The costs incurred by Lahmont and the payments from the state of Maryland over the two-year period follow.

	Period 1	Period 2	Total
Costs incurred by Lahmont	\$300,000	\$100,000	\$400,000
Payments from Maryland	400,000	200,000	600,000

- a. Prepare income statements for Lahmont for the two periods under the following assumptions:
 - (1) Revenue is recognized at the end of the project.
 - (2) Revenue is recognized in proportion to the costs incurred by Lahmont.
 - (3) Revenue is recognized when the payments are received.
- b. Calculate the total net income over the two-year period under each assumption.

E3-7

Assets and depreciation— which assumption sand principle?

RDP and Brothers purchased a panel truck for \$25,000 on January 1, 2011. It estimated the life of the truck to be five years, and it planned to depreciate an equal amount in each of the five years.

- a. In line with generally accepted accounting principles, determine the amounts required here.

	2011	2012	2013	2014	2015
Original cost					
Depreciation expense					
Accumulated depreciation					
Net book value					

- b. Why did you decide to initially recognize the cost as an asset rather than treat it as an expense? What basic assumption of financial accounting are you relying upon in this decision?
- c. Why did you allocate a portion of the cost to each of the five years? What basic principle of financial accounting measurement are you relying upon in this decision?

E3-8

The concept of materiality

All large U.S. companies have policies in which all expenditures under a certain dollar amount are expensed. Many of these expenditures are for assets, items that are useful to the company beyond the period in which they were purchased.

- a. Explain the proper accounting treatment for expenditures for items that are expected to generate benefits in the future.
- b. Explain why it might make economic sense to expense some of these items. Upon what exception to the principles of financial accounting would such a decision be based?

E3-9

Changing accounting methods and net income

The net income amounts for Hauser and Bradley over the four-year period beginning in 2009 follow.

2009	2010	2011	2012
\$21,000	\$24,000	\$23,000	\$29,000

After further examination of the financial report, you note that Hauser and Bradley made accounting method changes in 2010 and 2012, which affected net income in those periods. In 2010, the company changed depreciation methods. This change increased the book value of its fixed assets in each subsequent year by \$5,000. In 2012, the company adopted a new inventory method that increased the book value of the inventory by \$9,000.

- a. Calculate the effect of each of these changes on net income in the year of the change.
- b. Prepare a chart that compares net income across the four-year period, assuming that Hauser and Bradley made no accounting changes. How would your assessment of the company's performance change after you learned of the accounting method changes?
- c. What principle of financial accounting makes it difficult to make such changes? Describe the conditions under which Hauser and Bradley would be allowed to make changes in their accounting methods.

E3-10

Adjusting for market value—U.S. GAAP vs. IFRS

At the end of every year NIKE and adidas record inventory write-downs for items (footwear and apparel) that have lost value due to a variety of reasons, such as changing styles, defective merchandise, and lost items. Occasionally, the values of some of these inventories

recover in subsequent periods. NIKE reports under U.S. GAAP, and adidas reports under IFRS.

- Explain in general how the changes in inventory values are reflected on U.S. GAAP-based vs. IFRS-based balance sheets.
- How might NIKE's accounting for these events differ from that of adidas?

PROBLEMS

P3-1

The effects of inflation on reported profits

On January 1, 2011, you purchased a piece of property for \$10,000. On December 31 of that year, you sold the property for \$20,000. Assume that the general rate of inflation for 2011 was 10 percent.

REQUIRED:

- According to generally accepted accounting principles, how much gain would be recorded in the income statement due to the sale of the property?
- The \$10,000 you used to purchase the property on January 1 could have been used to purchase any number of goods and services on January 1. Would the \$20,000 you received at the end of the period enable you to purchase twice as many goods and services? Why or why not?
- How much of the accounting gain computed in (a) could be attributed to inflation, and how much could be attributed to the fact that the property rose in value? Do generally accepted accounting principles make such a distinction? Why or why not?

P3-2

Inflation and bank loans

Assume that on January 1, Bush Enterprises borrowed \$4,760 from Banking Corporation, promising to pay \$5,000 at the end of one year. The effective rate of interest on the loan is approximately 5 percent ($[\$5,000 - \$4,760]/\$4,760$). Suppose that the general rate of inflation for that year was 10 percent.

