CHAPTER 1

Introduction to Financial Management and Analysis

Finance is the application of economic principles and concepts to business decision-making and problem solving. The field of finance can be considered to comprise three broad categories: financial management, investments, and financial institutions:

- *Financial management*. Sometimes called ***corporate finance*** or ***business finance***, this area of finance is concerned primarily with financial decision-making within a business entity. Financial management decisions include maintaining cash balances, extending credit, acquiring other firms, borrowing from banks, and issuing stocks and bonds.
- *Investments*. This area of finance focuses on the behavior of financial markets and the pricing of securities. An investment manager's tasks, for example, may include valuing common stocks, selecting securities for a pension fund, or measuring a portfolio's performance.
- *Financial institutions*. This area of finance deals with banks and other firms that specialize in bringing the suppliers of funds together with the users of funds. For example, a manager of a bank may make decisions regarding granting loans, managing cash balances, setting interest rates on loans, and dealing with government regulations.

No matter the particular category of finance, business situations that call for the application of the theories and tools of finance generally involve either investing (using funds) or financing (raising funds).

Managers who work in any of these three areas rely on the same basic knowledge of finance. In this book, we introduce you to this common body of knowledge and show how it is used in financial decision-making. Though the emphasis of this book is financial management, the basic principles and tools also apply to the areas of investments and financial institutions. In this introductory chapter, we'll consider the types of decisions financial managers make, the role of financial analysis, the forms of business ownership, and the objective of managers' decisions. Finally, we will describe the relationship between owners and managers.

FINANCIAL MANAGEMENT

Financial management encompasses many different types of decisions. We can classify these decisions into three groups: investment decisions, financing decisions, and decisions that involve both investing and financing. Investment decisions are concerned with the use of funds—the buying, holding, or selling of all types of assets: Should we buy a new die stamping machine? Should we introduce a new product line? Sell the old production facility? Buy an existing company? Build a warehouse? Keep our cash in the bank?

Financing decisions are concerned with the acquisition of funds to be used for investing and financing day-to-day operations. Should managers use the money raised through the firms' revenues? Should they seek money from outside of the business? A company's operations and investment can be financed from outside the business by incurring debts, such as though bank loans and the sale of bonds, or by selling ownership interests. Because each method of financing obligates the business in different ways, financing decisions are very important.

Many business decisions simultaneously involve both investing and financing. For example, a company may wish to acquire another firm—an investment decision. However, the success of the acquisition may depend on how it is financed: by borrowing cash to meet the purchase price, by selling additional shares of stock, or by exchanging existing shares of stock. If managers decide to borrow money, the borrowed funds must be repaid within a specified period of time. Creditors (those lending the money) generally do not share in the control of profits of the borrowing firm. If, on the other hand, managers decide to raise funds by selling ownership interests, these funds never have to be paid back. However, such a sale dilutes the control of (and profits accruing to) the current owners.

Whether a financial decision involves investing, financing, or both, it also will be concerned with two specific factors: expected return and risk. And throughout your study of finance, you will be concerned with these factors. ***Expected return*** is the difference between potential benefits and potential costs. ***Risk*** is the degree of uncertainty associated with these expected returns.

Financial Analysis

Financial analysis is a tool of financial management. It consists of the evaluation of the financial condition and operating performance of a business firm, an industry, or even the economy, and the forecasting of its future condition and performance. It is, in other words, a means for examining risk and expected return. Data for financial analysis may come from other areas within the firm, such as marketing and production departments, from the firm's own accounting data, or from financial information vendors such as Bloomberg Financial Markets, Moody's Investors Service, Standard & Poor's Corporation, Fitch Ratings, and Value Line, as well as from government publications, such as the *Federal Reserve Bulletin*. Financial publications such as *Business Week*, *Forbes*, *Fortune*, and the *Wall Street Journal* also publish financial data (concerning individual firms) and economic data (concerning industries, markets, and economies), much of which is now also available on the Internet.

Within the firm, financial analysis may be used not only to evaluate the performance of the firm, but also its divisions or departments and its product lines. Analyses may be performed both periodically and as needed, not only to ensure informed investing and financing decisions, but also as an aid in implementing personnel policies and rewards systems.

Outside the firm, financial analysis may be used to determine the creditworthiness of a new customer, to evaluate the ability of a supplier to hold to the conditions of a long-term contract, and to evaluate the market performance of competitors.

Firms and investors that do not have the expertise, the time, or the resources to perform financial analysis on their own may purchase analyses from companies that specialize in providing this service. Such companies can provide reports ranging from detailed written analyses to simple creditworthiness ratings for businesses. As an example, Dun & Bradstreet, a financial services firm, evaluates the creditworthiness of many firms, from small local businesses to major corporations. As another example, three companies—Moody's Investors Service, Standard & Poor's, and Fitch—evaluate the credit quality of debt obligations issued by corporations and express these views in the form of a rating that is published in the reports available from these three organizations.

