

Chapter 1

Introduction to Financial Statement Analysis

Chapter Learning Objectives

Upon completion of this chapter, you should be able to:

1. Understand the economic decision emphasis of financial statement analysis.
2. Articulate why sound financial statement analysis depends upon a comprehensive assessment of financial statements and related information.
3. Indicate who uses financial statements and how they use them to make economic decisions.
4. Identify the five general-purpose financial statements, each statement's purpose, and the elements composing each financial statement.
5. Relate generally accepted accounting principles (GAAP) to financial statement analysis, identify which organizations determine GAAP, discuss why GAAP differs among countries, and explain the benefits of eliminating differences among various versions of GAAP.
6. Explain the advantages of accrual accounting over the cash-basis of accounting.
7. Describe the benefits and limitations of the nominal dollar concept of capital maintenance and historical cost valuation of accounts on the financial statements.
8. Compensate for differences in financial statement data sources, terminology, reporting periods, financial restatements, and the constraints that affect financial statement analysis.

2 Chapter 1

Financial statements

Documents that communicate monetary data about an entity's financial performance and position

Financial statement analysis

The various methods and techniques people use to derive decision-useful information from financial statements

Financial statement analyst

A person who combines information from financial statements with other sources to make good economic decisions for himself or herself and those who employ him or her

Shareholder (stockholder)

A person who owns shares or stock in a corporation

Equity investor

A financial statement analyst who has invested equity in a corporation to become a shareholder or stockholder

Feedback

Information contained in historical financial statements regarding an analyst's previous expectations and forecasts

Predictive value

The value of financial statements to help analysts predict a firm's financial future

Financial statements communicate monetary data about an entity's financial performance and position. People use financial statements to guide them in allocating their scarce economic resources among competing investment alternatives. **Financial statement analysis**, therefore, consists of the various methods and techniques people use to derive decision-useful information from the financial statements. In turn, **financial statement analysts** are those individuals who combine information from financial statements with other sources to make good economic decisions for themselves and others who employ them.

This textbook provides an in-depth analysis of the financial statements and the environment surrounding them. This first chapter of *Financial Statement Analysis: Content and Context* introduces you to this discipline. Chapter 1 begins this process by discussing how financial statements help people make good economic decisions. Next, this chapter examines those who use financial statements to make decisions. The third section of this introductory chapter defines and discusses the specific financial statements that decision makers analyze. Chapter 1 concludes by evaluating an array of financial statement factors that affect analysis.

Decision Usefulness

You can begin to appreciate financial statement analysis by way of an example. **Shareholders** (or **stockholders**) own corporations and constitute a category of financial statement analysts known as **equity investors**. Current and potential equity investors analyze the financial statements of specific corporations to help them make *buy*, *sell*, and *hold* decisions. Their assessment of an entity's reported financial results helps them to decide whether to buy shares of stock in the analyzed corporation, *hold on* to any shares they currently control, or *sell* their existing investment in the firm.

Although financial statements are an economic scorecard of what has recently transpired within a reporting entity, financial statement analysts understand that their discipline is future oriented. Continuing the buy, sell, or hold example, shareholders cannot change their past investment decisions. They do use information contained in historical financial statements, however, to provide them with financial **feedback** about their previous expectations and forecasts. In other words, equity investors can learn from their past decisions. As such, financial feedback helps equity analysts predict a firm's financial future. Financial feedback is one element of the **predictive value** of financial statements. Equity analysts combine feedback information with other information contained in the financial statements, and from secondary sources, to predict a firm's financial future. Those predictions, in turn, govern their *buy*, *sell*, and *hold* decisions.

Analysis Broadly Defined

Good economic decisions rest, in large part, on the ability to *analyze* financial statements. In order to appreciate the discipline of financial statement analysis fully, one must understand the meaning of analysis. The essence of any type of analysis is to disaggregate something whole into its relevant components and investigate their fundamental elements and properties. Analysts critically study each of those components, and their collective interactions, so they can understand the subject matter at a deep and meaningful level. Such an investigation enables them to understand the existing state of the subject of interest and to appreciate how it arrived there. Most importantly, meaningful insight enables analysts to draw logical inferences about the subject's future.

Knowledge acquired by thorough analysis results in a sounder assessment of possible future outcomes than would otherwise occur. This means that analysts improve the probability of correctly predicting what will happen in the future because they thoroughly understand the subject at hand. In other words, analysts improve their odds of foreseeing the future, despite the inherent uncertainty of forthcoming events. Analysts leverage their assessments of the item's current state and behavior into rational expectations about the future.

Financial Statement Analysis

We now return to the subject matter at hand: analyzing financial statements. These financial disclosures are the historical scorecard of the economic activities of a firm. They report income, economic resources, and other important monetary amounts in summary fashion. Financial statement analysts study those historical disclosures in detail. They strive to understand the entity specific decisions and external factors that produced those monetary results. Financial analysts use that knowledge to predict the firm's future financial results. That assessment, in turn, drives economic decisions. As noted earlier in this chapter, the perception of future financial performance affects the *buy, sell, or hold decisions* of equity investors.

Consistent with analysis in general, good financial statement analysis is always oriented toward the future. While one cannot change past economic events, an individual who understands what caused them can convert such knowledge into reasonable expectations of the future. Financial statement analysis does not always produce optimal, or even correct, resource allocation decisions. However, it does improve the odds of doing so. Equity investors are more likely to make correct buy, sell, and hold decisions based on thorough financial analysis rather than on random choice or haphazard judgment. Careful analysis of corporate financial statements and related information empowers people to make prudent choices when allocating scarce economic resources.



My Analysis 1-1

Financial Reporting Scandals

Financial analysis is complicated, even when an analyst has accurate information. The difficulty of that task, however, increases dramatically when financial statements do not represent economic reality, as a rash of financial reporting scandals early in the 21st century demonstrated. Companies such as Enron, Tyco, WorldCom, Adelphia, and HealthSouth reported inaccurate, and sometimes fraudulent, financial statements. Making sense out of those inaccuracies was a virtually impossible task. Moreover, the numerous financial reporting scandals raised doubts about the integrity of all companies' financial disclosures.

Companies used numerous ploys to mislead the public, including the following:

- **Round tripping.** Some companies in the telecommunication industry used this ploy to inflate profits. These firms mutually exchanged services and booked revenues from the transactions. Inasmuch as the conspiring firms did not receive cash for their services, they wildly exaggerated the value of the service received in these round tripping arrangements. Moreover, they usually failed to match any expenses incurred in generating round tripping revenues. The financial effects of round tripping are significant. For example, cable giant Adelphia was bankrupt, despite reporting healthy earnings. Its earnings stemmed from round trips—income that did not add value to the firm.
- **Channel Stuffing.** A distributor or wholesaler ships goods to a retailer, regardless of whether the retailer ordered the product in these transactions, and then recognizes revenues upon shipment. The vendor informally agrees to take back the merchandise if the retailer cannot sell it, but does not recognize an allowance for returned merchandise. Channel stuffing inflates current income by overstating revenues. American FoodServices landed in bankruptcy court when it failed to collect cash from the sales it stuffed into its distribution channel.
- **Vendor Dinging.** This means of deferring expenses is the opposite of channel stuffing. Less than ethical retailers overstate damaged or outdated merchandise claims to vendors, thereby lowering cost of goods sold and reducing obligations to sellers. The judicial system convicted some Rite-Aid executives in 2003, the nation's third largest drug store, for dinging its vendors.
- **Capitalizing Revenue Expenditures.** This maneuver treats a current cost as a long-term asset. Rather than charging the full cost of the item against revenue in the current reporting period, the firm charges only a small portion of the purported asset cost as depreciation expense. WorldCom overstated income by \$3.5 billion from 1998 to 2002 by capitalizing operating expenses.
- **Special Purpose Entities (SPEs).** Enron established numerous SPEs to eliminate debt from its balance sheet and eliminate interest expense from its income statement. Enron established its SPEs by entering into partnerships with

ostensibly independent companies. The partnerships financed an array of business ventures with debt. Enron's independently reporting partners, rather than the energy giant, reported most of the debt on their balance sheets.

Discussion

Do you think the companies in each of the five cases accurately reported economic reality? If not, discuss how their actions would have complicated financial statement analysis. Discuss procedures that financial analysts could have used to overcome the fraudulent financial statements.

Critical financial statement analysis improves the probability that shareholders will invest in firms that maximize their returns on invested capital. The primary challenge facing equity investors, or any group of financial statement users for that matter, is that economic decisions always contain financial risk. The future does not always unfold as expected. Consequently, this means the goal of financial statement analysis is to make the best economic decisions possible in a world fraught with uncertainty. In essence, financial statement analysis lowers the financial risk for decision makers. While it does not guarantee good decisions; financial statement analysis improves the odds of doing so.

Good financial statement analysts realize their discipline is only part economic science. While gathering information for decision making includes mathematical calculations and quantitative assessments of the financial statements; financial statement analysis is also part art or craft. A financial statement analyst must apply logic, judgment, experience, and other non-numerical techniques to the financial statements in order to reach optimal decisions.

Environmental Factors

Financial statements represent the financial outcomes of an entity's interaction with its customers, vendors, shareholders, creditors, employees, regulators, and other stakeholders. In other words, financial statements do not occur in a vacuum. Financial statement analysts must understand the numerous environmental factors that affected past financial statements and forecast their effects on future financial statements. Understanding the environment surrounding financial statements provides the necessary context within which to analyze the information they contain.

Industry Insight 1-1

Air Carriers

Circumstances and events underlying the numbers place financial statement analysis in context. Industry and economic conditions affect business operations and have a bearing on financial performance, economic position, and cash flow. Consider the U.S. air carrier industry as a case in point. Full service airlines, such as American, Delta, and United, have fared poorly since the federal government deregulated the industry in the late 1970s. Mergers, acquisitions, bankruptcies, and liquidations attest to the struggle. Conversely, air carriers such as Southwest and Jet Blue have gained market share and generated higher profit margins than those of their more established competitors.

The nascent aviation industry evolved into a cost-plus pricing model in the early 20th century. Under cost-plus pricing, the limited number of federally approved airlines priced their tickets at amounts that covered operating costs and insured an acceptable return on capital invested by their owners. Little incentive existed for cost control because the airlines passed all of their costs through to passengers. This type of operating structure ceased in 1978 when the government relaxed aviation regulations. Competition ensued for the so-called full service, or legacy, carriers.

Discount airlines emerged in the deregulated environment. These new competitors did not share the bloated labor costs and managerial inefficiencies of the legacy carriers. Discounters quickly gained market share by offering lower prices and better service. For example, the newer airlines provided direct routing (or point-to-point service) as opposed to the legacy's hub and spoke passenger distribution system. The older system, which funnels passengers from outlying airports to central hub airports and redirects them to other cities contributed to byzantine pricing structures and poor on-time performance.

External events exacerbated the woes of full service firms. Rapid jet fuel price increases from 2005 to 2008 dampened industry profitability. The weak financial position of the full service air carriers prevented them from locking in jet fuel prices at existing market prices. Financially sounder discount airlines, such as Southwest, insured manageable fuel costs by contracting with distributors for future fuel deliveries at predetermined prices.

Financial analysts differ as to the extent to which full service airlines could have controlled or compensated for the events and circumstances described above. The fact remains that specific circumstances have contributed to their poor economic performance and lost market share. Financial analysts must understand these circumstances in order to comprehend reported disclosures and intelligently forecast future economic results.