REQUIRED:

- How much interest revenue did Banking Corporation recognize for the year? (*Hint:* The difference between the cash payment and the face value of the note receivable is interest revenue that Banking Corporation will earn over the life of the note.)
- Do you think that Banking Corporation is better off at the end of the year by the amount of the interest revenue? Did Banking Corporation have more or less purchasing power at the end of the year? How much?
- Which of the two parties, Bush Enterprises or Banking Corporation, seems to have ended up with the better deal? Could one determine this from a careful examination of the financial statements prepared on the basis of GAAP? Why or why not?

P3-3

The irrelevance of original cost

Three years ago Yeagley and Sons purchased the three assets listed in the following table. The chief financial officer, Kathy Dillon, is presently trying to decide what to do with each asset. She has three choices for each asset: (1) sell it, (2) sell it and replace it with an equivalent asset, or (3) keep it. The following information is provided to aid her decision.

Asset	Original Cost	Replacement Cost	Fair Market Value	Present Value of Future Cash Flows Produced by Old Asset	Present Value of Future Cash Flows of Equivalent Asset
A	\$4,000	\$1,000	\$1,500	\$2,500	\$5,000
B	1,500	2,000	500	2,500	3,500
C	2,000	3,500	3,000	2,500	5,000

REQUIRED:

- Assuming that Kathy chooses to keep Asset A and Asset B and sell and replace Asset C, evaluate her decisions. What decisions should she have made? Support your choices.
- How useful was the original cost of each asset in the evaluation of Kathy’s decisions?
- Assume that Kathy proceeds with her decisions. According to generally accepted accounting principles, at what dollar amount would each asset be carried on Yeagley’s balance sheet? What principles of financial accounting would be involved?

P3-4

Are dollars really stable?

Sales data for the fiscal years 2006, 2007, and 2008 for Bed Bath & Beyond follows (dollars in billions):

	2006	2007	2008
Sales	\$6.6	\$7.0	\$7.2

According to the financial statements, sales increased by 9 percent from 2006 to 2008. Assume that the general rate of inflation as well as the price increase for Bed Bath & Beyond’s products for the period 2006 to 2008 was 6 percent.

REQUIRED:

- Considering price increases, did sales actually increase by 9 percent from 2006 to 2008? By how much did the company’s sales actually grow from 2006 to 2008? By what percent did sales increase?
- If prices had increased 10 percent from 2006 to 2008, what would have been the effect on the growth of sales?
- Describe how the stable dollar assumption could have misled the users of Bed Bath & Beyond’s financial statements.

REAL DATA

P3-5

Comparing across currencies and accounting systems

Selected financial information is provided below for three major pharmaceuticals: GlaxoSmithKline (Britain), Sanofi-Aventis (France), and Pfizer (U.S.). GlaxoSmithKline’s numbers were taken from the 2008 SEC Form 20-F, it uses IFRS, and the numbers are expressed in British pounds; the numbers for Sanofi-Aventis were also taken from the 2008 SEC Form 20-F and it too uses IFRS, but the numbers are expressed in euros; Pfizer is a U.S. company that uses U.S. GAAP, and the numbers are expressed in dollars and were taken from the 2008 SEC Form 10-K. As of the end of 2008, 1 U.S. dollar was equivalent to .69 British pounds and .71 euros. All numbers are in billions.

	GlaxoSmithKline	Sanofi-Aventis	Pfizer
Sales	24.3	27.5	48.2
Total assets	39.3	71.9	111.1
Shareholders’ equity	7.9	45.1	57.5

- Which company is the largest, and by how much?
- Explain why it may be difficult to clearly state which is the largest.

REAL DATA

P3-6

The economic value of a company vs. its book value

The December 31, 2008, balance sheet and the income statement for the period ending December 31 for Manpower, Inc., a world leader in staffing and workforce management solutions, follow (dollars in millions). (This problem requires knowledge of present value. Refer to Appendix A.)

Balance Sheet		Income Statement	
Current assets	\$4,690	Liabilities	\$4,134
Long-lived assets	1,928	Common stock	1,283
		Retained earnings	1,201
		Total liabilities and	Sales
		shareholders’ equity	\$21,553
Total assets	\$6,618		Expenses
			21,334
			Net income
			\$ 219

You are interested in purchasing Manpower and have analyzed the future prospects of the company, estimating that it should be able to maintain at least its current earnings amount for the next ten years, at which time the assets would be worthless. You also estimate that the discount rate over that time period will be 12 percent.

