

INTRODUCTION TO FINANCIAL MANAGEMENT

P A R T

1

1 *An Overview of Financial
Management*



CHAPTER 1

AN OVERVIEW OF FINANCIAL MANAGEMENT

Citigroup

Striking the Right Balance

In 1776 Adam Smith described how an “invisible hand” guides companies striving to maximize profits so that they make decisions that also benefit society. Smith’s insights led economists to reach two key conclusions: (1) Profit maximization is the proper goal for a business, and (2) the free enterprise system is best for society. However, the world has changed since 1776. Firms then were much smaller, they operated in one country, and they were generally managed by their owners. Firms today are much larger, operate across the globe, have thousands of employees, and are owned by millions of investors. Therefore, the “invisible hand” may no longer provide reliable guidance. If not, how should our giant corporations be managed, and what should their goals be? In particular, should companies try to maximize their owners’ interests, or should they strike a balance between profits and actions designed specifically to benefit customers, employees, suppliers, and even society as a whole?

Most academics today subscribe to a slightly modified version of Adam Smith’s theory: Maximize stockholder wealth, which amounts to maximizing the value of the stock. Stock price maximization requires firms to consider profits, but it also requires them to think about the riskiness of those profits and whether they are paid out as dividends or retained and reinvested in the business. Firms must develop desirable products, produce them efficiently, and sell them at competitive prices, all of which also benefit society. Obviously, some constraints are necessary—firms must not be allowed to pollute the air and water excessively, engage in unfair employment practices, or create monopolies that exploit consumers. *So, the view today is that management should try to maximize stock values, but subject to government-imposed constraints.* To paraphrase Charles Prince, chairman of Citigroup, in an interview with *Fortune*: We

want to grow aggressively, but without breaking the law.¹ Citigroup had recently been fined hundreds of millions of dollars for breaking laws in the United States and abroad.

The constrained maximization theory does have critics. For example, General Electric (GE) chief executive officer (CEO) Jeffrey Immelt believes that alterations are needed. GE is the world's most valuable company, and it has an excellent reputation.² Immelt tells his management team that value and reputation go hand in glove—having a good reputation with customers, suppliers, employees, and regulators is essential if value is to be maximized. According to Immelt, “The reason people come to work for GE is that they want to be part of something that is bigger than themselves. They want to work hard, win promotions, and receive stock options. But they also want to work for a company that makes a difference, a company that's doing great things in the world. . . . It's up to GE to be a good citizen. Not only is it a nice thing to do, it's good for business.”

This is a new position for GE. Immelt's predecessor, Jack Welch, focused on compliance—like Citigroup's Prince, Welch believed in obeying rules pertaining to the environment, employment practices, and the like, but his goal was to maximize shareholder value within those constraints. Immelt, on the other hand, thinks it's necessary to go further, doing some things because they benefit society, not just because they are profitable. But Immelt is not totally altruistic—he thinks that actions to improve world conditions will also enhance GE's reputation, helping it attract top workers and loyal customers, get better cooperation from suppliers, and obtain expedited regulatory approvals for new ventures, all of which would benefit GE's stock price. One could interpret all this as saying that the CEOs of both Citigroup and GE have stock price maximization as their top goal, but Citigroup's CEO focuses quite directly on that goal while GE's CEO takes a somewhat broader view.

Putting Things In Perspective

This chapter will give you an idea of what financial management is all about. We begin with a brief discussion of the different forms of business organization. For corporations, management's goal should be to maximize shareholder wealth, which means maximizing the value of the stock. When we say “maximizing the value of the stock,” we mean the “true, long-run value,” which may be different from the current stock price. Good managers understand the importance of ethics, and they recognize that maximizing long-run value is consistent with being socially responsible. We conclude the chapter by describing how finance is related to the overall business and how firms must provide the right incentives if they are to get managers to focus on long-run value maximization.

¹ “Tough Questions for Citigroup's CEO,” *Fortune*, November 29, 2004, pp. 114–122.

² Marc Gunther, “Money and Morals at GE,” *Fortune*, November 15, 2004, pp. 176–182.

1.1 FORMS OF BUSINESS ORGANIZATION

The key aspects of financial management are the same for all businesses, large or small, regardless of how they are organized. Still, its legal structure does affect some aspects of a firm's operations and thus must be recognized. There are three main forms of business organization: (1) sole proprietorships, (2) partnerships, and (3) corporations. In terms of numbers, about 80 percent of businesses are operated as sole proprietorships, while most of the remainder are divided equally between partnerships and corporations. However, based on the dollar value of sales, about 80 percent of all business is done by corporations, about 13 percent by sole proprietorships, and about 7 percent by partnerships. Because corporations conduct the most business, and because most successful proprietorships and partnerships eventually convert into corporations, we concentrate on them in this book. Still, it is important to understand the differences among the three types of firms.

Proprietorship

An unincorporated business owned by one individual.

A **proprietorship** is an unincorporated business owned by one individual. Going into business as a sole proprietor is easy—merely begin business operations. Proprietorships have three important advantages: (1) They are easily and inexpensively formed, (2) they are subject to few government regulations, and (3) they are subject to lower income taxes than corporations. However, proprietorships also have three important limitations: (1) Proprietors have unlimited personal liability for the business's debts, which can result in losses that exceed the money they have invested in the company; (2) it is difficult for proprietorships to obtain large sums of capital; and (3) the life of a business organized as a proprietorship is limited to the life of the individual who created it. For these reasons, sole proprietorships are used primarily for small businesses. However, businesses are frequently started as proprietorships and then converted to corporations when their growth causes the disadvantages of being a proprietorship to outweigh the advantages.

Partnership

An unincorporated business owned by two or more persons.

A **partnership** is a legal arrangement between two or more people who decide to do business together. Partnerships are similar to proprietorships in that they can be established easily and inexpensively, and they are not subject to the corporate income tax. They also have the disadvantages associated with proprietorships: unlimited personal liability, difficulty raising capital, and limited lives. The liability issue is especially important, because under partnership law, each partner is liable for the business's debts. Therefore, if any partner is unable to meet his or her pro rata liability and the partnership goes bankrupt, then the remaining partners are personally responsible for making good on the unsatisfied claims. The partners of a national accounting firm, Laventhol and Horvath, a huge partnership that went bankrupt as a result of suits filed by investors who relied on faulty audit statements, learned all about the perils of doing business as a partnership. Another major accounting firm, Arthur Andersen, suffered a similar fate because the partners who worked with Enron, WorldCom, and a few other clients broke the law and led to the firm's demise. Thus, a Texas partner who audits a business that goes under can bring ruin to a millionaire New York partner who never even went near the client company.³

³ There are actually a number of types of partnerships, but we focus on "plain vanilla partnerships" and leave the variations to courses on business law. We note, though, that the variations are generally designed to limit the liabilities of some of the partners. For example, a "limited partnership" has a general partner, who has unlimited liability, and limited partners, whose liability is limited to their investment. This sounds great from the standpoint of the limited partners, but they have to cede sole and absolute authority to the general partner, which means that they have no say in the way the firm conducts its business. With a corporation, the owners (stockholders) have limited liability, but they also have the right to vote and thus influence management.