Internal environmental factors

The numerous items existing within the reporting organization that affect its financial statements

Environmental factors affecting financial statements are both internal and external to the reporting firm. **Internal environmental factors** are the numerous items existing within the reporting organization that affect its financial statements. Financial statement analysts must consider such internal environmental factors as business strategies, managerial competence, labor relations, productive capabilities,

product quality, information systems, marketing mixes, distribution channels and the like. Internal environmental factors significantly influenced past financial statements and will do so in the future—especially if the firm changes any internal environmental factors.

External environmental factors encompass a broad array of economic, social, and political items that are beyond the direct control of the reporting firm. For example, a financial statement analyst must answer such questions about the external environment as these:

- How sensitive are the company's financial results to macroeconomic conditions (such as economic expansion or contraction)?
- What is the life cycle stage of the firm's industry? Is it an emerging, growing, mature, or declining industry?
- Who are the firm's key competitors, and what are their relative strengths and weaknesses?
- What pending legislative or regulatory initiatives exist, and how will they affect financial results?

An analyst cannot answer these questions by directly examining a company's financial statements, but these issues, and other externalities like them, affect a firm's financial statements.

A critical perspective to the decision usefulness objective of financial statement analysis is that environment matters. Failure to consider the myriad internal and external environmental factors driving financial statements leads to poor analysis and bad economic decisions.

External environmental factors

The economic, social, and political items that are beyond the direct control of the reporting firm

Industry Insight 1-2

Computer Hardware Manufacturers

Dell and Hewlett-Packard (HP) are the largest manufacturers and distributors of personal computers in the world. The two firms have traded places intermittently as the market leader or runner-up in domestic and international sales throughout the 21st century. The means by which they have achieved those lofty rankings, however, differs dramatically.

Dell took the computer hardware industry by storm in the 1990s. The firm revolutionized the manufacturing and distribution processes of personal computers. The firm mastered lean-manufacturing techniques and sold computers directly to customers over the Internet. This efficient business model reduced operating costs by virtually eliminating inventory holding costs for components and finished machines. Dell gained market share rapidly by selling quality products at reasonable prices.

Hewlett-Packard is an older and more diversified computer hardware company than Dell. The company was a middle-of-the-pack personal computer maker until it acquired Compaq Computer in the late 1990s. Both HP and Compaq primarily sold their machines to

(Continues)

retailers who, in turn, sold them to end-use customers. This traditional distribution system required greater investments in inventory and resulted in slower inventory turnover.

Over time and with increased competition, HP has improved in the area of direct sales, and Dell began placing its product in bricks and mortar locations. As the cost of computing power continued to decline, the price difference between direct (Internet) and indirect (retail) sales diminished. Moreover, the market shifted in recent years. People now generally prefer laptop instead of desktop machines. Consumers have begun to favor the convenience of purchasing laptops in stores. These grab-and-go type sales favor HP, the established indirect PC seller. It is one reason why HP has sold more machines than Dell both domestically and internationally in 2008 and 2009.

Orientation

Readers of this text should understand its overarching objective. *Financial Statement Analysis: Content and Context* is designed to help a broad array of decision makers understand the financial statements and use them as the basis for economic decisions. As such, this textbook focuses on interpreting the financial statements as reported by *firms*, rather than analyzing the financial statements from the singular perspective of *equity investors*. This **reporting entity** perspective differs from the narrower view of some other texts that focus on determining owner value.¹ In contrast to our *reporting entity* focus, investor-based texts use financial statement disclosures to build economic models that, in turn, guide stock investments.²

Reporting entity

The entity responsible for the creation of the financial statements

Issued shares

Stock shares provided in exchange for capital invested by shareholders

Ownership (equity) capital

Capital provided in exchange for stock shares that enables an entity to finance necessary firm operations

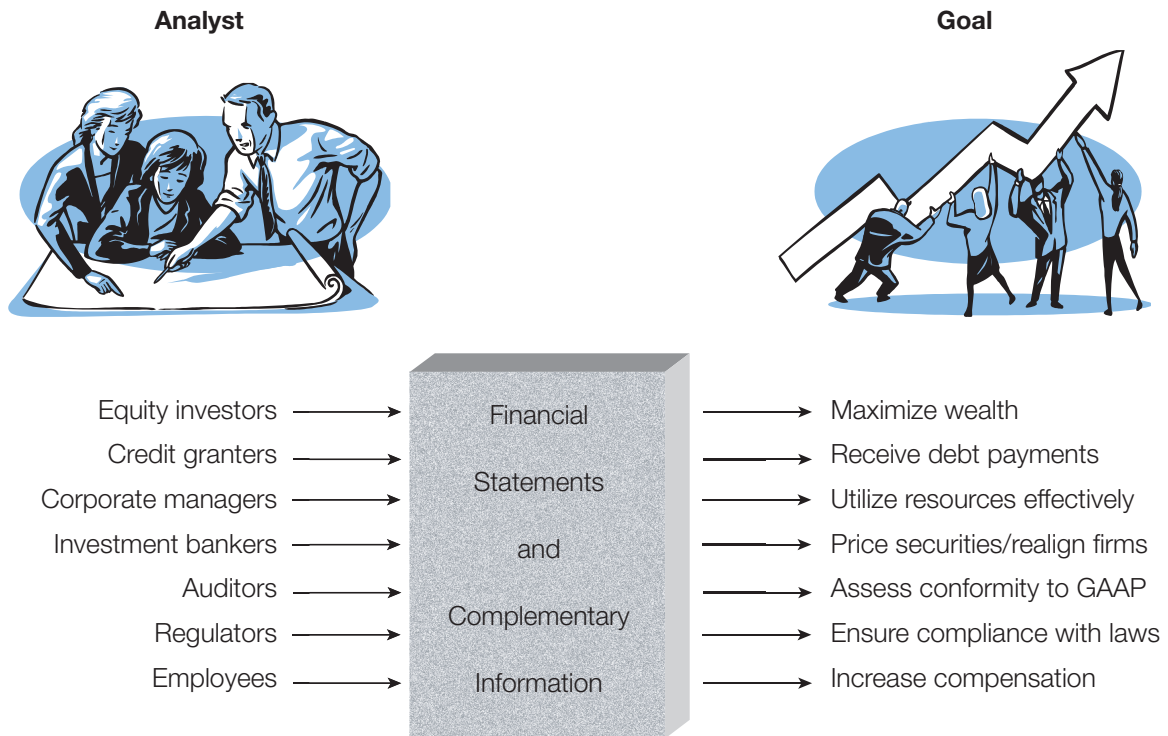
Creditor

One to whom a reporting entity owes funds or other compensation

Financial Statement Users

People analyze corporate financial statements for decision-specific reasons. While the previously discussed equity investors constitute a primary category of economic decision makers, other groups of financial statement users exist. We will discuss six other groups of financial statement users in addition to equity investors: creditors, corporate managers, merger and acquisition (M&A) specialists, internal and external auditors, regulators, and corporate employees. Exhibit 1-1 presents each type of financial analyst and his or her primary objective.

EXHIBIT 1-1 FINANCIAL STATEMENT ANALYSTS AND THEIR OBJECTIVES



Equity Investors

An entity reports capital invested by shareholders as financial statement equity. These equity investments, manifested in the form of **issued shares** of stock, provide the reporting entity with the **ownership (equity) capital** necessary to finance firm operations. **Creditors** will only lend to a reporting entity that has sufficient equity capital invested in the firm. In other words, equity investors supply the **risk capital** that protects creditor (non-owner) claims to corporate resources. From the perspective of the corporation, equity capital, therefore, equals the **residual interest** in firm resources. The reporting entity only has an obligation to compensate shareholders for their investments after it has satisfied creditor claims to the firm's assets.

Most equity investors purchase stock from other investors rather than from the issuing firm. These transactions occur in **secondary capital markets**, as opposed to the **primary capital market** transactions that supply risk capital to the reporting entity.³ Regardless of how owners acquire stock, equity investors analyze financial statements and related information to build wealth in their investments. They make the aforementioned buy, sell, and hold decisions in an attempt to maximize their returns on invested capital. Those decisions

Risk capital

Cash and other resources invested into a firm by its owners

Residual interest

The claim to corporate resources by its owners; the difference between a firm's resources and its liabilities

Secondary capital market

A place where people trade securities, such as the New York Stock Exchange

Primary capital market

A place where a firm receives equity or debt financing

are based on their forecasts of *expected* cash flows. Equity investors analyze financial statements to answer questions such as these:

- Will expected cash flows increase or decrease future share price?
- How much cash is the *core business* activity expected to generate, as opposed to cash flows from nonrecurring events?
- Will expected cash flows be sufficient to the warrant payment of cash dividends?
- How does a firm's expected cash flows compare to those expected from alternative investments?

Equity investors increase their wealth in two ways: 1) when the current stock price of an invested entity exceeds its purchase price, **capital gains** occur; and 2) when they receive cash from the invested entity in the form of a **dividend**, or a direct return on their investment.⁴ The objective of equity investors, therefore, is to devise investment portfolios (equity investments in multiple firms) that maximize wealth, subject to an acceptable level of risk.⁵

Financial economic theory developed in the last half of the 20th century influences equity investors. In the 1950s, **portfolio theory** provided a framework for evaluating investment risks and rewards.⁶ In the next decade, the **capital asset pricing model (CAPM)** extended portfolio theory.⁷ The CAPM quantifies the price of risk and formally specifies the relationship between risk and reward. Following this, the **efficient market hypothesis (EMH)** states that stock prices fully reflect all publicly available information.⁸ This hypothesis postulates that financial analysis cannot produce excessive rates of returns. This might lead one to ask, "Why should equity investors analyze financial statements?" Equity investors do so for the following reasons:

- Their efforts ensure market efficiency.
- They realize positive, if not excessive, rates of return, because companies create wealth over time.
- Equity analysts attempt to distinguish between fundamental corporate value and speculative stock prices.
- Some of them think they can beat the market.
- They need to value privately held firms (i.e., non-publicly traded entities).

Creditors

Lenders analyze borrowers' financial statements to assess their ability to pay for resources extended on credit. For instance, **short-term creditors** usually allow firms acquiring goods and services to pay for them after their receipt. Short-term credit extensions are mutually beneficial: vendors increase sales and debtors conserve operating cash. Vendors analyze the financial statements of their customers' to insure payment before extending credit. For example, a manufacturer

Capital gains

The difference between a stock's current market price and its acquisition cost

Dividend

Cash paid by a reporting entity as compensation for the use of an owner's capital

Portfolio theory

The concept that stock ownership in many firms maximizes returns on investment

Capital asset pricing model (CAPM)

A model that prices securities on a risk-adjusted basis

Efficient market hypothesis (EMH)

The theory that all publicly available information is factored into the price of a security

Short-term creditor

One to whom a reporting entity owes funds or must otherwise compensate, typically within one year

Credit analyst

An individual who grades a firm's ability to make timely principal and interest payments; grades range from highest (AAA) to lowest (C)

analyzes a retailer's financial statements to determine if the merchant will have the resources to pay for goods (i.e., inventory) purchased on credit.

Firms often borrow substantial amounts of money for protracted periods of time to supplement equity (owner) financing. Lenders of debt capital employ **credit analysts** to evaluate the creditworthiness of loan applicants. Their analysis of a loan applicant's financial statements is central to capital lending decisions. Unlike equity capital, firms are contractually obligated to repay the principal and pay interest on debt capital in a timely manner. Credit analysts determine a loan applicant's debt service capability.