REQUIRED:

- Assuming that net income is equal to cash inflows, how much should you be willing to pay for Manpower?
- What is the book value of Manpower?
- Explain why there is a difference between the book value of Manpower and the amount you are willing to pay for it. What assumptions and/or principles of financial accounting are important here?

P3-7

Economic value and income vs. book value and income

On January 1, 2011, Barry Smith established a company by contributing \$90,000 and using all of the cash to purchase an apartment house. At the time, he estimated that cash inflows due to rentals would be \$65,000 per year, while annual cash outflows to manage and maintain it would be \$45,000. He felt that the apartment house had a ten-year life and could be sold at the end of that time for \$40,000. He also estimated that the effective interest rate during the ten-year period would be 10 percent. (This problem requires knowledge of present value. Refer to Appendix A.)

REQUIRED:

- What is the book value of the building as of January 1, 2011? Assuming that Barry's estimates are correct, what is the economic value of the building? In your opinion, did Barry make a wise investment?
- On December 31, 2011, Barry prepares financial statements and observes that his estimates were exactly correct. Assuming that cash inflows equal revenues, cash outflows equal expenses, and the net cost of the apartment, \$50,000 (\$90,000 - \$40,000), is depreciated evenly over the ten-year period, prepare the income statement and balance sheet for Barry's apartment house.
- Calculate the economic income of the apartment building for 2011. Economic income equals the difference between the present value at the beginning of the year and the present value at the end of the year plus any cash received during the year. Why is there a difference between accounting income and economic income?
- What is the value on Barry's books of the apartment building at the end of 2011? What is the present value of the apartment building at that time?

P3-8

The differences between present value, book value, and liquidation value

The December 31, 2011, balance sheet of Myers and Myers, prepared under generally accepted accounting principles, follows. (This problem requires knowledge of present value calculations. Refer to Appendix A.)

Assets		Liabilities and Shareholders' Equity	
Cash	\$ 10,000	Current liabilities	\$ 8,000
Short-term investments	14,000	Long-term liabilities	20,000
Land	20,000	Common stock	80,000
Buildings and machinery	<u>80,000</u>	Retained earnings	<u>16,000</u>
		Total liabilities and shareholders' equity	<u>\$124,000</u>
Total assets	<u>\$124,000</u>		

An investor believes that Myers and Myers can generate \$20,000 cash per year for ten years, at which time it could be sold for \$80,000. The FMVs of each asset as of December 31, 2011, follow:

Cash	\$ 10,000
Short-term investments	14,000
Land	60,000
Buildings and machinery	<u>40,000</u>
Total FMV	<u>\$124,000</u>

REQUIRED:

- What is the book value of Myers and Myers as of December 31, 2011?
- What is the value of Myers and Myers as a going concern (i.e., present value of the net future cash inflows) as of December 31, 2011? Assume a discount rate of 10 percent.
- What is the liquidation value of Myers and Myers (i.e., how much cash would Myers and Myers be able to generate if each asset were sold separately and each liability were paid off on December 31, 2011)?
- Discuss the differences among the book value of the company, the present value, and the liquidation value. Calculate goodwill, and explain it in terms of these three valuation bases.

P3-9

Three different measures of incomes

Suppose that Myers and Myers in P3-8 paid no dividends during 2012 and that the December 31, 2012, balance sheet looks like the one below. (This problem requires knowledge of present value calculations. Refer to Appendix A.)

Assets		Liabilities and Shareholders' Equity	
Cash	\$ 30,000	Current liabilities	\$ 6,000
Short-term investments	20,000	Long-term liabilities	20,000
Land	20,000	Common stock	80,000
Buildings and machinery	<u>76,000</u>	Retained earnings	<u>40,000</u>
Total assets	<u>\$146,000</u>	Total liabilities and shareholders' equity	<u>\$146,000</u>

Assume that the investor in P3-8 was correct (i.e., the company produced \$20,000 cash during 2012) and that the investor's expectations at the end of 2012 are unchanged. Assume further that an objective appraisal of the company's assets revealed the following FMVs as of December 31, 2012:

Cash	\$ 10,000
Short-term investments	20,000
Land	66,000
Buildings and machinery	<u>32,000</u>
Total FMVs	<u>\$148,000</u>

REQUIRED:

- What dollar amount did Myers and Myers report in 2012 for net income under generally accepted accounting principles?
- Calculate net income during 2012, using fair market values as the asset and liability valuation bases (i.e., $FMV_{2012} - FMV_{2011}$).
- Calculate economic income for 2012 (i.e., cash received during 2012 plus the change in present value). The discount rate is still 10 percent.
- Discuss the differences among these three measures of income. Discuss some of the strengths and weaknesses of each measure.