A **corporation** is a legal entity created by a state, and it is separate and distinct from its owners and managers. Corporations have unlimited lives, their owners are not subject to losses beyond the amount they have invested in the business, and it is easier to transfer one's ownership interest (stock) in a corporation than one's interest in a nonincorporated business. These three factors make it much easier for corporations to raise the capital necessary to operate large businesses. Thus, growth companies such as Hewlett-Packard and Microsoft generally begin life as proprietorships or partnerships, but at some point find it advantageous to convert to the corporate form.

The biggest drawback to incorporation is taxes: Corporate earnings are generally subject to double taxation—the earnings of the corporation are taxed at the corporate level, and then, when after-tax earnings are paid out as dividends, those earnings are taxed again as personal income to the stockholders. However, as an aid to small businesses Congress created **S corporations** and allowed them to be taxed as if they were proprietorships or partnerships and thus exempt from the corporate income tax. The S designation is based on the section of the Tax Code that deals with S corporations, though it could stand for “small.” Larger corporations are known as C corporations. S corporations can have no more than 75 stockholders, which limits their use to relatively small, privately owned firms. The vast majority of small firms elect S status and retain that status until they decide to sell stock to the public and thus expand their ownership beyond 75 stockholders.

In deciding on a form of organization, firms must trade off the advantages of incorporation against a possibly higher tax burden. However, the value of any business other than a very small one will probably be maximized if it is organized as a corporation for the following three reasons:

1. Limited liability reduces the risks borne by investors, and, other things held constant, *the lower the firm's risk, the higher its value.*
2. A firm's value is dependent on its *growth opportunities*, which, in turn, are dependent on its ability to attract capital. Because corporations can attract capital more easily than can unincorporated businesses, they are better able to take advantage of growth opportunities.
3. The value of an asset also depends on its *liquidity*, which means the ease of selling the asset and converting it to cash at a “fair market value.” Because an investment in the stock of a corporation is much easier to transfer to another investor than are proprietorship or partnership interests, a corporate investment is more liquid than a similar investment in a proprietorship or partnership, and this too enhances the value of a corporation.

As we just discussed, most firms are managed with value maximization in mind, and that, in turn, has caused most large businesses to be organized as corporations.



What are the key differences between sole proprietorships, partnerships, and corporations?

How do some firms get to enjoy the benefits of the corporate form of organization yet avoid corporate income taxes? Why don't all firms—for example, IBM or GE—do this?

Why is the value of a business other than a small one generally maximized if it is organized as a corporation?

Corporation

A legal entity created by a state, separate and distinct from its owners and managers, having unlimited life, easy transferability of ownership, and limited liability.

S Corporation

A special designation that allows small businesses that meet qualifications to be taxed as if they were a proprietorship or partnership rather than as a corporation.

1.2 STOCK PRICES AND SHAREHOLDER VALUE

At the outset, it is important to understand the chief goals of a business. As we will see, the goals of a sole proprietor may be different than the goals of a corporation. Consider first Larry Jackson, a sole proprietor who operates a sporting goods store on Main Street. Jackson is in business to make money, but he also likes to take time off to play golf on Fridays. Jackson also has a few employees who are no longer very productive, but he keeps them on the payroll out of friendship and loyalty. Jackson is clearly running the business in a way that is consistent with his own personal goals—which is perfectly reasonable given that he is a sole proprietor. Jackson knows that he would make more money if he didn't play golf or if he replaced some of his employees, but he is comfortable with the choices he has made, and since it is his business, he is free to make those choices.

By contrast, Linda Smith is CEO of a large corporation. Smith manages the company on a day-to-day basis, but she isn't the sole owner of the company. The company is owned primarily by shareholders who purchased its stock because they were looking for a financial return that would help them retire, send their kids to college, or pay for a long-anticipated trip. The shareholders elected a board of directors, who then selected Smith to run the company. Smith and the firm's other managers are working on behalf of the shareholders, and they were hired to pursue policies that enhance shareholder value. Throughout this book we focus primarily on publicly owned companies, hence we operate on the assumption that management's primary goal is **stockholder wealth maximization**, which translates into *maximizing the price of the firm's common stock*.

If managers are to maximize shareholder wealth, they must know how that wealth is determined. Essentially, a company's shareholder wealth is simply the number of shares outstanding times the market price per share. If you own 100 shares of GE's stock and the price is \$35 per share, then your wealth in GE is \$3,500. The wealth of all its stockholders can be summed, and that is the value of GE, the item that management is supposed to maximize. The number of shares outstanding is for all intents and purposes a given, so what really determines shareholder wealth is the price of the stock. Therefore, a central issue is this: What determines the stock's price?

Throughout this book, we will see that the value of any asset is simply the present value of the cash flows it provides to its owners over time. We discuss stock valuation in depth in Chapter 9, where we will see that a stock's price at any given time depends on the cash flows an "average" investor expects to receive in the future if he or she bought the stock. To illustrate, suppose investors are aware that GE earned \$1.58 per share in 2004 and paid out 51 percent of that amount, or \$0.80 per share, in dividends. Suppose further that most investors expect earnings, dividends, and the stock price to all increase by about 6 percent per year. Management might run the company so that these expectations are met. However, management might make some wonderful decisions that cause profits to rise at a 12 percent rate, causing the dividends and stock price to increase at that same rate. Of course, management might make some big mistakes, profits might suffer, and the stock price might decline sharply rather than grow. Thus, investors are exposed to more risk if they buy GE stock than if they buy a new U.S. Treasury bond, which offers a guaranteed interest payment every six months plus repayment of the purchase price when the bond matures.

We see, then, that if GE's management makes good decisions, the stock price should increase, while if it makes enough bad decisions, the stock price will

Stockholder Wealth Maximization

The primary goal for managerial decisions; considers the risk and timing associated with expected earnings per share in order to maximize the price of the firm's common stock.

decrease. Management's goal is to make the set of decisions that leads to the maximum stock price, as that will maximize its shareholders' wealth. Note, though, that factors beyond management's control also affect stock prices. Thus, after the 9/11 terrorist attacks on the World Trade Center and Pentagon, the prices of virtually all stocks fell, no matter how effective their management was.