Credit rating agencies assist creditors in determining firms' debt service capabilities. Firms such as *Moody's Investor Services*, *Standard & Poor's*, and *Fitch Ratings* evaluate capital structure and use other financial statement analysis techniques (often used by the creditors themselves) to determine the financial risk of loans. Credit rating agencies rate firms along a risk continuum, extending from *investment grade* status to *junk* status. The specific credit ratings established by credit rating agencies influence the interest rates creditors charge firms seeking debt capital. Credit ratings and interest rates are inversely correlated: the higher the credit rating, the lower the interest rate and vice versa.

Corporate Managers

Financial statements help managers plan and control enterprise activities. Managers compile **pro-forma (or forecast) financial statements**, which quantify budgeted expectations before business operations take place. They then report actual financial statements at the conclusion of an accounting period, such as one fiscal year. Managers conduct **performance assessments** to analyze differences between actual and expected financial statements. Information gleaned from performance assessments enable managers to alter business operations and to improve budgeting practices.

Managers operate the firm on behalf of its owners. They have a **fiduciary duty**, which legally and ethically obligates them to protect the financial interests of equity investors and create shareholder value. In legal terms, managers are **agents** who work on behalf of their **principals**, or equity investors. An **agency dilemma** exists because managers (agents) could seek to enhance their own economic position to the detriment of the shareholders (principals). Contracts between equity investors and managers often exist to protect the relative interests of both the principals and their agents. Financial statements often assist in these contracting arrangements.⁹

Credit rating agency

Firms that assist creditors in determining a company's ability to service its debt

Pro-forma (forecast) financial statement

Hypothetical financial statements, such as financial forecasts, or those that deviate from generally accepted accounting principles

Performance assessment

The extent to which actual financial statements coincide with budgeted, pro-forma financial statements

Manager

Professionals who run an entity on behalf of its owners

Fiduciary duty

Management's obligation to maximize the owners' return on investment, subject to an acceptable level of risk

Agent

One who works for or represents the interests of another party

Principal

One who contracts with another party, an agent, to act on his or her behalf

Agency dilemma

Inherent conflicts between a principal and an agent attributable to different self-interests

Investment bank

An entity that brings together those seeking funds with those seeking to lend capital

Investment banker

One who works for an investment bank

Financial intermediary

Any financial institution, such as a commercial or investment bank, that facilitates capital to flow between lenders and borrowers

Undervalued company

A firm whose stock price is less than its intrinsic worth

Value gap

The difference between a firm's stock price and its inherent economic worth

Corporate divestiture

The disposition of a significant segment of a business

Internal auditor

An employee who assesses adherence to corporate policy and accurate financial reporting

External auditor

A certified public accountant who opines on the fairness of a reporting entity's financial statements

Investment Bankers

Investment banks, such as *Credit Suisse* and *Goldman Sachs*, help firms raise capital. They design and sell equity and debt securities to investors in primary capital market transactions. **Investment bankers**, employed by these banking houses, analyze corporate financial statements to price securities at amounts that will raise the sum of capital required by their clients and insure their rapid sale to investors. Correct security pricing is critical to investment banks because these firms often assume the risk of corporate debt and equity issues. As **financial intermediaries**, investment bankers usually purchase the securities from the issuing corporations before selling them to the ultimate investors.

Investment bankers also analyze financial statements to guide corporate realignments. Some equity investors search for **undervalued companies**: firms whose true worth exceeds their current market value. Financial statement analysis, for instance, could reveal operating inefficiencies, product duplications, or overlapping markets for two firms within the same industry. A business combination could reduce costs or increase revenues, thereby unlocking shareholder value. Investment bankers often consult investors searching for firms with such a **value gap**. The investment banks sometimes take equity positions when investors acquire undervalued firms. Just as a successful merger increases shareholder value, **corporate divestitures** can also improve financial performance. Investment bankers assist in spinning off underperforming or non-essential business segments.

Auditors

Internal auditors assess corporate operations. They analyze financial statements to determine compliance with the firm's financial reporting policies and to measure any deviations from forecast financial statements. **External auditors** render opinions about the fairness of financial statements. These auditors are independent certified public accountants (CPAs) who determine whether their clients' financial statements conform to generally accepted accounting principles. External auditors base their opinions on evidence gathered in accordance with the auditing standards set by a governmental agency.¹⁰

In performing their jobs, both external and internal auditing groups analyze financial statements. For example, internal auditors analyze asset efficiency with a variety of asset turnover measures. Such ratios help companies determine which economic resources produce acceptable levels of cash flows, relative to the investments made in them. External auditors can use asset turnover ratios to help conclude whether management's asset account balances are reasonably stated. For example, an external auditor may question the economic viability of goods held for resale if a firm's inventory turnover ratio diminished over time and was substantially lower than that of its competition.

Not only do auditors evaluate financial statements in doing their jobs, but their opinions also influence other financial statement

analysts' judgments. Managers base many decisions on internal audit reports, and external stakeholders rely on external independent audit opinions when making investing and lending choices. **Audit failure** causes incorrect and costly decisions. Consider a company that appears profitable, according to its financial statements, and continually receives clean (or unqualified) audit opinions. Those glowing financial statements, however, resulted from fraudulent financial reporting, and independent audits repeatedly failed to detect the deceit. Financial statement users who relied on those inaccurate management assertions and erroneous audit reports would have wasted precious resources on a nonproductive enterprise.

Audit failure

An audit opinion that attested to the fairness of a reporting entity's financial statements when it did not exist

Regulators

Many government agencies analyze financial statements as part of their regulatory duties. The intent of such analysis is to protect the public by insuring that reporting entities provide the citizenry with complete and accurate information. A primary regulatory agency is the **Securities and Exchange Commission (SEC)**, which administers U.S. securities laws. The commission's charge is to insure that investors receive full and fair disclosure regarding publicly traded corporations. Firms under the SEC's jurisdiction file many forms to that end, and commission analysts monitor the extent to which they comply with securities laws.

Securities and Exchange Commission (SEC)

The federal regulator that ensures full and fair security disclosures, protects investor interests, and regulates capital markets

Government analysts also assist in regulating specific industries. Financial statements inform bank regulators about financial institutions' capital funding levels and their ability to protect customer deposits. The Federal Reserve System, Office of the Comptroller of the Currency, and state banking commissions employ analysts to ensure regulatory compliance. Government analysts also help regulate numerous other industries, such as insurance, communication, and transportation, in the name of public interest.

Corporate Employees

Employees analyze financial statements to improve their bargaining position with management. Workers often use financial data as a basis for wage and benefit demands when negotiating a contract. A labor union, for example, could cite record earnings, large management bonuses, and higher compensation packages paid by the firm's competitors to justify demands for salary increases. Employees can also use financial productivity disclosures, such as the amount of cash generated per employee, as bargaining tools. Negotiating is a two-way street, however. When firms experience economic difficulties, they can use financial disclosures to buttress their position in contracting with employees.

As with the other categories of financial statement users, financial statement analysts working on behalf of employees benefit from accurate and timely representations of corporate performance and

General-purpose external reporting system

Interrelated financial information framework composed of financial statements, notes to them, and supplemental disclosures

Balance sheet (statement of financial position)

The financial statement that reports an entity's financial position at a single point of time

Asset

An economic resource controlled by an entity resulting from a past transaction

Liability

An entity's obligation arising from a past transaction

Shareholders' equity

The owners' interest in firm assets; the difference between assets and liabilities

Balance sheet equation

Assets = liabilities + shareholders' equity

Income statement (profit and loss (P&L) statement, statement of financial performance)

The financial statement that reports an entity's financial performance over a period of time

economic position. As this section of the chapter has demonstrated, different groups use financial statement analysis to meet their specific needs. Although the specific content and procedures may differ among analysts, they all use publicly disclosed data in order to make good decisions. Presenting a true and fair picture of corporate performance is the goal of the financial statements; making sense of the financial statements is the job of financial statement analysts.

Financial Statements

As defined at the beginning of this chapter, financial statements communicate a firm's economic events to interested readers. They do so in aggregate form by summarizing an entity's dealings with people, organizations, and processes. Up to this point in the chapter, we have identified *financial statements* as a single concept. Technically, five specific-purpose monetary reports and their footnotes compose the **general-purpose external reporting system**. This system is what the business world refers to as the financial statements.

The Five Financial Statements

We will now briefly identify each of these statements by discussing its objective and defining its elements. (We defer a detailed examination of the financial statements until Chapter 2.)

1. **Balance Sheet**—reports an entity's financial position at a single moment in time, such as the last day of the business year. It equates a firm's **assets** (economic resources) to the sum of its **liabilities** (economic obligations to non-owners) and **shareholders' equity** (owners' interest in the business). More succinctly:

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

A synonym for the balance sheet is the **statement of financial position**. Rearranging the **balance sheet equation** emphasizes the owners' interest in the enterprise: $\text{assets} - \text{liabilities} = \text{shareholders' equity}$. This approach demonstrates that the owners' interest equals the entity's net assets (or $\text{assets} - \text{liabilities}$).¹¹

2. **Income Statement**—reports the results of business operations for a specific time interval (such as one year). These operations are captured in the following **income statement equation**:

$$\text{Revenues} - \text{Expenses} = \text{Net Income (or profit or earnings)}$$

Financial statement analysts often refer to the income statement as the **profit and loss (or P&L) statement**. Some call it the

statement of financial performance. Companies recognize **revenues** by selling goods or providing services to customers. **Expenses**, in turn, are the business costs incurred in generating those revenues. The income statement also reports **gains** and **losses**, which are non-recurring revenue and expense items. **Net income**, or the difference between revenues (gains) and expenses (losses), equals the wealth created by a business during the reporting period.¹²

3. **Statement of Comprehensive Income**—reports *non-income* statement events that change the ownership interest in the firm's assets. Generally accepted accounting principles mandate that the income statement *exclude* a select few gains and losses, items called **other comprehensive income (OCI)**. An example of an OCI item is the change in market value of certain security investments during a reporting period. The following equation determines periodic comprehensive income:

$$\text{Net income +/- other comprehensive income} = \text{comprehensive income}$$

(Other comprehensive income items are usually immaterial in amount. Therefore **comprehensive income** usually approximates net income. In addition, other comprehensive income items arise from complex business events. For these reasons, we ignore discussing the statement of comprehensive income until Chapter 5 of the text.)

4. **Statement of Shareholders' Equity**—discloses the changes in the owners' business interest for a specific time interval (such as one year). Owners' equity increases when the business operates profitably or when stockholders inject capital into the enterprise. Their net assets decrease when the company operates at a loss, declares a cash dividend, or acquires *treasury stock* (the acquisition of issued shares in secondary capital markets).
5. **Statement of Cash Flows**—reports the net increase or decrease in cash during a specific reporting period. The change in this asset, or economic resource, results from three distinct types of business activities. This statement discloses the inflow and outflow of cash from operating, investing, and financing activities. (The *Financial Statement Accounting Basis* section of this chapter will discuss how revenues and expenses relate to, but do not equal, cash inflows and outflows.)