P3-10

Comparing companies using different accounting methods

The net income and working capital accounts for two companies in the same industry, ABC Company and XYZ Company, follow:

	ABC	XYZ
1/1-12/31 Net income	\$10,000	\$24,000
12/31 Working capital	16,000	30,000

After reviewing the complete financial statements of the two companies, you note that ABC and XYZ use different inventory valuation and depreciation methods. ABC uses method A to value its inventory, while XYZ uses method B. Had ABC used B and XYZ used A, their inventory accounts would have been \$10,000 greater and \$10,000 smaller, respectively. Similarly, ABC uses method X depreciation, while XYZ uses method Y. Had XYZ used X

and ABC used Y, their depreciation expenses for the year would have been \$8,000 higher and \$8,000 lower, respectively.

REQUIRED:

- a. Calculate net income and working capital for the two companies under the following assumptions. (*Hint:* Working capital equals current assets less current liabilities).

Inventory Method	Depreciation Method	ABC Income/ Working Capital	XYZ Income/ Working Capital
B	Y		
B	X		
A	Y		
A	X		

- b. Given this information, which combination of inventory and depreciation methods gives rise to the highest income and working capital numbers? Can you think of reasons why a manager would choose one method over another? Would managers always choose the method that results in the highest income? Why or why not?
- c. If you were an investor attempting to decide in which company to invest, how would you treat the fact that the two companies used different methods to account for inventory and fixed assets? Is there a principle of accounting that covers this situation? Why or why not?

P3-11

Different methods of recognizing revenue

The Maple Construction Company agreed to construct twelve monuments for the city of Elderton. The total contract price was \$2.4 million, and total estimated costs were \$1,140,000. The construction took place over a four-year period, and the following schedule indicates the monuments completed, costs incurred, and cash collected for each period:

Year	1	2	3	4	Total
Monuments completed	2	6	3	1	12
Costs incurred	\$380,000	\$380,000	\$285,000	\$ 95,000	\$1,140,000
Cash collected	\$600,000	\$900,000	\$300,000	\$600,000	\$2,400,000

REQUIRED:

- a. How much revenue should Maple recognize in each of the four periods under the following three assumptions?
- (1) Revenues are recognized each year in proportion to the monuments completed.
 - (2) Revenues are recognized each year in proportion to the percentage of costs incurred.
 - (3) Revenues are recognized each year in proportion to the cash collected each year.
- b. For each of the three assumptions, match the appropriate amount of cost against the recognized revenue. Determine net income for each period under the three assumptions.
- c. Compare the total revenue, total cost, and total net income that result from each of the three assumptions. Note that although the timing of the recognition differs across the three assumptions, the total amount of income recognized is the same.

P3-12

Revenue recognition and net income

Hydra Aire, Inc., sells appliances to Seasons Department Store. A recent order requires Hydra Aire to manufacture and deliver 500 toasters at a price of \$100 per unit. Hydra Aire's manufacturing costs are approximately \$40 per unit. The following schedule summarizes the production and delivery record of Hydra:

Year	1	2	3	Total
Toasters produced	200	200	100	500
Costs incurred	\$ 8,000	\$ 8,000	\$ 4,000	\$20,000
Toasters delivered	150	200	150	500
Cash received	\$10,000	\$15,000	\$20,000	\$45,000

REQUIRED:

- Assuming that Hydra Aire recognizes revenue when the toasters are produced, how much revenue should be recognized in each of the three years?
- Assuming that Hydra Aire recognizes revenue at delivery, how much revenue should be recognized in each of the three years?
- Calculate net income for the three periods under each of the two assumptions above.
- If Hydra Aire's management is paid an income-based bonus, which of the two assumptions would be preferred?