Firms have a number of different departments, including marketing, accounting, production, human resources, and finance. The finance department's principal task is to evaluate proposed decisions and judge how they will affect the stock price and therefore shareholder wealth. For example, suppose the production manager wants to replace some old equipment with new, automated machinery that will enable the firm to reduce labor costs. The finance staff will evaluate that proposal and determine if the savings are worth the cost. Similarly, if marketing wants to sign a contract with Tiger Woods that will cost \$10 million per year for five years, the financial staff will evaluate the proposal, looking at the probable increased sales and other related factors, and reach a conclusion as to whether signing Tiger will lead to a higher stock price. Most significant decisions will be evaluated similarly.

Note too that stock prices change over time as conditions change and as investors obtain new information about companies' prospects. For example, Apple Computer's stock ranged from a low of \$21.18 to \$69.57 per share during 2004, rising and falling as good and bad news was released. GE, which is older, more diversified, and consequently more stable, had a narrower price range, from \$28.88 to \$37.75. Investors can predict future results for GE more accurately than for Apple, hence GE is less risky. Note too that the investment decisions firms make determine their future profits and investors' cash flows. Some corporate projects are relatively straightforward and easy to evaluate, hence not very risky. For example, if Wal-Mart were considering opening a new store, the expected revenues, costs, and profits for this project would be easier to estimate than an Apple Computer project for a new voice-activated computer. The success or lack of success of projects such as these will determine the future stock prices of Wal-Mart, Apple, and other companies.

Managers must estimate the probable effects of projects on profitability and thus on the stock price. Stockholders must forecast how successful companies will be, and current stock prices reflect investors' judgments as to that future success.



What is management's primary goal?

What do investors expect to receive when they buy a share of stock? Do investors know for sure what they will receive? Explain.

Based just on the name, which company would you regard as being riskier, General Foods or South Seas Oil Exploration Company? Explain.

When a company like Boeing decides to invest \$5 billion in a new jet airliner, are its managers positive about the project's effect on Boeing's future profits and stock price? Explain.

Would Boeing's managers or its stockholders be better able to judge the effect of a new airliner on profits and the stock price? Explain.

Would all Boeing stockholders expect the same outcome from an airliner project, and how would these expectations affect the stock price? Explain.

1.3 INTRINSIC VALUES, STOCK PRICES, AND COMPENSATION PLANS

As noted in the preceding section, stock prices are based on cash flows expected in future years, not just in the current year. Thus, stock price maximization requires us to take a long-run view of operations. Academics have always assumed that managers adhere to this long-run focus, but the focus for many companies shifted to the short run during the latter part of the 20th century. To give managers an incentive to focus on stock prices, stockholders (acting through boards of directors) gave executives stock options that could be exercised on a specified future date. An executive could exercise the option on that date, receive stock, sell it immediately, and thereby earn a profit. That led many managers to try to maximize the stock price on the option exercise date, not over the long run. That, in turn, led to some horrible abuses. Projects that looked good in the long run were turned down because they would penalize profits in the short run and thus the stock price on the option exercise day. Even worse, some managers deliberately overstated profits, thus temporarily boosting the stock price. These executives then exercised their options, sold the inflated stock, and left outside stockholders holding the bag when the true situation was revealed. Enron, WorldCom, and Fannie Mae are examples of companies whose managers did this, but there were many others.

Many more companies use aggressive but legal accounting practices that boost current profits but will lower profits in future years. For example, management might truly think that an asset should be depreciated over 5 years but will then depreciate it over a 10-year life. This reduces reported costs and raises reported income for the next 5 years but will raise costs and lower income in the following 5 years. Many other legal but questionable accounting procedures were used, all in an effort to boost reported profits and the stock price on the options exercise day, and thus the executives' profits when they exercised their options. Obviously, all of this made it difficult for investors to decide how much stocks were really worth.

Figure 1-1 can be used to illustrate the situation. The top box indicates that managerial actions, combined with economic and political conditions, determine investors' returns. Remember too that we don't know for sure what those future returns will be—we can estimate them, but expected and realized returns are often quite different. Investors like high returns but dislike risk, so the larger the expected profits and the lower the perceived risk, the higher the stock price.

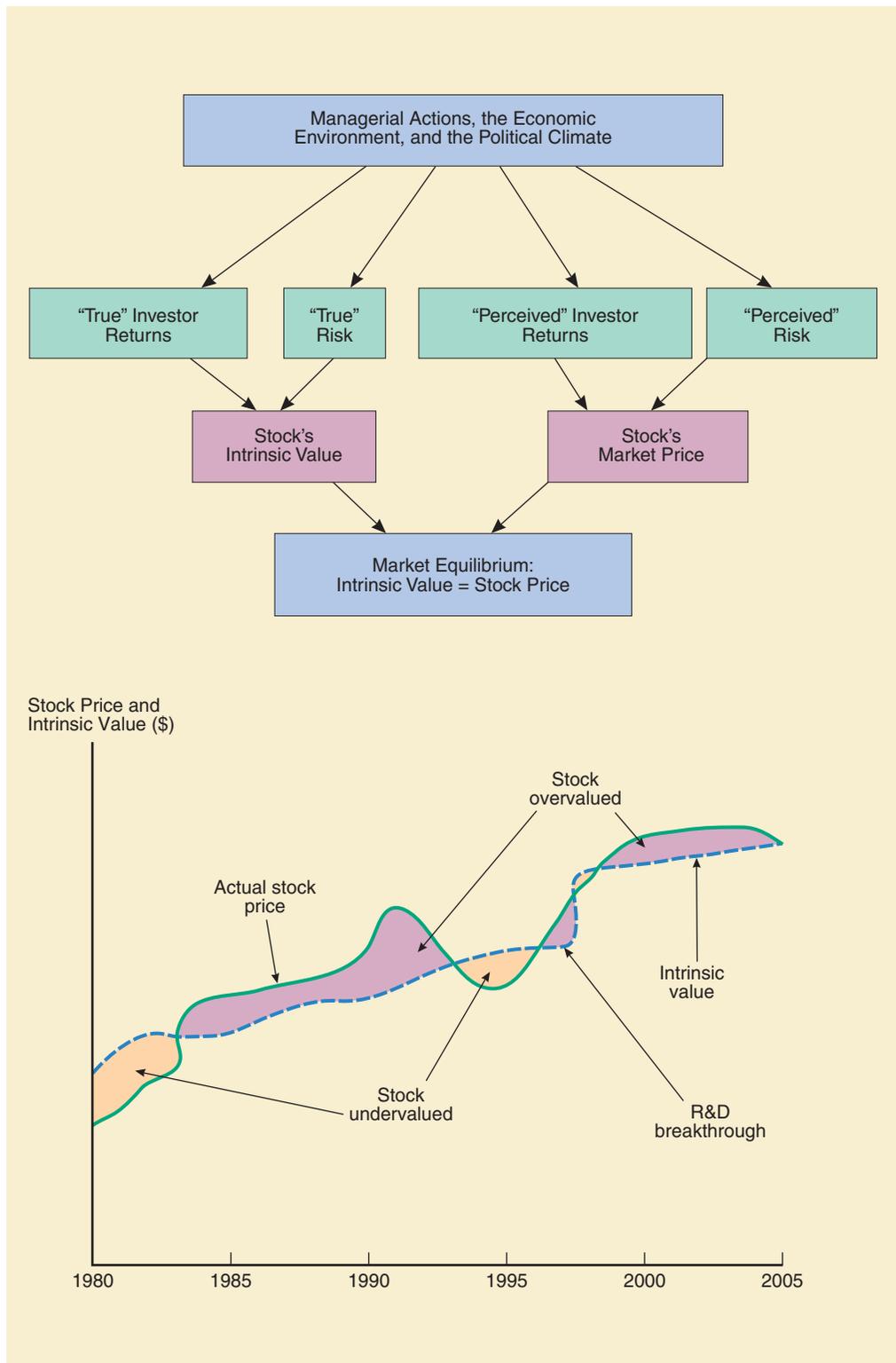
The second row of boxes differentiates between what we call "true expected returns" and "true risk" versus "perceived" returns and risk. By "true" we mean the returns and risk that most investors would expect if they had all the information that exists about the company. "Perceived" means what investors expect, given the limited information that they actually have. To illustrate, in early 2001 investors thought that Enron was highly profitable and would enjoy high and rising future profits. They also thought that actual results would be close to their expected levels, hence that Enron's risk was low. However, the best true estimates of Enron's profits, which were known by its executives but not the investing public, were negative, and Enron's true situation was extremely risky.