The balance sheet differs from the remaining four financial statements listed above. As noted in the balance sheet definition, this financial statement reports assets, liabilities, and shareholders' equity on a single date, such as the last day of the business year. The statements of income, comprehensive income, shareholders' equity, and cash flows report changes in the statement titles over a period of time,

Income statement equation

Revenues – expenses = net income

Revenue

An asset increase resulting from the sale of goods and services

Expense

An asset decrease incurred from the sale of goods and services

Gain

An asset increase resulting from a non-operating transaction

Loss

An asset decrease incurred by a non-operating transaction

Net income

The difference between revenues/gains and expenses/losses

Statement of comprehensive income

The financial statement that reports all changes in shareholders' equity not reported on the income statement

Other comprehensive income (OCI)

A shareholders' equity account reporting changes in assets from non-income statement transactions

Comprehensive income

Net income adjusted for the periodic change in other comprehensive income

Statement of shareholders' equity

The financial statement that reports the periodic change in the owners' interest in a firm

Statement of cash flows

The financial statement that reports the periodic change in cash

Stock financial statement

A disclosure of firm resources and claims to them at a specific moment; the balance sheet

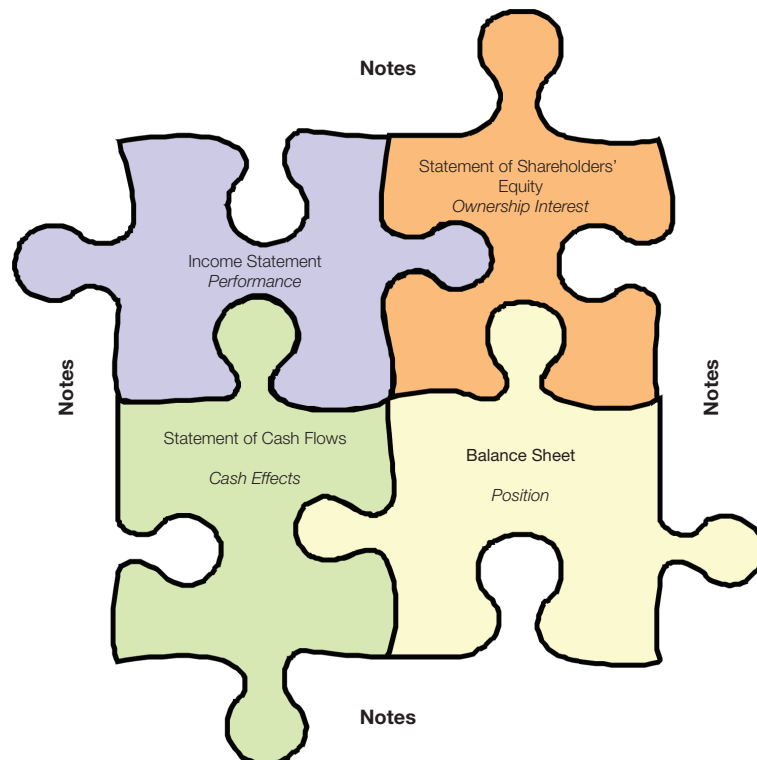
such as one business year. Economists refer to the balance sheet as a **stock financial statement** and the other financial statements as **flow financial statements**.

Financial statement analysts contrast the difference between stock and flow financial statements by way of analogy. They consider the balance sheet as offering a *snapshot* of a reporting firm's financial position, and view the other financial statements as providing a *motion picture* of economic activities that alter an entity's financial position.

Financial Statement Articulation

Monetary disclosures from each financial statement connect with monetary disclosures contained in other financial statements. In essence, the account values reported on one financial statement help explain the account values reported on other financial statements. Consequently, the financial statements tie together in an interrelated process known as **financial statement articulation**. You can visualize each financial statement (excluding the statement of comprehensive income) as an *interlocking* piece of the general-purpose external reporting system puzzle, as demonstrated in Exhibit 1-2.

EXHIBIT 1-2 ARTICULATED FINANCIAL STATEMENTS (IGNORES THE STATEMENT OF COMPREHENSIVE INCOME)



Recall that the balance sheet reports assets, liabilities, and shareholders' equity at specific points in time, but the other financial statements report changes in resources and claims against them over a period of time. Consequently, the *flow* financial statements articulate with the *stock* financial statement, or balance sheet.

To illustrate the concept of financial statement articulation, consider cash. An entity reports the amount of cash it controls at the end of a specific financial reporting period on its balance sheet. The entity reports the net increase or decrease in cash for a specific reporting period in its statement of cash flows. Therefore, one can determine an entity's current cash balance by adding the net change in cash (per the statement of cash flows) to the cash balance reported on the *previous* reporting period's balance sheet. In other words, cash disclosures reported on the statement of cash flows and the balance sheets articulate; they work in concert to report cash balances at specific moments in time and explain how they got there. Exhibit 1-3 graphically emphasizes the *interrelated* nature among the financial statements and the notes to them.

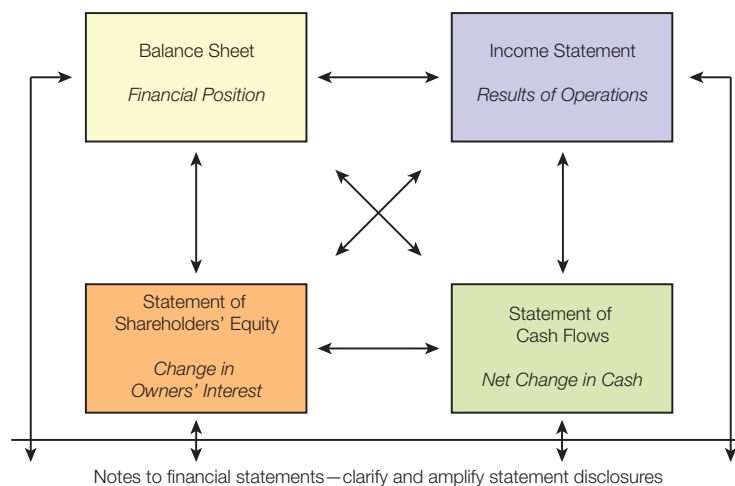
Flow financial statement

The disclosures that report financial results over a specified time period; all non-balance sheet financial statements

Financial statement articulation

The interrelationships among financial statements

EXHIBIT 1-3 FINANCIAL STATEMENT ARTICULATION (IGNORES STATEMENT OF COMPREHENSIVE INCOME)



Notes to the financial statements (or footnotes) are an integral part of the financial statements. These disclosures amplify and clarify the monetary amounts disclosed in the five financial statements. Footnotes contain both qualitative and quantitative disclosures. Financial statement analysts must read all notes to the financial statements in order to appreciate fully the assertions made by a firm in its five financial statements.

Notes to the financial statements (footnotes)

Disclosures that amplify and clarify the financial statements

Accounting Standards Codification

The source of generally accepted accounting principles

Generally accepted accounting principles (GAAP)

The rules governing financial reporting in the United States

User sophistication

The assumption that financial statement readers understand the disclosures

Generally Accepted Accounting Principles

The **Accounting Standards Codification** contains the authoritative pronouncements that compose **generally accepted accounting principles (GAAP)** in the United States. GAAP underlies the financial statements.¹³ The five financial statements and the notes to them defined above must conform to GAAP. This standardization provides a common financial reporting basis among reporting entities. Such commonality increases financial reporting consistency within a firm over time and facilitates comparability among reporting entities.

GAAP assumes financial statement readers are financially knowledgeable. The assumption of **user sophistication** has two important implications. First, those who analyze financial statements are aware of the economic complexities that underlie many business transactions. Second, financial statement analysts know how generally accepted accounting principles measure those transactions and report them in the financial statements.



My Analysis 1-2

Regulatory Responses for Improving Financial Disclosures

The financial scandals of the early 21st century resulted in a number of reforms designed to insure accurate financial disclosures. The Financial Accounting Standards Board enacted numerous financial reporting standards designed to close loopholes for such activities as special purpose entities and improper revenue recognition. We now briefly discuss three prominent changes to the financial reporting system besides the changes in generally accepted accounting principles.

- *Regulation FD* (for full disclosure), enacted in 2000 by the SEC, bans selective informational disclosures and eliminates insider-trading loopholes. This regulation prohibits management from making disclosures to selected parties before making the information available to all financial statement users. Regulation FD's intent was to level the informational playing field for all current and potential financial statement users by eliminating the sometimes too cozy relationships between companies and certain securities analysts.
- Congress passed the *Sarbanes-Oxley Act* in 2002 to strengthen financial reporting and corporate governance. Section 302 of the law requires that an entity's chief executive officer (CEO) and its chief financial officer (CFO) certify the "appropriateness of the financial statements and disclosures contained in the periodic report." The law also requires those two executives, along with the firm's external auditors, to attest to the soundness of their internal control policies (Section

404). In addition, Sarbanes-Oxley makes it unlawful for any corporate officer or director to “influence, coerce, manipulate, or mislead” auditors in the performance of their duty (Section 303). It also requires companies to disclose all material off-balance sheet transactions, according to Section 401(a).

- Various regulatory agencies increased their oversight of financial disclosures and punished violators. For example, ten investment banks paid over one billion dollars to the SEC, New York Stock Exchange, National Association of Securities Dealers, and various states’ attorneys general for publishing biased research reports. Regulators and investment banks filed a joint “Statement Regarding Global Settlement Related to Analysts Conflicts of Interest,” that requires investment banks to serve the investing public’s interest by producing independent research reports of all companies, including their clients.

Discussion

Do you feel that financial reporting standard setters can ever prescribe a set of comprehensive accounting principles that will eliminate misleading or fraudulent financial reporting? Assess whether the three regulatory actions discussed above improved financial reporting. Discuss whether the fraudulent financial reporting warranted government intervention. Explain how a broad analytical perspective could help an analyst detect misleading or fraudulent financial statements.

A working relationship between the public and private sectors determines GAAP. The federal government’s Securities and Exchange Commission has legal authority to set accounting standards, but it has generally ceded that task to a private organization, the **Financial Accounting Standards Board (FASB)**.¹⁴ The SEC reviews GAAP as part of its regulatory responsibilities and the commission often influences the FASB by taking a position on unresolved financial reporting issues. The collaborative efforts of the SEC and FASB have produced many accounting principles and rules that constitute the backbone of financial reporting in the United States. The FASB’s standard setting authority extends to corporate financial statements, accompanying notes, and supplementary disclosures. The Board establishes changes in GAAP by updating the aforementioned codification of accounting standards. In addition, the FASB has issued a series of **Statements of Financial Accounting Concepts** that provides guidance in developing sound and consistent financial reporting standards.

Financial statement principles provide a basis for measuring, valuing, and comparing economic activity. These standards provide consistent disclosure over time and permit meaningful comparisons among companies. Commercial, economic, legal, cultural, social, political, and educational factors have all influenced their development. Evolution yielded some principles; policy created others. Moreover, reporting principles change over time, as business practices and user needs shift. Financial analysts need to remember that financial

Financial Accounting Standards Board (FASB)

The United States standard setter of accounting principles

Statements of Financial Accounting Concepts

The theoretical underpinning of financial reporting

Depreciation expense

The allocation of an asset's cost over its revenue-producing life

Accrual basis of accounting (accrual accounting)

The generally accepted financial reporting method that recognizes revenue when earned and expenses when incurred

Cash basis of accounting (cash accounting)

A non-accepted financial reporting method that equates revenues to cash received and expenses to cash paid

Accrual accounting

Reports the cash consequences of economic transactions

Cash accounting

Reports cash inflows and outflows from economic transactions

reporting standards are human contrivances designed to represent economic reality. They are not immutable laws of nature.

In certain instances, GAAP allows an entity to choose from a number of acceptable financial reporting alternatives. One example of such latitude is how a reporting firm allocates the cost of equipment over its expected life. This treatment, known as **depreciation expense**, charges a portion of the cost of the fixed asset against revenues over the productive life of that resource. A firm can apportion that cost in equal annual amounts, or it can choose to recognize larger amounts of depreciation in the early years of the asset's life. Depreciation method, therefore, affects depreciation expense. The accounting method chosen affects reported earnings on the income statement and the disclosure of the net asset value on the balance sheet.