P3-13

The economics of conservatism

Joe McGuire is a CPA who has recently completed the audit of Nelson Repairs, Inc. The audited balance sheet and income statement follow:

Balance Sheet

Current assets	\$ 60,000	Liabilities	\$ 80,000
Long-term assets	<u>140,000</u>	Shareholders' equity	<u>120,000</u>
		Total liabilities and shareholders' equity	<u>\$200,000</u>
Total assets	<u>\$200,000</u>		

Income Statement

Sales	\$160,000
Expenses	<u>130,000</u>
Net income	<u>\$ 30,000</u>

During his examination, Joe learned that a lawsuit is soon to be filed against Nelson. The lawsuit accuses Nelson of negligence and asks for damages of \$60,000 over and above the insurance. If Nelson were to lose the lawsuit, the future of the business would be in jeopardy. However, as the lawyers described it to Joe, the probability that Nelson will lose the lawsuit is very low, approximately 20 percent.

Joe is unsure about whether he should require Nelson to disclose the lawsuit on the financial statements. The president of Nelson does not want it disclosed because he believes that the disclosure would cause undue concern among the company's shareholders. Joe does not want to ignore the president's request because Nelson is his most important client. On the other hand, Joe knows that if he does not require disclosure, and Nelson loses the lawsuit, he may be legally liable for the losses of the shareholders. Joe constructed the following framework to help him make his decision.

Decision	Lawsuit Outcome	
	Win (80%)	Lose (20%)
Require disclosure	Error 1	Correct decision
Do not require disclosure	Correct decision	Error 2

REQUIRED:

- Study Joe's framework, and note that he can choose to require or not to require disclosure. Requiring disclosure and winning the lawsuit gives rise to Error 1. Not requiring disclosure and losing the lawsuit gives rise to Error 2. Comment on the costs that Joe would incur from each of these two errors. Which of the two errors would be more costly? Which of the two outcomes (winning or losing the suit) is more likely to occur?
- Suppose that Joe estimates that the cost of Error 1 is \$10,000 and the cost of Error 2 is \$50,000. Ignoring the costs and benefits of correct decisions, should Joe choose to require disclosure?
- Explain the concept of conservatism in terms of Joe's framework.

ISSUES FOR DISCUSSION

REAL DATA

ID3-1

Revenue recognition
and matching

Most airlines offer promotional programs in which passengers accumulate miles over time; when they have earned enough miles, they receive free tickets. In the past, airlines did not make any accounting entries for these free tickets. The free rider merely uses available seats or, on occasion, displaces a ticketed passenger.

The FASB adopted a method of accounting for tickets issued under these programs. They require that a portion of the fare paid when a passenger in such a program pays for a ticket be deferred until the free ride is used. For example, if a passenger purchases a \$200 ticket, a portion, say \$20, would not appear as revenue to the airline until the free trip is taken. It would be considered unearned revenue until then.

REQUIRED:

- Evaluate the accounting standard in terms of the principle of revenue recognition and matching. List the criteria of revenue recognition, and suggest when it would be appropriate to recognize the revenue from a ticket sale. Given your suggestion, how should the related costs be accounted for?
- Continental Airlines changed the way it accounts for “frequent flyer” credits, deferring more of the revenue it recognizes from this program until the service is actually provided. How would this change affect income in the year of the change, and does it appear to be a better application of matching? Why or why not?

REAL DATA

ID3-2

Aggressive revenue
recognition in the
Internet industry

Many Internet firms “gross up” their revenues by reporting the entire sales price a customer pays at their site, when in fact the company keeps only a small percentage of that amount. Take Priceline.com, for example, the company made famous by those William Shatner ads about “naming your own price” for airline tickets and hotel rooms. In SEC filings for the year ended 2006, Priceline reported that it earned over \$1.1 billion in revenues, but that included the full amount customers paid for tickets, hotel rooms, and rental cars. Traditional travel agencies call that amount “gross bookings,” not revenues. And much like traditional travel agencies, Priceline keeps only a small portion of the “gross bookings,” namely, the difference between the customers’ accepted bids and the price it pays for the merchandise or service. The rest, which Priceline calls “cost of revenues,” are paid to the airlines and hotels that supply the tickets and rooms. In 2006, those costs came to \$722 million, leaving Priceline just \$401 million. After subtracting other costs—like advertising and salaries—Priceline netted a profit of \$74 million.