The third row of boxes shows that each stock has an **intrinsic value**, which is an estimate of its "true" value as calculated by a fully informed analyst based

Intrinsic Value

An estimate of a stock's "true" value based on accurate risk and return data. The intrinsic value can be estimated but not measured precisely.

FIGURE 1-1 *Determinants of Intrinsic Values and Stock Prices*



Market Price

The stock value based on perceived but possibly incorrect information as seen by the marginal investor.

Equilibrium

The situation in which the actual market price equals the intrinsic value, so investors are indifferent between buying or selling a stock.

on accurate risk and return data, and a **market price**, which is the value in the market based on perceived but possibly incorrect information as seen by the *marginal investor*.⁴ Investors don't all agree, so it is this "marginal" investor who determines the actual price. For example, investors at the margin might expect GE's dividend to be \$0.80 per share in 2005 and to grow at a rate of 6 percent per year thereafter, and on that basis they might set a price of \$35 per share. However, if they had all the available facts, they might conclude that the best dividend estimate is \$0.85 with a 7 percent growth rate, which would lead to a higher price, say, \$40 per share. In this example, the actual market price would be \$35 versus an intrinsic value of \$40.

If a stock's actual market price is equal to its intrinsic value, then as shown in the bottom box in Figure 1-1, the stock is said to be in **equilibrium**. There is no fundamental imbalance, hence no pressure for a change in the stock's price. Market prices can and do differ from intrinsic values. Eventually, though, as the future unfolds, the two values will converge.

Actual stock prices are easy to determine—they are published in newspapers every day. However, intrinsic values are strictly estimates, and different analysts with different data and different views of the future will form different estimates of the intrinsic value for any given stock. *Indeed, estimating intrinsic values is what security analysis is all about, and something successful investors are good at.* Investing would be easy, profitable, and almost riskless if we knew all stocks' intrinsic values, but of course we don't—we can estimate intrinsic values, but we can never be sure that we are right. Note, though, that a firm's managers have the best information about the company's future prospects, so managers' estimates of intrinsic value are generally better than the estimates of outside investors. Even managers, though, can be wrong.

The graph in the lower part of Figure 1-1 plots a hypothetical company's actual price and intrinsic value as estimated by management over time.⁵ The intrinsic value rose because the firm retained and reinvested earnings, which tends to increase profits, and it jumped dramatically in 1997, when a research and development (R&D) breakthrough raised management's estimate of future profits. The actual stock price tended to move up and down with the estimated intrinsic value, but investor optimism and pessimism, along with imperfect knowledge about the intrinsic value, led to deviations between the actual prices and intrinsic values.

Intrinsic value is a long-run concept. It reflects both improper actions (Enron's overstating earnings) and proper actions (GE's efforts to improve the environment). *Management's goal should be to take actions designed to maximize the firm's intrinsic value, not its current market price.* Note, though, that maximizing

⁴ Investors at the margin are the ones who actually set stock prices. Some stockholders think a stock at its current price is a good deal, and they would buy more if they had more money. Other investors think the stock is priced too high, so they would not buy it unless it dropped sharply. Still other investors think the current stock price is about where it should be, so they would buy more if it fell slightly, sell it if it rose slightly, and maintain their current holdings unless something changes. These are the marginal investors, and it is their view that determines the current stock price. We discuss this point in more depth in Chapter 8, where we discuss the stock market in detail.

⁵ We emphasize that the intrinsic value is an estimate, and different analysts will have different estimates for a company at any given time. Its managers should also estimate their firm's intrinsic value and then take actions to maximize that value. They should also try to help outside security analysts improve their intrinsic value estimates by providing accurate information about the company's financial position and operations, but without releasing information that would help its competitors. Enron, WorldCom, and a number of other companies tried successfully to deceive analysts and succeeded only too well.

the intrinsic value will maximize the *average* price over the long run but not necessarily the current price at each point in time. For example, management might make an investment that will lower profits for the current year but raise future profits substantially. If investors are not aware of the true situation, then the stock price might be held down by the low current profits even though the intrinsic value is actually increased. Management should provide information that helps investors make accurate estimates of the firm's "true" intrinsic value, which will keep the stock price closer to its equilibrium level over time, but there may be times when management cannot divulge the true situation because to do so would provide helpful information to its competitors.⁶



What's the difference between a stock's current market price and its intrinsic value?

Do stocks have a known and "provable" intrinsic value, or might different people reach different conclusions about intrinsic values? Explain.

Should a firm's managers estimate its intrinsic value or leave this estimation to outside security analysts? Explain.

If an action would maximize either the current market price or the intrinsic value, but not both, which one should stockholders (as a group) want managers to maximize? Explain.

Should its managers help investors improve their estimates of a firm's intrinsic value? Explain.

1.4 SOME IMPORTANT TRENDS

Three important trends should be noted. First, the points noted in the preceding section have led to profound changes in business practices. Executives at Enron, WorldCom, and other companies lied when they reported financial results, leading to huge stockholder losses. These companies' CEOs later claimed not to have been aware of what was happening. As a result, Congress passed legislation that requires the CEO and chief financial officer (CFO) to certify that their firm's financial statements are accurate, and these executives could be sent to jail if it later turns out that the statements did not meet the required standards. Consequently, published statements in the future are likely to be more accurate and dependable than those in the past.