A good analyst identifies alternative accounting methods used by different companies in the same industry or by the same firm over time. If those alternatives produce material variances, the analyst employs specific techniques to equate data among firms and over time. Failure to do so, could cause one to conclude that significant economic differences exist among firms (or over time for the same firm) when it is merely accounting methodology that caused different results. In other words, good analysis always requires *apples-to-apples* comparisons.

Reporting standards affect corporate profitability and financial position; consequently, many of these pronouncements are quite controversial. However, despite some dissatisfaction, the public/private partnership generally succeeds in producing timely and detailed financial reporting standards. These rules improve capital market efficiency, or the allocation of economic resources.

Financial Reporting Basis

Financial statements benefit readers primarily because they convey information about the amount, timing, and probability of future cash flows. Somewhat ironically, the most effective means for conveying information about how much, when, and the likelihood that an entity will receive and pay cash in the future is by reporting economic events on the **accrual basis of accounting**, as opposed to the **cash basis of accounting**.

Accrual accounting reports economic events that have cash consequences instead of actual cash inflows and outflows. This means that income statements under GAAP recognize revenues and expenses when they economically occurred, as opposed to when the entity received or paid cash for them. **Cash accounting**, on the other hand, does not conform to generally accepted accounting principles. Therefore, the reporting entity does not use cash accounting as the basis for its accounting system, or the resulting statements of income and shareholders' equity or balance sheets. It does report, however, periodic amounts of cash inflows and outflows in its statements of cash flows.

To understand the accrual basis of accounting at a deeper level, consider the concept of revenue. Under accrual accounting, a firm recognizes revenue when it provides goods or services to its customers.¹⁵ It does so irrespective of when it collects cash from those sales. From an economic and legal perspective, the **critical event** (or **crucial event**) in the revenue realization process occurs when the reporting entity transfers goods or services to the buyer. This is the key point of a commercial transaction because the seller has received or established a valid claim against the customer's resources at the point that it transfers the goods or has performed the service. In other words, the firm has created wealth for its shareholders at the point of sale, even if it has yet to receive cash. Consequently, accrual accounting means income statements report revenues when *earned*, regardless of whether the seller collects cash for goods or services rendered before, during, or after the sale. All firms report on the accrual basis of accounting because it provides a better basis for predicting future cash flows than the cash basis does.

Critical (crucial) event

The point when a reporting entity recognizes revenue in its accounts and reports revenue on its income statement

Industry Insight 1-3

Fast-Food Restaurants

Virtually everyone in the world is familiar with brands such as McDonald's, Burger King, and KFC. Far fewer people know how these restaurants managed to saturate the market. The key to their growth is the franchise business model. Plant and equipment are the largest costs for establishing a restaurant, and franchising enables a restaurant to earn revenue and penetrate markets while off-loading these burdensome costs to other entities.

Parent companies own and operate some of their restaurants, but they franchise the majority of them. The parent company, or franchisor, develops the brand and markets it to other entities or individuals called franchisees. In such an arrangement, the franchisor develops standard operating procedures, products, pricing, advertising and other business operations and charges franchisees for their use.

Franchisees pay an initial franchise fee and a percentage of their sales revenues for the franchisor's services. Moreover, franchisors can also generate revenues by owning the land on which franchisees build restaurants. They can also lend franchisees the initial purchase amount for the franchise. This results in numerous revenue streams for the franchisor:

- Sales revenues from company-owned restaurants
- Revenue earned as a percentage of franchised restaurant sales
- Rental revenue on real estate holdings
- Interest income on loans to franchisees

(Continues)

Analysts must distinguish between two types of sales in franchised arrangements. Systemwide sales consist of all revenues generated by both company- and franchised-owned restaurants. Company revenues are the gross sales from company-owned restaurants plus the net fees paid by the franchisees to the franchisor, such as a percentage of the franchisees' sales revenues. It is this latter category of revenues that compose the top-line of the income statement for companies such as McDonald's restaurants.

Relevant information

Financial statement disclosure that provides useful information to a decision maker

Faithful representation

Financial statement disclosure that equals the economic substance underlying the disclosure

Capital maintenance

Various perspectives as to what constitutes investment recovery

Nominal dollar concept of capital maintenance

Holds that a reporting entity earns income upon recovering the amount invested in an asset, irrespective of price changes over time

Physical units concept of capital maintenance

Holds that a reporting entity earns income after recovering the current cost equivalent invested in an asset

General-purchasing-power concept of capital maintenance

Holds that a reporting entity earns income after recovering the general-price-level-adjusted cost invested in an asset

Capital Maintenance Concepts

Ultimately, financial statement users seek two qualitative reporting characteristics from the financial reporting system and policy makers do their best to accommodate them. As noted earlier in this chapter, financial statement analysts want the financial statements to provide them with the ability to make good predictions and feedback about past assumptions. Collectively, predictive and feedback value compose the reporting characteristic of **relevant information**. Financial statement analysts also want disclosures that represent underlying economic reality. The financial reporting characteristic of **faithful representation** means data are complete, unbiased, and free from error. Thus, analysts want financial statements to contain both important (relevant) and valid (unbiased) data. These two financial reporting qualities sometimes conflict. Consequently, GAAP is not always effective at capturing both relevance and representational faithfulness in every financial statement disclosure. Tradeoffs exist, which affect data measurement, recognition, and disclosure.

Conflict between relevance and faithful representation exists on one level because the financial statements depend on an underlying assumption about **capital maintenance**. This assumption determines the amount of earnings a firm reports after recovering its investments through revenues. Multiple concepts of capital maintenance exist but GAAP, in the best interest of relevance and faithful representation, permits firms to report financial statements under only one concept of capital maintenance.

To illustrate, assume a merchant purchased one computer tablet for \$200 and sold it for \$300. The cost of replacing the tablet decreased to \$175 during the reporting period. General price levels increased by 10% between the date of purchase and sale. Depending on the concept of capital maintenance employed in the financial reporting system, profit could be \$100, \$125, or \$80? The **nominal dollar concept of capital maintenance** underlies the U.S. system of financial reporting. Consequently, the merchant's income is \$100 (the \$300 sales price minus the \$200 acquisition cost) under current GAAP. The company, however, is a going concern, and it must replace its inventory on an on-going basis. One could argue that the retailer's profit is \$125, or the \$300 current selling price less the \$175 current replacement cost for the computer.

This method of reporting maintains capital based on *physical units*. Profit could also be \$80, or \$300 in sales revenue less the inflation-adjusted cost of the tablet \$220 ($\$200 * 1.10$). Income of \$80 reflects capital maintained in *general purchasing power* terms. Although theoretically sound, the **physical units** and **general-purchasing-power concepts of capital maintenance** violate GAAP.

Industry Insight 1-4

Discount Retailers

Wal-Mart dominates the discount retail industry. The Arkansas-based firm is the largest retailer of general merchandise in the world. Its sales revenues and asset base exceed the gross domestic product of many countries. Another success story in discount retailing, albeit much smaller than Wal-Mart, is Target Corporation. The strategies employed by the two successful competitors, however, are quite different.

Firms seek to maximize a return on their owners' invested capital. Two components drive return on investment: profit margin and asset turnover. In retailing, profit margin (or return on sales) is the amount of earnings generated on each dollar of merchandise sold. Asset turnover is the number of sales dollars produced per dollar invested in the firm's assets. These two return on investment components conflict with each other. All things being equal, a firm that increases its margin of profit experiences a slowing turnover of assets. Conversely, one can accelerate asset turnover by lowering prices.

Retailers seek investment returns by essentially embracing either a profit or a turnover strategy. Wal-Mart exemplifies the turnover strategy. The firm is willing to accept a relatively low profit margin in order to sell its inventory rapidly. The retailer builds market share with this approach. The increasing size of Wal-Mart allows it to buy goods at even lower costs from its vendors and spread its fixed operating costs over more stores. Wal-Mart seeks to perpetuate this cycle by furthering lowering selling prices, gaining additional market share, and perpetuating growth.

Some refer to Target as the upscale discounter. This seemingly oxymoronic moniker reflects the retailer's profit oriented strategy. Overall, Target prices its goods higher than Wal-Mart. It generates a higher profit margin than its larger competitor by doing so, but Target does not turnover its inventory as fast as Wal-Mart does. Target believes the best way to compensate its investors is to provide a more favorable shopping experience to its customers than that of the low cost leader.

It may be possible that both Wal-Mart and Target can be successful using different business strategies. An analyst should use return on investment data, as well as the profit margin and turnover component measures, in order to make that determination.

Financial Attributes

Financial statements report a specific **financial attribute** (or **financial characteristic**) for all of the accounts presented in them, such as

Financial attribute (financial characteristic)

A monetary amount reported by a firm based on a specific asset or liability characteristic, such as historical cost

Historical cost

The monetary amount a reporting entity pays to acquire an asset or settle a liability

cash, accounts receivable, and equipment. The financial attribute of **historical cost** governs measurement of most accounts within the nominal dollar concept of capital maintenance.¹⁶ Under the historical cost principle, companies report assets at the value actually exchanged to acquire them. That value, however, is only one of many measurable financial characteristics possible; others are

1. the replacement cost of the asset
2. its selling price
3. the liquidation value of the resource
4. the opportunity cost given up to acquire the resource.

These alternative financial attributes to historical cost contain economic information, but financial statements, for the most part, do not disclose them.



My Analysis 1-3

Major League Reporting

Generally accepted accounting principles favor reporting assets and liabilities based on past exchange prices, or what we refer to as historical cost reporting. Major League Baseball, however, differs from GAAP when it comes to a financial reporting basis. Baseball puts a different spin on the ball when it comes to valuing resources and obligations. How would you umpire baseball's pitch?

A 1982 guideline enacted by the franchises of America's pastime emphasizes market values over historical costs. The *60-40 rule* requires that each team maintain \$60 of assets for every \$40 of liabilities. The rule does not define assets and liabilities in accordance with GAAP. A team's asset base equals its appraised market value, and its liabilities include the total current player payroll and all deferred salaries. For example, if the Boston Red Sox have a current and deferred payroll of \$100 million and other obligations of \$150 million, then it must have a current market value of at least \$375 million to comply with the 60-40 rule. Market values can change dramatically in a short time interval. For example, winning the World Series, announcing a new taxpayer-financed ballpark, securing a more lucrative television and radio broadcast contract, and signing a superstar could all serve to increase the market value of a team.

In general, GAAP does not accept appraised asset valuations. External financial reporting conventions consider market values harder to verify and more likely to be manipulated than historical exchange prices. Moreover, salaries incurred in the current reporting period are business expenses, and only become liabilities if they are unpaid. In GAAP's view, baseball strikes out!

Discussion

Baseball's valuation of its assets and liabilities raises many analytical questions:

1. Do you agree with GAAP's contention that market values are less reliable than historical costs?
2. Does this view prevail in all instances?
3. How could fair values be more relevant than historical exchange prices for decision-making purposes?
4. How would the use of either historical costs or market values serve as the basis for financial reporting affect financial statement analysis?

Even if we assume for the moment that historical cost is the most informative financial attribute that an entity could report, the financial statements would still report limited financial information. Consider a company that reports \$1,000 cash as an asset on its balance sheet. You would probably agree that this financial disclosure represents economic reality. It provides both relevant and reliable information to financial statement analysts. Moreover, the historical, replacement, and liquidation values of the cash reported all equal \$1,000.

Now assume the company uses a two-year-old computer in running its business. GAAP dictates reporting the computer at historical cost less some adjustment for depreciation. The depreciation-adjusted dollar value the report on its balance sheet is called the **book value** (or **net value** or **carrying value**). Book value, however, depends upon a number of assumptions: the expected life of the computer, the method used to calculate depreciation, and its predicted salvage value.¹⁷ Thus, even *before* considering the alternative financial attributes that an entity could possibly report on its balance sheet, historical cost accounting could report a potential range of book values.