REQUIRED:

- Comment on Priceline’s method of booking “revenue.”
- Like Priceline, many Internet companies reported losses in the early years, forcing analysts to focus on other reported numbers. For example, at one time Priceline’s stock price per share was 23 times its revenue per share, and 214 times its gross profit (revenue – product costs) per share. Can you think of a reason why Priceline might want to include “gross bookings” as revenue?
- Why do you think that the SEC is clamping down on unethical accounting practices of Internet companies—most importantly, including as revenue “gross” versus “net” bookings?

REAL DATA

ID3-3

Revenue recognition

A report on Blockbuster Video commented that Blockbuster seems to have unusual success in opening new franchises during the Christmas season. It appears that during each of the past few years, product sales to new franchises have increased significantly in the fourth quarter. The report also noted, however, that Blockbuster recognizes revenue when products are shipped, and there is no indication that the new franchises receiving the merchandise were actually open for business. Blockbuster is not alone. U.S. Robotics, which reports revenues when it ships items to dealers and wholesalers, has been criticized for puffing up reported sales by stuffing inventory into dealers.

REQUIRED:

- How could the policy of recognizing revenue when products are shipped enable a company like Blockbuster or U.S. Robotics to “manage” earnings?
- Is recognizing revenue when products are shipped necessarily a violation of GAAP? Explain.

REAL DATA**ID3-4**

Consistency and accounting changes

In 2003, Campbell Soup Company booked a special charge (reduction) to earnings totaling \$31 million; the expense was a change in the way the company capitalized certain acquisition costs. These earnings numbers reported by the company for 2001, 2002, and 2003 (dollars in millions) are as follows.

2001	\$649
2002	525
2003	595

REQUIRED:

- Recalculate net income for 2003, assuming that the accounting change had not been made. Which is the more appropriate comparison—the reported amounts or the recalculated amounts? Why?
- In what three places in Campbell Soup’s annual report would an investor be able to find a reference to this accounting change?
- Does it appear that Campbell Soup is practicing any of the reporting strategies discussed earlier in the text? Which one and why?

REAL DATA**ID3-5**

Comparability across time

MarketWatch and the news organization Reuters posted the following announcement on January 23, 2007:

Excluding One-Time Expenses, Johnson & Johnson Beats Estimates

Johnson & Johnson released its fourth quarter 2006 earnings . . . announcing that net income rose to \$2.17 billion (Earnings Per Share of \$0.74), from \$2.1 billion (EPS of \$0.70) during the prior year quarter. Excluding a one-time charge surrounding the acquisition of Pfizer Inc.’s consumer healthcare unit, Johnson & Johnson earned \$0.81 EPS.

The report goes on to say that financial analysts were expecting earnings per share of 79 cents.

REQUIRED:

- Which earnings per share figure (the 74 cents actually earned or the 81 cents earned if the special charge is ignored) is more important to investors interested in Johnson & Johnson?
- Were the financial analysts who follow Johnson & Johnson pleased with the company’s results?
- What challenges will investors face when reviewing future financial statements of Johnson & Johnson?

REAL DATA**ID3-6**

Comparability

General Electric (GE) depreciates its fixed assets using a method that recognizes a relatively large portion of depreciation in the early years of an asset’s useful life. IBM, on the other hand, uses the straight-line method.

REQUIRED:

Briefly describe the adjustments an investor would have to make when comparing GE’s performance and financial position to that of IBM.

REAL DATA

ID3-7

Matching and mismatching

Much has been written about the accounting fraud and subsequent bankruptcy of WorldCom. The *Baltimore Sun* reported that the “fraud was brazen (and) easy to spot. . . . The scheme was not complicated: the company’s financial officers recorded routine maintenance expenses totaling \$3.9 billion as capital expenditures, which can be written off over decades rather than booked as immediate expenses.”

REQUIRED:

- Explain how capitalizing an item, instead of expensing it, affects the financial statements.
- Which principle of accounting is being violated? Are other principles involved? Discuss.

REAL DATA

ID3-8

Earnings restatements and fiscal period, matching, and consistency

The *Wall Street Journal* reported in early 2010 that CitiBank acknowledged a series of errors in accounting for the investment in the firm by the U.S. government. These errors overstated the company’s quarterly earnings in 2008 and 2009, and were corrected with an adjusting entry in the fourth quarter of 2009 that contributed to a large reported loss for the company. A stock analyst following Citi lamented that he was very concerned about these errors.