A second trend is the increased globalization of business. Developments in communications technology have made it possible for firms like Wal-Mart to obtain real-time data on sales of hundreds of thousands of items in stores from China to Chicago, and to manage those stores from Bentonville, Arkansas. IBM, Microsoft, and other high-tech companies now have research labs and help desks in China, India, Romania, and the like, and the customers of Home Depot and other retailers have their telephone or e-mail questions answered by call-center operators in countries all around the globe. Moreover, many U.S. companies,

⁶ As we discuss in Chapter 5, many academics believe that stock prices embody all publicly available information, hence that stock prices are typically reasonably close to their intrinsic values and thus at or close to an equilibrium. However, almost no one doubts that managers have better information than the public at large, that at times stock prices and equilibrium values diverge, and thus that stocks can be temporarily undervalued or overvalued, as we suggest in the graph in Figure 1-1.

Is Shareholder Wealth Maximization a Worldwide Goal?

Most academics agree that shareholder wealth maximization should be a firm's primary goal, at least in the United States; however, it's not clear that people really know how to implement it. PricewaterhouseCoopers (PWC), a global consulting firm, conducted a survey of 82 Singapore companies to test their understanding and implementation of shareholder value concepts. Ninety percent of the respondents said their firm's primary goal was to enhance shareholder value, but only 44 percent had taken steps to achieve this goal. Moreover, almost half of the respondents who had shareholder value programs in place said they were dissatisfied with the results achieved thus far. Even so, respondents who focused on shareholder value were more likely to believe that their stock was fairly valued than those with other focuses, and 50 percent of those without a specific program said they wanted to learn more and would probably adopt one eventually.

The study found that firms measure performance primarily with accounting-based measures such as the returns on assets, on equity, or on invested capital. These measures are easy to understand and thus to implement, even though they might not be the best conceptually. Compensation was tied to shareholder value, but only for mid-level managers and above.

It is unclear how closely these results correspond to U.S. firms, but firms from the United States and Singapore would certainly agree on one thing: It is easier to set the goal of shareholder wealth maximization than it is to figure out how to achieve it.

Source: Kalpana Rashiwala, "Low Adoption of Shareholder Value Concepts Here," *The Business Times (Singapore)*, February 14, 2002.

including Coca-Cola, ExxonMobil, GE, and IBM, generate close to half their sales and income overseas. The trend toward globalization is likely to continue, and companies that resist it will have difficulty competing in the 21st century.

A third trend that's having a profound effect on financial management is ever-improving information technology (IT). These improvements are spurring globalization, and they are also changing financial management as it is practiced in the United States. Firms are collecting massive amounts of data and then using it to take much of the guesswork out of financial decisions. For example, when Wal-Mart is considering a potential site for a new store, it can draw on historical results from thousands of other stores to predict results at the proposed site, which lowers the risk of investing in the new store.

These trends are reflected in this book, and everyone involved in business should recognize the trends and their implications for decisions of all types.



What are three trends that affect business management in general and financial management in particular?

1.5 BUSINESS ETHICS

As a result of the Enron and other recent scandals, there has been a strong push to improve *business ethics*. This is occurring on several fronts, from actions by New York Attorney General Elliot Spitzer and others who are suing companies for improper acts, to Congress, which has passed legislation imposing sanctions

on executives who do bad things, to business schools trying to inform students about what's right and what's wrong, and about the consequences of their actions once they enter the business world.

As we discussed earlier, companies benefit from good reputations and are penalized by bad ones, and the same is true for individuals. Reputations reflect the extent to which firms and people are ethical. *Ethics* is defined in *Webster's Dictionary* as "standards of conduct or moral behavior." **Business ethics** can be thought of as a company's attitude and conduct toward its employees, customers, community, and stockholders. High standards of ethical behavior demand that a firm treat the parties that it deals with in a fair and honest manner. A firm's commitment to business ethics can be measured by the tendency of its employees, from the top down, to adhere to laws, regulations, and moral standards relating to product safety and quality, fair employment practices, fair marketing and selling practices, the use of confidential information for personal gain, community involvement, and illegal payments to obtain business.

Business Ethics

A company's attitude and conduct toward its employees, customers, community, and stockholders.

What Companies Are Doing

Most firms today have strong codes of ethical behavior, and they also conduct training programs to ensure that employees understand proper behavior in different situations. When conflicts arise between profits and ethics, ethical considerations sometimes are so obviously important that they clearly dominate. However, in many cases the right choice is not clear. For example, suppose Norfolk Southern's managers know that its coal trains are polluting the air, but the amount of pollution is within legal limits and further reduction would be costly. Are the managers ethically bound to reduce pollution? Similarly, some time ago Merck's own research indicated that its Vioxx pain medicine might be causing heart attacks, but the evidence was not overwhelmingly strong and the product was clearly helping some patients. Over time, additional tests produced stronger and stronger evidence that Vioxx did indeed pose a significant health risk. If the company released negative but still questionable information, this would hurt sales and possibly keep some patients who would benefit from using the product. If it delayed release, more and more patients might suffer irreversible harm. At what point should Merck make the potential problem known to the public? There are no obvious answers to questions such as these, but companies must deal with them, and a failure to handle them properly can lead to severe consequences.

Consequences of Unethical Behavior

Over the past few years ethical lapses have led to a number of bankruptcies. The recent collapses of Enron and WorldCom, as well as the accounting firm Arthur Andersen, dramatically illustrate how unethical behavior can lead to a firm's rapid decline. In all three cases, top executives came under fire for misleading accounting practices that led to overstated profits. Enron and WorldCom executives were busily selling their stock at the same time they were recommending the stock to employees and outside investors. Thus, senior executives reaped millions before the stock declined, while lower-level employees and outside investors were left holding the bag. Some of these executives are now in jail, and others will probably follow. Moreover, the financial institutions that facilitated these frauds, including Merrill Lynch and Citigroup, have been fined hundreds of millions of dollars, and more lawsuits are on the way.

These frauds also contributed to fatal wounds to other companies and even whole industries. For example, WorldCom understated its costs by some \$11 billion. It used those artificially low costs when it set prices to its customers, and as

a result its prices were the lowest in the industry. This allowed it to increase its market share and growth rate. Its earnings per share were badly overstated, and this caused its stock price to be way too high. Even though WorldCom's results were built on lies, they still had a tremendous effect on the industry. For example, AT&T's top executives, believing WorldCom's numbers, put pressure on their own managers to match WorldCom's costs and prices, but that was not possible without cheating. AT&T cut back on important projects, put far too much stress on its employees, and ended up ruining a wonderful 100-year-old company. A similar situation occurred in the energy industry as a result of Enron's cheating.