Assume further that we accept the historical cost-derived book value reported on the balance sheet based on the firm's assessment of economic life and depreciation method as *reliable* information. Financial statement analysts still could question its *relevance*. They could inquire as to the financial value of the computer's:

- market value?
- replacement cost?
- cash generating ability?
- opportunity cost, which is the sacrifice of an alternative given up by selling the computer?
- Intrinsic worth to the firm?

Answers to the above questions are unimportant right now. They do illustrate, however, the difficulties financial statement analysts

Book (net or carrying) value

The amount of an asset reported on the balance sheet

encounter when gauging the value of the information contained in the financial statements.

The financial reporting system measures selective aspects of multidimensional economic events. An analyst must be aware that financial statements contain incomplete data and expand his or her information sources to compensate for this limitation. They increase their probabilities of accurately forecasting future performance and making better decisions by doing so.

International Standards

Financial reporting principles are not uniform throughout the world. Over 120 countries now require their reporting entities to conform to the **International Financial Reporting Standards (IFRS)** promulgated by the **International Accounting Standards Board (IASB)**, based in London, England. These countries include member nations of the European Union, Russia, Canada, and Australia. Japan and the People's Republic of China are large industrial countries who, along with the United States, continue to require conformity with a national set of accounting standards.

Just as the use of alternative accounting methods can affect financial disclosures among U.S. firms, disclosures made by firms using alternative notions of GAAP complicate analysis. Fortunately, the movement toward an international set of financial reporting standards is lessening GAAP differences among nations. The United States, China, and Japan are among the countries with national standards that are working with the IASB to reduce financial reporting differences between national GAAP and IFRS. The financial community has coined this effort **financial reporting convergence**.

A recent change in SEC policy illustrates the extent to which differences in GAAP has been reduced. The regulator of securities in the United States previously required foreign firms trading in the U.S. to reconcile financial statements reported under international standards to those of U.S. GAAP. Beginning in 2008, however, firms reporting under IASB standards are no longer required to restate their financial disclosures to conform to FASB-mandated standards.¹⁸ The view of the SEC is that the financial disclosures mandated by the FASB and IASB have converged to such a degree that the two sets of GAAP are essentially equivalent.

Financial statement convergence could ultimately yield a single set of financial reporting standards that govern all entities, regardless of where they are domiciled. Standardization would facilitate cross-border financial analysis. The United States supports the goal of unified financial reporting standards. Section 509 of the *National Securities Markets Improvement Act of 1996* states that, "establishment of a high-quality comprehensive set of generally accepted international accounting standards in cross-border security offerings would greatly facilitate international financing activities and, most significantly, would

International Financial Reporting Standards (IFRS)

Generally accepted accounting principles for many countries other than the United States

International Accounting Standards Board (IASB)

The body that sets International Financial Reporting Standards

Financial reporting convergence

Attempts by the FASB and IASB to equate U.S. GAAP to IFRS

enhance the ability of foreign corporations to access and list in United States markets.” The FASB expressed its concurrence for unified accounting standards in its 1999 *International Accounting Standard Setting: A Vision for the Future* report.

The SEC issued a policy statement pursuant to the Sarbanes-Oxley Act of 2002 that reaffirmed the FASB as private-standard setter for the U.S., but the Commission also expressed the view that a unified set of international accounting standards ultimately would serve the public interest. Furthermore, the SEC published for public comment a proposal, commonly referred to as the **Roadmap**, which would allow eventually allow U.S. filers to disclose financial statements in conformity with international financial reporting standards.¹⁹ While the final disposition of the Roadmap is unresolved as of the writing this text, recent policy initiatives have greatly reduced financial reporting differences throughout the world. This enhanced comparability is good news for financial analysts analyzing companies that report under alternative sets of reporting standards.

Roadmap

A plan to attain financial reporting convergence between the FASB and IASB



My Analysis 1-4

Rules or Principles?

A single set of high-quality globally accepted accounting standards would improve financial statement analysis throughout the world by eliminating inter-country financial reporting disparities. If the U.S. adopted IFRS, the financial statements of American business would be comparable to their international competitors. Such conformity would help U.S. firms raise capital abroad because foreign investors could more clearly value the equity and debt securities offered by American entities.

One studying financial statement analysis may logically question why the United States has not adopted international accounting standards. The answer is attributable to alternative financial reporting perspectives. International standard setters promulgate broad financial reporting rules that focus on underlying economic *principles*. The Financial Accounting Standards Board, on the other hand, prescribes detailed *rules* regarding financial measurement and disclosure for American firms. For instance, international accounting standards total 2,500 pages, while U.S. GAAP composes over 25,000 pages—a tenfold difference.

The legal environment in the United States favors rules over principles for financial reporting. The U.S. is a highly litigious society, and detailed financial reporting rules protect companies from lawsuits. The principles-based nature of IFRS requires extensive use of professional judgment in financial reporting. Such judgment is more susceptible to lawsuits than compliance with rules.

Two other factors currently work against the United States adopting international accounting standards. First, the IASB is not under U.S. control. Some contend the United

(Continues)

States could not insure IASB independence in the face of political pressure or protect the interest of American companies in such situations. Second, critics argue that transition to international financial reporting standards is too costly and complex, especially in light of the poor economic environment.

Discussion

Discuss the validity of the impediments currently preventing U.S. adoption of international financial reporting standards. Propose means of overcoming them. Do you think the U.S. will eventually adopt international financial reporting standards?

Disclosures Considerations

Up to this point, Chapter 1 has stated the objective of financial statement analysis, discussed those who analyze financial statements, and enumerated the financial statements. The remainder of this introductory chapter presents a host of practical considerations that influence financial statement analysis.

Data Sources

Public corporations' financial statements are available to everyone, but the financial statements of privately held concerns are confidential. This book assumes data accessibility; consequently, it analyzes disclosures of companies whose stocks trade publicly. References in this text about enterprises, entities, businesses, companies, and firms pertain to public corporations. Financial statement analytical techniques, however, are applicable to non-public entities, provided you have access to the data.

As noted earlier in this chapter, comprehensive information improves financial statement analysis. Data, however, exist in many forms. Data are found in many places, possess varying degrees of relevance and reliability, contain various benefits, and have different costs. Information sources vary in worth: some are good, some are bad, and some contain both good and bad elements. Misleading, untimely, and false information abounds. Bad information taints analysis; researchers must identify it and then ignore it. Good financial statement analysis requires the use of sound, reputable source data.

Informational bias can even exist within the financial statements themselves. Management, as agents of the investors, compiles and reports corporate financial statements. External auditors state whether the financial statements conform to generally accepted accounting principles. Yet firms such as Enron, Worldcom, Sunbeam and others published inaccurate, financial statements in the early part of the 21st century and received clean audit opinions. As such, financial statement analysts must always judge reporting credibility before

assessing corporate performance. **Due diligence** captures the essence of financial statement analysis conducted in a thorough, reasonable, and responsible manner. Financial statement analysts must always maintain a healthy degree of skepticism when evaluating financial statements and other managerial assertions.

To illustrate how data sources affect financial statement analysis, consider data surrounding reported accounts receivable. A company knows with certainty who owes them money from credit sales and how much each customer owes as of the balance sheet date. Not all debtors, however, pay their bills. The problem is that the reporting entity does not know which *specific* outstanding accounts that owe it cash will never pay. Consequently, the reporting firm reduces gross accounts receivable (or legal claims for payment) by its *estimate* of bad debts. The firm reports net receivables (an *estimated* economically realizable amount of cash) on its balance sheet and reports an *estimate* of bad debt expense on its income statement. In addition, the company supplements these financial statement measures with a detailed schedule explaining its *estimates* for uncollectible accounts receivable.

Bad debt determinants, while grounded in managerial judgment, are, nonetheless, subjective valuations made by the firm. Management may be too optimistic in estimating the amount of cash it will eventually receive from outstanding accounts. If management reported such optimism on the income statement, the firm would underreport bad debt expense and overstate net income. The balance sheet would also overstate the amount of cash the company expects to collect from its customers. Furthermore, external environmental factors could contribute to cash collections. For example, a weakening economy could reduce cash collected from outstanding accounts (i.e., bad debts increase as economic conditions worsen). Consequently, financial statement analysts must interpret the numerical, verbal, objective, and subjective data contained in the financial statements and their footnotes to judge the validity of management's assertions about the anticipated customer cash collections. They must also incorporate information from secondary sources to judge the appropriate amounts disclosed as net accounts receivable on the balance sheet and bad debt expense reported on the income statement.

Due diligence

Thorough research that allows for good economic decisions

Terminology

Financial statement terminology and format vary among companies and over time. These inconsistencies can hinder financial statement analysis. For instance, reporting firms may refer to the individuals who own a company as stockholders, shareholders, shareowners, equity investors, or owners in their balance sheets. Similarly, companies could denote long-term economic resources under any of the following captions:

- fixed assets
- long-term assets

- plant and equipment
- tangible assets
- capital resources
- productive assets
- property, plant, and equipment
- land, buildings, and machinery.

Analyzing financial statements containing divergent terminology depends on grasping the common characteristics of a reported item, irrespective of its name. For instance, long-term productive resources meet the definition of an asset class. Financial statement analysts must determine which category of asset disclosures contains the following characteristics:

- Cash generating capabilities in future reporting periods
- Controlled by the company (as of the balance sheet date)
- Created by a past transaction
- Tangible in nature

Industry Insight **1-5**

Nonalcoholic Beverages

Coca-Cola and PepsiCo are the dominant non-alcoholic beverage firms in the world. These two soft drink giants strategically structure their operations to create shareholder value. Both firms manufacture, distribute, and market their products. Historically, both firms have not perceived soft drink bottling as a way to add value to their business. Coke and Pepsi generally outsource the bottling of their products. In essence, Coke and Pepsi make and distribute syrup concentrates to bottling concerns. The bottlers, in turn, place the product in containers and stock retailers' shelves.

While Coke and Pepsi do own some of their bottlers, most are independent affiliates. That degree of independence, however, varies among bottling firms. Some bottlers are completely independent of Coke and Pepsi. In other instances, Coke and Pepsi own significant shares of stock in some bottlers. For those bottlers, the beverage giants usually do not have a voting majority interest (i.e., they own less than 50%).

The upshot of the bottling relationships reflects itself on corporate financial statements. Coke and Pepsi include the operations of their wholly owned bottlers in their financial statements because parent firms must consolidate their financial statements with those of owned affiliated entities. The firms report their proportionate share of earnings and assets for those bottlers they have an interest in, but do not control. Coke and Pepsi do not include the financial results and economic position of completely independent bottling concerns.

An analyst should evaluate the bottling arrangements that maximize shareholder wealth. Questions arise such as

- Does the bottling strategy maximize shareholder wealth?
- Will those bottling arrangements change in the future?
- If so, will Coke and Pepsi move to consolidate bottling operations or spin off their bottling investments?

Generally accepted accounting principles remain silent with respect to the format of the financial statements. There is no single correct presentation format for the financial statements, nor does GAAP prescribe a list of accounts they must disclose. Some companies report detailed financial statements with many line items disclosures, but other firms elect to aggregate disclosures. (Those summarizing financial amounts at highly summarized levels usually provide footnotes breaking down the aggregated line items that appear in the financial statements.)