REQUIRED:

Discuss how CitiBank’s accounting errors relate to the concepts of the fiscal period assumption, the consistency principle, and the matching principle. Further, discuss why the analyst is so concerned.

REAL DATA

ID3-9

Inventory recoveries under IFRS

The 2008 Form 20-F published by Unilever, which uses IFRS, notes that during 2008 assets were written down by 246 million euros to market value for damaged, obsolete, and lost inventories. It also noted that the market value of certain inventories written down in prior periods was recovered, leading to an increase in the 2008 inventory value of 23 million euros.

REQUIRED:

- Compute the net adjustment recorded by Unilever for inventory market value changes during 2008.
- If Unilever followed U.S. GAAP instead of IFRS, what would have been the net adjustment?
- Briefly discuss fundamental differences between U.S. GAAP and IFRS.

REAL DATA

ID3-10

Income management and conservatism

Whitney Tilson, a noted analyst, warns investors in an article in *The Motley Fool* that more than any other type of company, financial companies have immense discretion regarding what earnings to report. The key is the rate of loan losses that they expect to experience, which must be estimated at the end of every period. By changing this estimate, which in turn changes one of the largest expenses on their income statement, financial companies can manage net income. Tilson specifically cites Farmer Mac, the agency created by the federal government to provide funds in the agricultural lending market, which many analysts believe smooths its earnings across time by simply changing its estimate on loss rates.

REQUIRED:

- What does it mean to “smooth earnings across time”? How might a financial company practice this strategy, and why might it engage in this activity?
- Earnings smoothing has also been associated with conservatism. Why?

ID3-11

Economic entity

Enron was one of the world’s largest power companies before it went bankrupt in one of the most spectacular financial frauds in history. One aspect of the fraud involved the creation of a separate entity that borrowed a large amount of money and then used the money to acquire facilities, which were then leased and used by Enron. Because Enron owned less than 50 percent of the stock of the separate entity, Enron was not required to include the entity in its consolidated financial statements. This arrangement was attractive to Enron management because the company did not have to report the huge debt held by the entity on its consolidated balance sheet.

The arrangement was deceptive to shareholders and potential investors because they were unaware of this debt, which turned out to be the responsibility of Enron. Recently, the FASB issued a standard requiring companies to include such separate entities in their consolidated financial statements.

REQUIRED:

Describe the economic entity assumption, and provide reasons why the FASB is requiring the consolidation of such entities. Do you think that the separate entity should have been considered part of the economic entity called Enron? Why?

ID3-12

Valuation bases

The 2006 annual report of KeyCorp, a regional bank holding company headquartered in Cleveland, indicates that marketable securities are listed on the balance sheet at fair value. In addition to its marketable securities, Key notes that it also has “Other Investments” that include principal investments made predominantly in privately held companies that are also listed at “fair value.” Finally, Key documents that it also has investments, including equity and real estate instruments, that “do not have readily determinable fair value.” This last category of investments is carried at estimated fair value.

REQUIRED:

- Using terminology from the chapter, what are the valuation bases used by KeyCorp for its investments?
- What are some of the challenges facing KeyCorp in valuing its “principal investments”?
- What are some issues that investors should understand about “estimated fair value” of certain investments?

REAL DATA**ID3-13**Fair value
accounting

The FASB requires that companies report the fair value of their equity and debt securities on the balance sheets. The FASB described fair value as a market exit price—an estimate of the price an entity would have realized if it had sold the asset or paid if it had been relieved of the liability on the reporting data in an arm’s-length exchange motivated by normal business conditions.

REQUIRED:

- Which of the four valuation bases discussed in the chapter is the FASB suggesting that companies use for their equity and debt securities?
- Prior to the requirement, most of these securities were reported at cost. How did reporting them at fair value affect the income reported by companies?
- Do you agree with the FASB? Why or why not?
- Explain the basic differences between U.S. GAAP and IFRS regarding the use of fair market values on the balance sheet.

REAL DATA**ID3-14**The SEC Form
10-K of NIKE

Excerpts taken from the SEC Form 10-K of NIKE are reproduced in Appendix C. This chapter listed and defined four basic assumptions, four principles of measurement, and two exceptions.

REQUIRED:

Review the NIKE Form 10-K, and find at least one example of each of the ten concepts. Indicate the accounts on NIKE’s balance sheet that use present value as a valuation base. Also indicate the accounts on NIKE’s balance sheet that use fair market value as a valuation base.