All of this caused many investors to lose faith in American business and to turn away from the stock market, which made it difficult for firms to raise the capital they needed to grow, create jobs, and stimulate our economy. So, unethical actions can have consequences far beyond the companies that perpetrate them.

This raises a question: Are *companies* unethical, or is it just some of their employees? That issue came up in the case of Arthur Andersen, the accounting firm that audited Enron, WorldCom, and several other companies that committed accounting fraud. Evidence showed that some Andersen accountants helped perpetrate the frauds. Its top managers argued that while some rogue employees did bad things, the firm's 85,000 other employees, and the firm itself, were innocent. The U.S. Justice Department disagreed, concluding that the firm itself was guilty because it fostered a climate where unethical behavior was permitted, and it built an incentive system that made such behavior profitable to both the perpetrators and the firm itself. As a result, Anderson was put out of business, its partners lost millions of dollars, and its 85,000 employees lost their jobs. In most other cases, individuals rather than firms were tried, and while the firms survived, they suffered reputational damage that greatly lowered their future profit potential and value.

How Should Employees Deal with Unethical Behavior?

Far too often the desire for stock options, bonuses, and promotions drives managers to take unethical actions, including fudging the books to make profits in the manager's division look good, holding back information about bad products that would depress sales, and failing to take costly but needed measures to protect the environment. Generally these acts don't rise to the level of an Enron or WorldCom, but they are still bad. If questionable things are going on, who should take action, and what should that action be? Obviously, in situations like Enron and WorldCom, where fraud was being perpetrated at or close to the top, senior managers knew about it. In other cases, the problem is caused by a mid-level manager trying to boost his unit's profits and thus his bonus. In all cases, though, at least some lower-level employees are aware of what's happening, and they may even be ordered to take fraudulent actions. Should the lower-level employees obey their boss's orders, refuse to obey those orders, or report the situation to a higher authority, such as the company's board of directors, its auditors, or a federal prosecutor?

In the WorldCom and Enron cases, it was clear to a number of employees that unethical and illegal acts were being committed, but in cases like Merck's Vioxx product, the situation is less clear. If early evidence that Vioxx led to heart attacks was quite weak but evidence of its pain reduction was strong, then it would probably not be appropriate to sound an alarm. However, as evidence accumulates, at some point the public should be given a strong warning, or the product should be taken off the market. But judgment comes into play when

Protection for Whistle-Blowers

As a result of the recent accounting and other frauds, Congress in 2002 passed the Sarbanes-Oxley Act, which codified certain rules pertaining to corporate behavior. One provision in the bill was designed to protect “whistle-blowers,” or lower-level employees who sound an alarm over actions by their superiors. Employees who report improper actions are often fired or otherwise penalized, and this keeps many people from reporting things that should be investigated. The Sarbanes-Oxley provision was designed to alleviate this problem—if someone reports a corporate wrong-doing and is later penalized, he or she can ask the Occupational Safety and Health Administration

(OSHA) to investigate the situation, and if the employee was improperly penalized, the company can be required to reinstate the person, along with back pay and a sizable penalty award. According to *The Wall Street Journal*, some big awards have been handed out, and a National Whistle-Blower Center has been established to help people sue companies.^a It's still dangerous to blow a whistle, but less so than before the Sarbanes-Oxley Act was passed.

^a Deborah Solomon and Kara Scannell, “SEC Is Urged to Enforce ‘Whistle-Blower’ Provision,” *The Wall Street Journal*, November 15, 2004, p. A6.

deciding on what action to take and when to take it. If a lower-level employee thinks that the product should be pulled but his or her boss disagrees, what should the employee do? If an employee goes ahead and sounds the alarm, he or she might be in trouble regardless of the merits of the case. If the alarm is false, then the company will have been harmed and nothing will have been gained. In that case, the employee will probably lose his or her job. Even if the employee is correct, his or her career may still be ruined, because some companies, or at least some bosses, don't like “disloyal, troublemaking” employees.

Such situations arise frequently, and in contexts ranging from accounting fraud to product liability and environmental cases. Employees jeopardize their jobs if they come forward over their bosses' objections, but if they don't they can suffer emotional problems and also contribute to the downfall of their companies and the accompanying loss of jobs and savings. Moreover, if they obey orders that they know are illegal, they can end up going to jail. Indeed, in most of the scandals that have come to trial, the lower-level people who physically did the bad deeds have received longer jail sentences than the bosses who told them what to do. So, employees can be stuck between a rock and a hard place, that is, doing what they should do and possibly losing their jobs versus going along with the boss and possibly ending up in jail.

This discussion shows why ethics is such an important consideration in both business and business schools, and why we are concerned with it in this book.



How would you define “business ethics”?

Can a firm's incentive compensation plan lead to unethical behavior? Explain.

Unethical acts are generally committed by unethical people. What are some things companies can do to help ensure that their employees act ethically?

1.6 CONFLICTS BETWEEN MANAGERS AND STOCKHOLDERS⁷

It has long been recognized that managers' personal goals may compete with shareholder wealth maximization. In particular, managers might be more interested in maximizing their own wealth rather than their stockholders' wealth, hence pay themselves excessive salaries. For example, Disney paid its former president, Michael Ovitz, \$140 million as a severance package after just 14 months on the job—\$140 million to go away—because he and Disney CEO Michael Eisner were having disagreements. Eisner himself was also handsomely compensated the year Ovitz was fired—a \$750,000 base salary, plus a \$9.9 million bonus, plus a \$565 million profit from stock options, for a total of just over \$575 million. As another example of corporate excesses, Tyco CEO Dennis Kozlowski spent more than \$2 million of the company's money on a birthday party for his wife.

Neither the Disney executives' pay nor Kozlowski's expenditures seem consistent with shareholder wealth maximization. Still, good executive compensation plans can motivate managers to act in their stockholders' best interests. Useful motivational tools include (1) reasonable compensation packages; (2) direct intervention by shareholders, including firing managers who don't perform well; and (3) the threat of a takeover.

The *compensation package* should be sufficient to attract and retain able managers but not go beyond what is needed. Also, compensation should be structured so that managers are rewarded on the basis of the stock's performance over the long run, not the stock's price on an option exercise date. This means that options (or direct stock awards) should be phased in over a number of years so managers will have an incentive to keep the stock price high over time. If the intrinsic value could be measured in an objective and verifiable manner, then performance pay could be based on changes in intrinsic value. However, because intrinsic value is not observable, compensation must be based on the stock's market price—but the price used should be an average over time rather than on a spot date.