Just as firms are sometimes inconsistent in their terminology and format, financial statement analysts interchange phrases that have slightly different meanings. Many of these interchangeable phrases relate to financial items. *Financial reporting*, for example, usually refers to the financial statements, which include the footnotes to the financial statements. *Financial disclosures* represent the financial statements and other corporate data (e.g., management's discussion and analysis presented in the company's annual report). *Financial information* connotes monetary data from all sources available for analysis. The distinction among financial reporting, disclosures, and information is somewhat arbitrary, and this book, like many financial statement analysts, refers to them interchangeably.

Subtle terminology distinctions also exist among knowledge constructs. Technically, data are qualitative or quantitative disclosures, devoid of meaning. Information represents something of value to an analyst. Knowledge comes from understanding the information. In other words, information to a financial statement analyst represents the meanings and interpretations attached to the data, and knowledge synthesizes information. The lines between data, information, knowledge and even, occasionally, wisdom, blur. Consequently, this book sometimes treats these terms interchangeably.

Reporting Periods

Financial statement analysts evaluate data over a number of years to gain perspective about financial results. You should realize, however, that not all data points are equally informative. Financial statement

Form 10-K

Annual report filed with the SEC by publicly-traded firms containing audited financial statements and other pertinent disclosures

Form 10-Q

Quarterly report filed with the SEC by publicly-traded firms

analysts place a higher informational value on recent years' disclosures than they do on older years' financial disclosures. The most informative data are contained in the most recent financial statements. Firms report their financial statements to the Securities and Exchange Commission annually as part of their **Form 10-K** disclosures.²⁰ (Appendix A at the conclusion of this text reports financial statements and financial ratios for certain companies within selected industries from the past seven or eight years. This length of time provides financial analysts with an historical perspective of the firms' financial performance and position.)

Realistically, most analysts rely on quarterly financial statements (**Form 10-Q**), rather than annual financial statements, due to their more timely information. Quarterly financial statements, however, are unaudited. They also require more frequent updating of financial statement spreadsheets and their subsequent analysis. (Due to the limitations of quarterly financial statements, the authors of *Financial Statement Analysis: Content and Context*—an introductory text for the discipline—have opted to analyze only annual financial statements.)

The fiscal reporting year for many companies coincides with the calendar year (January 1–December 31). Such is not always the case, however. Moreover, different firms within the same industry may end their business years on different dates. You must be aware of these facts and make appropriate adjustments. *Financial Statement Analysis: Content and Context* investigates two industries with inconsistent financial statement timing. In the first case, discount retailers Target and Wal-Mart both have fiscal years that approximate February 1–January 31.²¹ However, the two firms designate the years of their financial statements differently. For example, Target reports the earnings period from February 1, 2012, through January 31, 2013, as its 2012 income statement, but Walmart entitles the income statement for that time-period as its 2013 income statement. Although the great majority of these retailers' operations (11 out of 12 months) occurred in the year prior to the year of the fiscal-year-end, we have elected to classify that industry's financial statements based on the calendar year in which they *end* (consistent with the Walmart reporting convention).

Alternative fiscal year-ends also exist for firms within the same industry, and the analyst must decide how to treat such a difference. This text analyzes Dell and Hewlett-Packard (H-P), who do business in the computer hardware industry. Dell's fiscal year ends on January 31, but Hewlett-Packard closes its books at the end of October. This text elects to equate the fiscal year with the calendar year for Dell and H-P, despite their nine-month differences in fiscal reporting periods. As such, we refer to the 2012 fiscal year terminates at the end of January 2012 for Dell and October 31, 2012, for Hewlett-Packard.

Financial restatement

A revision of previously published financial statements

Financial Restatement

Firms sometimes restate their financial statements. The primary reasons for **financial restatement** are changes in accounting principle,

changes in reporting entities, and correction of errors.²² Financial statement analysts must be aware that GAAP requires firms to restate previously reported financial statements to reflect the new accounting principle, reconfigured reporting entity, or error correction.

To illustrate financial restatement, assume that a firm made a significant mathematical error in 2013. The firm would have incorrectly report its 2013 financial statements in its annual report as a result of the mistake. Assume further that the firm discovered and corrected the mathematical error in 2014. The firm's 2014 annual report would restate the 2013 financial statements as well as report the financial statements for 2014.²³ In addition, the firm would disclose the reason for financial restatement in its 2014 notes to the financial statements.

Failure to detect a financial restatement can cause analytical confusion. Consider a financial statement analyst trending the financial statements in the preceding example. That analyst could have used one of two different sets of 2013 financial statements, depending on whether he or she sourced data from the 2013 or annual reports. Good financial statement analysis requires using the most recent financial statements because they report the correct amounts (i.e., 2014 in this case).

Constraints

Financial statements are limited in their disclosure capabilities beyond the capital maintenance and financial attribute limitations discussed earlier in this chapter. The financial statements only report those accounts that meet the FASB prescribed definition of a **financial statement element** (i.e., assets, liabilities, shareholders' equity, revenues, expenses, and so forth). Moreover, the reporting entity must be able to reliably measure a financial reporting characteristic of an account (such as its historical cost) in order to include it in the financial statements. These limitations mean that financial statements ignore many hard to quantify, but important, resources.

Human capital, for example, goes unreported as an asset. Companies cannot buy people; they can only compensate them for their services (i.e., salaries expense reported on income statements). People, however, do matter, and their efforts produce revenues and cash flow. In essence, they are assets—economic “human” resources controlled by the firm—albeit unreported on the balance sheet. Founders Larry Page and Sergey Brin are invaluable assets to Google as is Mark Zuckerberg to Facebook. It does not require detailed financial analysis to know that a superstar athlete affects his or her team's financial position, as well as its ability to win games. Financial statement analysts must consider unreported or underreported assets such as management quality, intellectual capital, employee morale, corporate reputation, and strategic positioning.

Financial statement element

A major component of a financial statement, such as assets, liabilities, revenues, and expenses

Summary

Firms summarize their financial transactions in five, interrelated financial statements—balance sheets, income statements, statements of comprehensive income, statements of shareholders' equity, and statements of cash flows. Financial statement analysts combine those financial statements with other information sources to make economic decisions regarding resource allocations. The primary decision making groups who rely on financial statements are: equity investors, creditors, corporate managers, investment bankers, internal and external auditors, regulators, and corporate employees.

Financial statements must conform to generally accepted accounting principles. The Financial Accounting Standards Board, in conjunction with the Securities and Exchange Commission, sets these standards in the United States. The financial statements of firms in many other countries conform to International Accounting Standards. The differences between American and international standards have lessened over time, and may someday be completely eliminated.

Financial statement analysts realize that the financial statements are inherently limited and incomplete. Factors limiting the decision usefulness of the financial statements include the use of only the nominal dollar concept of capital maintenance and reliance on measuring accounts at their historical exchange prices. Financial statement analysts must also compensate for uneven information data sources, inconsistent financial statement terminology and format, disparate reporting periods, financial restatements, and the non-reporting of human capital.

Financial statements analysts realize that good data, diligent research, and creative insights produce sound financial statement analysis and result in good economic decisions. The financial statement analysis discipline is as much art as science. Chapters 2 through 15 develop the scientific tools and artistic techniques needed to analyze financial statements thoroughly and accurately.

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Assignments

Conceptual Cases

1-1. Financial Statement Decision Makers

American Airlines Group Inc. (formerly AMR Corporation) emerged from court-supervised bankruptcy protection in late 2013. The air carrier filed for bankruptcy in 2011, citing a need to reorganize due to an unfavorable cost structure and burdensome debt. When it filed for bankruptcy AMR's liabilities exceeded its assets and the airline had reported a series of annual net losses. American Airlines kept flying in subsequent years, operating under the protection of the bankruptcy court as a *debtor-in-possession*. This arrangement allowed the airline to continue regular operations, but required bankruptcy court approval for all transactions outside the ordinary scope of business.

The filing by American Airlines' parent company was the latest in a series of bankruptcy filings made by the so-called *legacy airlines*—carriers that existed before federal deregulation of the airline industry in the late 1970s. UAL Corp., the parent company of United Air Lines and another legacy carrier, operated under bankruptcy protection from 2002–2006. The company sought refuge in the courts so that it could “bring costs and operations in line with the current business environment.” The bankruptcy filing culminated the airlines protracted struggle to reign in its operating expenses. UAL's 2002 bankruptcy filing was its second within a decade. The restructuring of United, after it emerged from its previous bankruptcy filing in the early 1990s, failed to correct the issues underlying the firm's second bankruptcy filing. Delta Air Lines, the third of the *big three* legacy carriers, operated under bankruptcy protection from 2005 through 2007. As cited by AMR and UAL, Delta cited unsustainable costs and debt as the reason for its bankruptcy.

Required:

Address the issue presented for each category of financial statement decision maker when the legacy airlines declared bankruptcy.

- a. State the value of *equity investors'* stock holdings as reported on the balance sheet.
- b. Determine the likelihood that the airlines' *creditors* would receive full payment for the capital, goods, and services reported on the balance sheet.
- c. Assume that you were the chief executive officer for one of the legacy airlines. Construct an argument citing external environmental factors, and not bad *management*, as the cause your airline's bankruptcy. Think of one example that the income statement would report to support your contention.

- d. As a unionized employee of a legacy airline, your future pay and benefits are **legally** guaranteed by contract. Explain how the financial statements would inform you that your future compensation is not **economically** assured.
- e. As an **investment banker** for a legacy carrier emerging from bankruptcy, explain how financial statement analysis could help you to price and sell stock in a reorganized airline.

1-2. Financial Statement Articulation

Use the information presented in Case 1-1 above to address the following issues.

- a. State whether the legacy airlines' revenues exceed or were less than expenses reported on the income statements leading up to their bankruptcy filing.
- b. Explain why the balance sheets of the legacy airlines would have reported **negative** shareholders' equity when they filed for bankruptcy protection.
- c. Discuss the effect of net losses reported on the legacy air carriers' income statements on the firms' statements of shareholders' equity and the shareholders' equity sections of their balance sheets.
- d. Explain why it is **not** possible to determine whether the legacy carriers reported negative cash flows on their statements of cash flows, despite reported net losses on their income statements.

1-3. Financial Statement Decision Makers

Varity Corp., a manufacturer of machinery and automotive parts, evolved from the Massey-Ferguson farm equipment company. Agricultural implements proved to be a drain on profitability; therefore, the company decided to focus on the automotive segment of the business. Because of this strategic decision, Varity created Massey Combines Corporation (MCC) as an independent entity, and induced many employees to switch to MCC. Workers received notice under the **Project Sunshine** campaign, which stated:

When you accept employment with Massey Combines Corporation (a Varity spin off)...benefits programs will remain unchanged... We are all optimistic that our new company has a bright future.

Varity presented numerous disclosures about the spin off. Those disclosures included a balance sheet in which liabilities exceeded assets. The combine company had net worth of negative \$46 million when operations began.

Five thousand Varity employees went to work for MCC. MCC declared bankruptcy two years later, and liquidated its assets shortly thereafter.

Varity discontinued health care benefits to MCC employees upon dissolution of the company, citing a provision in its health plan that stated:

The company hereby reserves the right, by action of the board, to amend or terminate the (health) plan or trust at any time.

Required:

- a. Assume you worked for Varity prior to the MCC spin off. Explain how financial statement analysis could have influenced your decision to accept employment with MCC.
- b. Do you think a balance sheet reporting a negative net worth at the beginning of business operations guaranteed MCC to failure?
- c. Discuss whether Varity Corp. acted ethically in its Project Sunshine campaign and its treatment of MCC employees.

1–4. Market Efficiency and Financial Statement Analysis

An apparent paradox often exists when companies announce their quarterly earnings. Firms that report net income sometimes realize stock price decreases, but market values can increase for firms that report net losses during a three-month period.