Stockholders can intervene directly with managers. Years ago most stock was owned by individuals, but today the majority is owned by institutional investors such as insurance companies, pension funds, and mutual funds. These institutional money managers have the clout to exercise considerable influence over firms' operations. First, they can talk with managers and make suggestions about how the business should be run. In effect, institutional investors such as Calpers (California Public Employees Retirement System, with \$165 billion of assets) and TIAA-CREF (a retirement plan originally set up for professors at private colleges that now has more than \$300 billion of assets) act as lobbyists for the body of stockholders. When such large stockholders speak, companies listen. Second, any shareholder who has owned \$2,000 of a company's stock for one year can sponsor a proposal that must be voted on at the annual stockholders' meeting, even if management opposes the proposal. Although shareholder-sponsored proposals are nonbinding, the results of such votes are clearly heard by top management.

Stockholder intervention can range from making suggestions for improving sales to threatening to fire the management team. Until recently, the probability of a large firm's management being ousted by its stockholders was so remote

⁷ These conflicts are studied under the heading of *agency theory* in the finance literature. The classic work on agency theory is Michael C. Jensen and William H. Meckling, "Theory of the Firm, Managerial Behavior, Agency Costs, and Ownership Structure," *Journal of Financial Economics*, October 1976, pp. 305–360.

that it posed little threat. Most firms' shares were so widely distributed, and management had so much control over the voting mechanism, that it was virtually impossible for dissident stockholders to get the votes needed to overthrow a management team. However, that situation has changed. In recent years the top executives of AT&T, Coca-Cola, Fannie Mae, General Motors, IBM, and Xerox, to name a few, have been forced out. Also, Tyco's Kozlowski is gone and Disney's Eisner is under pressure and will soon be leaving. All of these departures were due to their firm's poor performance.

If a firm's stock is undervalued, then **corporate raiders** will see it to be a bargain and will attempt to capture the firm in a **hostile takeover**. If the raid is successful, the target's executives will almost certainly be fired. This situation gives managers a strong incentive to take actions to maximize their stock's price. In the words of one executive, "If you want to keep your job, never let your stock sell at a bargain price."

Again, note that the price managers should be trying to maximize is not the price on a specific day. Rather, it is the average price over the long run, which will be maximized if management focuses on the stock's intrinsic value. However, managers must communicate effectively with stockholders (without divulging information that would aid their competitors) in order to keep the actual price close to the intrinsic value. It's bad for both stockholders and managers for the intrinsic value to be high but the actual price low, because then a raider may swoop in, buy the company at a bargain price, and fire the managers. To repeat our earlier message: *Managers should try to maximize their stock's intrinsic value and then communicate effectively with stockholders. That will cause the intrinsic value to be high and the actual stock price to remain close to the intrinsic value over time.*

Because the intrinsic value cannot be observed, it is impossible to know if it is really being maximized. Still, as we will discuss in Chapter 9, there are procedures for estimating a stock's value. Managers can then use these valuation models to analyze alternative courses of action in terms of how they are likely to affect the estimated value. This type of value-based management is not as precise as we would like, but it is the best way to run a business.



What are three techniques stockholders can use to motivate managers to try to maximize their stock's long-run price?

Should managers focus directly on the actual stock price, on the stock's intrinsic value, or are both important? Explain.

1.7 THE ROLE OF FINANCE IN THE ORGANIZATION

The organizational structure of a typical corporation has the board of directors at the top, and the **chairman of the board** is the person most responsible for the firm's strategic policies. Under the chairman's guidance, the board sets policy, but implementing that policy is the responsibility of the firm's management. Note too that the boards of most publicly owned corporations have a **compensation committee** that consists of three outside (nonemployee) directors who set the compensation package for the senior officers. The compensation committee looks at factors such as the firm's stock price performance relative to the market as a whole and other firms in the same industry, the growth rate in earnings per share, and the compensation of executives in other similar firms. Obviously, this is a very important committee.

Corporate Raider

An individual who targets a corporation for takeover because it is undervalued.

Hostile Takeover

The acquisition of a company over the opposition of its management.

Chairman of the Board

The person most responsible for the firm's strategic policies.

Compensation Committee

A committee that consists of three outside (nonemployee) directors who set the compensation package for senior officers.

Chief Executive Officer (CEO)

Heads the management team, and ideally is separate from chairman of the board.

Chief Operating Officer (COO)

In charge of the firm's actual operations.

Chief Financial Officer (CFO)

Responsible for the accounting system, raising capital, and evaluating major investment decisions and the effectiveness of operations.

The management team is headed by the **chief executive officer (CEO)**. Sometimes the chairman of the board is also the CEO, but corporate governance experts, including the New York Stock Exchange, think those two offices should be separated, and there is a clear trend toward separation. Directly below the CEO is the **chief operating officer (COO)** and the **chief financial officer (CFO)**. The COO is in charge of actual operations, including producing and selling the firm's products. The CFO is responsible for the accounting system, for raising any capital the firm needs, for evaluating the effectiveness of operations in relation to other firms in the industry, and for evaluating all major investment decisions, including proposed new plants, stores, and the like. All of the CFO's duties are important if the firm is to maximize shareholder wealth. The accounting system must provide good information if the firm is to be run efficiently—management must know the true costs in order to make good decisions. Also, the accounting system must provide investors with accurate and timely information—if investors don't trust the reported numbers, they will avoid the stock and its value won't be maximized. We don't go deeply into accounting mechanics in this text, but we do explain how accounting numbers are used to make good internal decisions and by investors when they value securities. It is also important that the firm be financed in an optimal manner—it should use the value-maximizing mix of debt and equity. Finally, the financial staff must evaluate the various departments and divisions, including their proposed capital expenditures, to make sure the firm is operating efficiently and making investments that will enhance shareholders' wealth.



What are the principal responsibilities of the board of directors and the CEO?

What are the principal responsibilities of the CFO?

Tying It All Together

This chapter provides a broad overview of financial management. Management's goal should be to maximize the long-run value of the stock, which means the intrinsic value as measured by the average stock price over time. To maximize value, firms must develop products that consumers want, produce them efficiently, sell them at competitive prices, and observe laws relating to corporate behavior. If they are successful at maximizing the stock's value, they will also be contributing to social welfare and our citizens' well-being.

In the 1990s corporations tended to give executives stock options that could be exercised and then sold on a specific date. That led some managers to try to maximize the stock price on the option exercise day, not the long-run price that would be in their stockholders' best interests. This problem can be corrected by giving options that are phased in and can be exercised over time, which will cause managers to focus on the stock's long-run intrinsic value.

Businesses can be organized as proprietorships, partnerships, or corporations. The vast majority of all business is done by corporations, and the most successful firms end up as corporations. Therefore, we focus on corporations in the book. We also discussed some new developments that are affecting all businesses. The first is the focus on business ethics that resulted from a series of scandals in the late 1990s. The second is the trend toward globalization, which is changing the way companies do business. And the third is the continuing development of new technology, which is also changing the way business is done.

The primary tasks of the CFO are (1) to make sure that the accounting system provides "good" numbers for internal decisions and to investors, (2) to ensure that the firm is financed in the proper manner, (3) to evaluate the operating units to make sure they are performing in an optimal manner, and (4) to evaluate all proposed capital expenditures to make sure that they will increase the firm's value. In the balance of the book we discuss exactly how financial managers carry out these tasks.

SELF-TEST QUESTIONS AND PROBLEMS (Solutions Appear in Appendix A)

- ST-1** **Key terms** Define each of the following terms:
- Proprietorship; partnership; corporation; S corporation
 - Stockholder wealth maximization
 - Intrinsic value; market price
 - Equilibrium; marginal investor
 - Business ethics
 - Corporate raider; hostile takeover
 - Chairman of the board; compensation committee
 - CEO; COO; CFO

QUESTIONS

- 1-1** If you bought a share of stock, what would you expect to receive, when would you expect to receive it, and would you be certain that your expectations would be met?
- 1-2** Are the stocks of different companies equally risky? If not, what are some factors that would cause a company's stock to be viewed as being relatively risky?
- 1-3** If most investors expect the same cash flows from Companies A and B but are more confident that A's cash flows will be close to their expected value, which should have the higher stock price? Explain.
- 1-4** Are all corporate projects equally risky, and if not, how do a firm's investment decisions affect the riskiness of its stock?
- 1-5** What is a firm's intrinsic value? Its current stock price? Is the stock's "true long-run value" more closely related to its intrinsic value or its current price?
- 1-6** When is a stock said to be in equilibrium? At any given time, would you guess that most stocks are in equilibrium as you defined it? Explain.

- 1-7** Suppose three *completely honest* individuals gave you their estimates of Stock X's intrinsic value. One is your current girlfriend or boyfriend, the second is a professional security analyst with an excellent reputation on Wall Street, and the third is Company X's CFO. If the three estimates differed, which one would you have the most confidence in? Why?
- 1-8** Is it better for a firm's actual stock price in the market to be under, over, or equal to its intrinsic value? Would your answer be the same from the standpoints of both stockholders in general and a CEO who is about to exercise a million dollars in options and then retire? Explain.
- 1-9** If a company's board of directors wants management to maximize shareholder wealth, should the CEO's compensation be set as a fixed dollar amount, or should it depend on how well the firm performs? If it is to be based on performance, how should performance be measured? Would it be *easier* to measure performance by the growth rate in reported profits or the growth rate in the stock's intrinsic value? Which would be the *better* performance measure? Why?
- 1-10** What are the three principal forms of business organization? What are the advantages and disadvantages of each?
- 1-11** Should stockholder wealth maximization be thought of as a long-term or a short-term goal—for example, if one action would probably increase the firm's stock price from a current level of \$20 to \$25 in 6 months and then to \$30 in 5 years but another action would probably keep the stock at \$20 for several years but then increase it to \$40 in 5 years, which action would be better? Can you think of some specific corporate actions that might have these general tendencies?
- 1-12** What are some actions stockholders can take to ensure that management's and stockholders' interests are aligned?
- 1-13** The president of Southern Semiconductor Corporation (SSC) made this statement in the company's annual report: "SSC's primary goal is to increase the value of our common stockholders' equity." Later in the report, the following announcements were made:
- The company contributed \$1.5 million to the symphony orchestra in Birmingham, Alabama, its headquarters city.
 - The company is spending \$500 million to open a new plant and expand operations in China. No profits will be produced by the Chinese operation for 4 years, so earnings will be depressed during this period versus what they would have been had the decision not been made to expand in that market.
 - The company holds about half of its assets in the form of U.S. Treasury bonds, and it keeps these funds available for use in emergencies. In the future, though, SSC plans to shift its emergency funds from Treasury bonds to common stocks.

Discuss how SSC's stockholders might view each of these actions, and how they might affect the stock price.

- 1-14** Investors generally can make one vote for each share of stock they hold. Teacher's Insurance and Annuity Association—College Retirement Equity Fund (TIAA-CREF) is the largest institutional shareholder in the United States, hence it holds many shares and has more votes than any other organization. Traditionally, this fund has acted as a passive investor, just going along with management. However, back in 1993 it mailed a notice to all 1,500 companies whose stocks it held that henceforth it planned to actively intervene if, in its opinion, management was not performing well. Its goal was to improve corporate performance so as to boost the prices of the stocks it held. It also wanted to encourage corporate boards to appoint a majority of independent (outside) directors, and it stated that it would vote against any directors of firms that "don't have an effective, independent board that can challenge the CEO."

In the past, TIAA-CREF responded to poor performance by "voting with its feet," which means selling stocks that were not doing well. However, by 1993 that position had become difficult for two reasons. First, the fund invested a large part of its assets in "index funds," which hold stocks in accordance with their percentage value in the broad stock market. Furthermore, TIAA-CREF owns such large blocks of stocks in many companies that if it tried to sell out, this would severely depress the prices of those stocks. Thus, TIAA-CREF is locked in to a large extent, and that led to its decision to become a more active investor.

- a. Is TIAA-CREF an ordinary shareholder? Explain.
- b. Due to its asset size, TIAA-CREF owns many shares in a number of companies. The fund's management plans to vote those shares. However, TIAA-CREF is itself owned by many thousands of investors. Should the fund's managers vote its shares, or should it pass those votes, on a pro rata basis, back to its own shareholders? Explain.
- 1-15** Edmund Enterprises recently made a large investment to upgrade its technology. While these improvements won't have much of an effect on performance in the short run, they are expected to reduce future costs significantly. What effect will this investment have on Edmund Enterprises' earnings per share this year? What effect might this investment have on the company's intrinsic value and stock price?
- 1-16** Suppose you were a member of Company X's board of directors and chairman of the company's compensation committee. What factors should your committee consider when setting the CEO's compensation? Should the compensation consist of a dollar salary, stock options that depend on the firm's performance, or a mix of the two? If "performance" is to be considered, how should it be measured? Think of both theoretical and practical (that is, measurement) considerations. If you were also a vice president of Company X, might your actions be different than if you were the CEO of some other company?
- 1-17** Suppose you are a director of an energy company that has three divisions—natural gas, oil, and retail (gas stations). These divisions operate independently from one another, but the division managers all report to the firm's CEO. If you were on the compensation committee as discussed in question 1-16 and your committee was asked to set the compensation for the three division managers, would you use the same criteria as you would use for the firm's CEO? Explain your reasoning.



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