Investors' *expectations* explain this seemingly inconsistent behavior. Financial statement analysts forecast quarterly earnings for publicly traded companies. The cumulative interpretation of such information by investors, in turn, affects share price. Investors, in other words, *price in* the financial analysts' forecasts of earnings prior to the formal earnings disclosure by the companies themselves. Formal release of earnings numbers does not move stock prices, but market values fluctuate to the extent that announced earnings deviate from expected ones. Stock prices tend to remain unchanged when actual corporate earnings meet forecasts, increase when they exceed them and decrease when earnings falls short of analysts' expectations.

Required:

- a. Assess the following contention: "There is no need to undertake financial statement analysis because earnings' forecasts already exist."
- b. Identify other information besides quarterly disclosures that influence an analyst's quarterly forecast of earnings.
- c. Discuss whether the stock market's response to earnings forecasts and announcements coincide with the efficient market hypothesis.

1–5. Financial Reporting and Capital Maintenance

Capital maintenance theory influences financial statement disclosures, including reported profits. Most financial reporting systems, including the American one, assume an entity maintains its capital in nominal dollars. Under this concept of capital maintenance, the difference between the historical cost of resources and their selling price determines income. The current reporting system does not consider general price level changes (inflation or deflation) or the replacement cost of the specific items when determining income. Yet, adjusting financial statements for overall or specific price changes in goods and services produces different income levels than those resulting from the nominal dollar concept.

Prices for most goods and services increase over time. The cost structure of technology hardware is an exception to the rule. Technological innovations and intense competition reduced raw material, component, and finished product costs during that time. Consistent with the nominal dollar concept of capital maintenance governing financial reporting, companies such as Apple, Hewlett-Packard, and Dell do not adjust their financial statements to account for decreasing prices in the components of the inventory.

Required:

- a. Explain why the nominal dollar concept of capital maintenance prevails in financial reporting.
- b. List the two alternatives to the nominal dollar concept of capital maintenance.
- c. Discuss the premise underlying each of these two alternative capital maintenance theories.
- d. Would each of those alternative concepts produce more or less profit for a technological hardware company?

1–6. Financial Statement Presentation

Wal-Mart Stores, Inc. reported the following long-term tangible assets on its balance sheet as part of its 2011 Form 10-K filing with the SEC:

Plant and Equipment:

Land
Buildings and improvements
Fixtures and equipment
Transportation equipment
Construction in process

Plant and equipment
Less: accumulated depreciation
 Plant and equipment, net

In its 2012 Form 10-K, Walmart listed long-term tangible assets on its 2012 balance sheet as follows:

Plant and equipment
Less: accumulated depreciation
 Plant and equipment, net

The Coca-Cola Company also inconsistently reported an asset category on its balance sheets. As noted in *Industry Insight 1-5. Nonalcoholic Beverages*, Coca-Cola (and PepsiCo) own a significant voting interest in some of their bottlers. In its 2008 annual report, The Coca-Cola Company reported its equity investments in these firms as follows:

Equity Method Investments:

Coca-Cola Hellenic Bottling Company
 Coca-Cola FEMSA
 Coca-Cola Amatil
 Coca-Cola Enterprises
 Other

Coke's 2009 balance sheet merely stated an asset category as follows:

Equity Method Investments

Required:

- a. As part of Form 10-K, firms must report balance sheets for the current year and the previous year. Consider Wal-Mart's 2012 Form 10-K and its comparative balance sheets. State whether Wal-Mart reported its 2011 long-term tangible assets consistent with the abbreviated 2012 disclosure or the more detailed 2011 disclosure.
- b. Consider the comparative balance sheets on Coca-Cola's 2009 Form 10-K. State whether Coke reported its 2008 equity investments consistent with the abbreviated 2009 disclosure or the more detailed 2008 disclosure.
- c. Independent of your responses in a. and b. above, state whether the abbreviated or detailed asset disclosures provided better information to financial statement analysts.
- d. Assume for the moment that Wal-Mart and Coca-Cola reported their assets in abbreviated format for comparative balance sheet

purposes. Discuss where a financial statement analyst might find more detailed information about Wal-Mart's plant and equipment and Coke's equity investments.

Industry Cases

The following industry assignments (and many that follow in succeeding chapters) require you to access the SEC's *Search the Next-Generation EDGAR System*. As of April 2014, the means by which you access an entity's Form 10-K (its annual report) is as follows:

1. Go to *sec.gov*. Click on *Search for Company Filings* within the Filings and Forms subheading
2. Click on the first bulleted point *Company or fund name....* Type *company name* (e.g., PepsiCo) in the search box
3. Click on *Find Company*. Type 10-K in the Filing Type search box
4. Click on *Search*. Click on *Document*. Click on *Form 10-K*.

In addition, the following industry assignments require you to access a reputable industry report. Some sources of industry analyses are *Standard & Poor's NetAdvantage*, *Hoover's*, *Mergent Online*, and *LexisNexis*.

1-1. Nonalcoholic Beverage Industry

Access the most recent 10-K forms for The Coca-Cola Company and PepsiCo, Inc. Examine Item 1, *Business*, for each firm. Read a reputable industry report for the nonalcoholic beverage industry. (Note that nonalcoholic beverages may be a subsection of a larger industry report, depending on your source.) Write a brief report summarizing the business of both firms and the industry in which they operate.

1-2. Discount Retail Industry

Access the most recent 10-K forms for Target Corporation and Wal-Mart Stores, Inc. Examine Item 1, *Business*, for each firm. Read a reputable industry report for the discount retail industry. (Note that discount retailers may be a subsection of a larger industry report, depending on your source.) Write a brief report summarizing the business of both firms and the industry in which they operate.

1-3. Computer Hardware Industry

Access the most recent 10-K forms for Dell Inc. and Hewlett-Packard Company. Examine Item 1, *Business*, for each firm. Read a reputable industry report for the computer hardware industry. (Note that computer hardware may be a subsection of a larger industry report, depending on your source.) Write a brief report summarizing the business of both firms and the industry in which they operate.

1–4. Franchised Restaurant Industry

Access the most recent 10-K forms for McDonald's Corporation and Yum! Brands, Inc. Examine Item 1, *Business*, for each firm. Read a reputable industry report for the fast-food restaurant industry. (Note that fast-food restaurants may be a subsection of a larger industry report, depending on your source.) Write a brief report summarizing the business of both firms and the industry in which they operate.

1–5. Airline Industry

Access the most recent 10-K forms for American Airlines Group Inc. (formerly AMR Corporation) and Southwest Airlines Co. Examine Item 1, *Business*, for each firm. Read a reputable industry report for the airline industry. (Note that airlines may be a subsection of a larger industry report, depending on your source.) Write a brief report summarizing the business of both firms and the industry in which they operate.

Endnotes

- 1 The orientation of *Financial Statement Analysis: Content and Context* is based on the *entity theory* of the firm as opposed to the *proprietary theory* of the firm. Under the *entity theory*, the firm, as opposed to its owners, is the center of accounting and financial reporting interest. Creditors as well as shareholders contribute resources to the firm, and the firm exists as a separate and distinct entity apart from both groups. Financial statements must inform both parties of the firm's efforts and results. Under the *proprietary theory* of the firm, accounting and financial reporting exist solely for the benefit of the shareholders. Thus, an investment orientation to financial statement analysis, the alternative approach to this textbook, is more aligned with the *proprietary theory* than the *entity theory* of the firm.
- 2 Richard Baker offers a detailed examination of the valuation methods in *Determining Value: Valuation Models and Financial Statements* (Harlow, England, Prentice Hall, 2001). Chapter 1 of this book discusses the difference between the valuation (proprietary) approach and the finance and accounting (or entity) approach to financial statement analysis.
- 3 Financial intermediaries, such as the New York Stock Exchange, facilitate these secondary or after market transactions. Independent of the price an individual equity investor pays for a share of stock in secondary markets, only stock sales in the primary market represent equity financing from the firm's perspective.
- 4 Firm value inextricably links share price and dividends. We explore this theoretical relationship in Chapter 15.
- 5 See, for example, E. F. Brigham and J. F. Houston's discussion of wealth maximization in Chapter 1 of *Fundamentals of Financial Management: Concise Fifth Edition*, (Mason, Ohio: Thomson South-Western, 2007).
- 6 See, for example, H. A. Markowitz, "Portfolio Selection," *Journal of Finance*, March 1952, pp. 77–91.
- 7 One example of CAPM is W. F. Sharpe's, "Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk," *Journal of Finance*, September 1964, pp. 425–442.
- 8 Various forms of market efficiency exist. These forms reflect the extent to which specific information sets affect share price. The majority of analysts believe that share price reflects publicly available information, or what people call the semi-strong form of market efficiency. A summary of EMH, and its various forms, is contained in E. F. Fama's "Efficient Capital Markets: A Review of Theory and Empirical Work," *Journal of Finance*, May 1970, pp. 383–417.
- 9 Agency theory examines contracting agreements between owners and managers. For a discussion of this theory see H. I. Wolk and M. G. Tearney, *Accounting Theory: A Conceptual and Institutional Approach, Fourth Edition* (Cincinnati: South-Western, 2000).
- 10 The Sarbanes-Oxley Act of 2002, enacted in response to a rash of financial reporting scandals, resulted in the creation of the Public Company Accounting Oversight Board to regulate auditors.
- 11 This is a true statement from the firm's perspective. It is not true from the owners' viewpoint because the market value of shareholders' equity does not equal its book value.
- 12 GAAP defines wealth creation this way. We examine alternative income (wealth creation) measures later in Chapter 1.

- 13 The Accounting Standards Codification replaced the hierarchical structure of GAAP in 2009. The pinnacle of the previous GAAP-hierarchy was the authoritative financial reporting standards.
- 14 Accounting Series Release No. 150 of the SEC, *Statement of Policy on the Establishment and Improvement of Accounting Rules*, effectively yielded financial reporting standard setting to the Financial Accounting Standards Board, or FASB.
- 15 This is a general statement regarding revenue recognition. We examine exceptions to it later in the text.
- 16 This statement is correct for the most part. As we will explore in future chapters, departures from the historical cost principle exist. In addition, historical *proceeds*, rather than historical cost financial reporting, govern liability valuation. Historical proceeds equal the cash equivalent value at the exchange date.
- 17 The same assumptions made to determine the reported value of the computer on the balance sheet would affect the amount of depreciation expense an entity reports on its income statements.
- 18 *Acceptance from Foreign Issuers of Financial Statements Prepared in Accordance with International Financial Reporting Standards without Reconciliation to U.S. GAAP*. (SEC: Washington D. C., December 2007).
- 19 Security Exchange Commission Release No. 33-8982, *Roadmap for the Potential Use of Financial Statement Preparation in Accordance with International Financial Reporting Standards by U.S. Issuers*, (SEC: Washington, DC, November 2008).
- 20 The *Industry Assignments* at the conclusion of this chapter instruct readers as to how to access Form 10-Ks on the SEC's website. Chapter 3 discusses Form 10-K in detail.
- 21 Walmart and Target actually base their financial statements on a 364-day year. This means the firms beginning a new fiscal reporting year on or about February 1 and ending them near the end of each January. The first *Industry Insight* sidebar in Chapter 3 discusses 364-day reporting year in detail.
- 22 FASB ASC section 250 governs the restatement of the financial statements.
- 23 We refer to the annual corporate filing primarily as its annual report in this chapter to simplify the discussion. We discuss Form 10-K, the annual filing of a public company with the SEC, in detail in future chapters. Form 10-Ks require comparative disclosure of the last two balance sheets and reporting of the last three financial flow statements.