FORMS OF BUSINESS ENTERPRISE

Financial management is not restricted to large corporations: It is necessary in all forms and sizes of businesses. The three major forms of business organization are the sole proprietorship, the partnership, and the corporation. These three forms differ in a number of factors, of which those most important to financial decision-making are:

- The way the firm is taxed.
- The degree of control owners may exert on decisions.
- The liability of the owners.
- The ease of transferring ownership interests.
- The ability to raise additional funds.
- The longevity of the business.

Sole Proprietorships

The simplest and most common form of business enterprise is the ***sole proprietorship***, a business owned and controlled by one person—the proprietor. Because there are very few legal requirements to establish and run a sole proprietorship, this form of business is chosen by many individuals who are starting up a particular business enterprise. The sole proprietor carries on a business for his or her own benefit, without participation of other persons except employees. The proprietor receives all income from the business and alone decides whether to reinvest the profits in the business or use them for personal expenses.

A proprietor is liable for all the debts of the business; in fact, it is the proprietor who incurs the debts of the business. If there are insufficient business assets to pay a business debt, the proprietor must pay the debt out of his or her personal assets. If more funds are needed to operate or expand the business than are generated by business operations, the owner either contributes his or her personal assets to the business or borrows. For most sole proprietorships, banks are the primary source of borrowed funds. However, there are limits to how much banks will lend a sole proprietorship, most of which are relatively small.

For tax purposes, the sole proprietor reports income from the business on his or her personal income tax return. Business income is treated as the proprietor's personal income.

The assets of a sole proprietorship may also be sold to some other firm, at which time the sole proprietorship ceases to exist. Or the life of a sole proprietorship ends with the life of the proprietor, although the assets of the business may pass to the proprietor's heirs.

Partnerships

A ***partnership*** is an agreement between two or more persons to operate a business. A partnership is similar to a sole proprietorship except instead of one proprietor, there is more than one. The fact that there is more than one proprietor introduces some issues: Who has a say in the day-to-day operations of the business? Who is liable (that is, financially responsible) for the debts of the business? How is the income distributed among the owners? How is the income taxed? Some of these issues are resolved with the partnership agreement; others are resolved by laws. The partnership agreement describes how profits and losses are to be shared among the partners, and it details their responsibilities in the management of the business.

Most partnerships are ***general partnerships***, consisting only of general partners who participate fully in the management of the business, share in its profits and losses, and are responsible for its liabilities. Each general partner is personally and individually liable for the debts of the business, even if those debts were contracted by other partners.

A ***limited partnership*** consists of at least one general partner and one ***limited partner***. Limited partners invest in the business but do not participate in its management. A limited partner's share in the profits and losses of the business is limited by the partnership agreement. In addition, a limited partner is not liable for the debts incurred by the business beyond his or her initial investment.

A partnership is not taxed as a separate entity. Instead, each partner reports his or her share of the business profit or loss on his or her personal income tax return. Each partner's share is taxed as if it were from a sole proprietorship.

The life of a partnership may be limited by the partnership agreement. For example, the partners may agree that the partnership is to exist only for a specified number of years or only for the duration of a specific business transaction. The partnership must be terminated when any one of the partners dies, no matter what is specified in the partnership agreement. Partnership interests cannot be passed to heirs; at the death of any partner, the partnership is dissolved and perhaps renegotiated.

One of the drawbacks of partnerships is that a partner's interest in the business cannot be sold without the consent of the other partners. So a partner who needs to sell his or her interest because of, say, personal financial needs may not be able to do so.[1]

Another drawback is the partnership's limited access to new funds. Short of selling part of their own ownership interest, the partners can

[1] Still another problem involves ending a partnership and settling up, mainly because it is difficult to determine the value of the partnership and of each partner's share.

raise money only by borrowing from banks—and here too there is a limit to what a bank will lend a (usually small) partnership.

In certain businesses—including accounting, law, architecture, and physician's services—firms are commonly organized as partnerships. The use of this business form may be attributed primarily to state laws, regulations of the industry, and certifying organizations meant to keep practitioners in those fields from limiting their liability.[2]

Corporations

A ***corporation*** is a legal entity created under state laws through the process of incorporation. The corporation is an organization capable of entering into contracts and carrying out business under its own name, separate from it owners. To become a corporation, state laws generally require that a firm must do the following: (1) file articles of incorporation, (2) adopt a set of bylaws, and (3) form a board of directors.

The ***articles of incorporation*** specify the legal name of the corporation, its place of business, and the nature of its business. This certificate gives "life" to a corporation in the sense that it represents a contract between the corporation and its owners. This contract authorizes the corporation to issue units of ownership, called ***shares***, and specifies the rights of the owners, the ***shareholders***.

The bylaws are the rules of governance for the corporation. The bylaws define the rights and obligations of officers, members of the board of directors, and shareholders. In most large corporations, it is not possible for each owner to participate in monitoring the management of the business. For example, at the end of 2001, Emerson Electric Co. had approximately 33,700 shareholders. It would not be practical for each of these owners to watch over Emerson's management directly. Therefore, the owners of a corporation elect a board of directors to represent them in the major business decisions and to monitor the activities of the corporation's management. The board of directors, in turn, appoints and oversees the officers of the corporation. Directors who are also employees of the corporation are called ***insider directors***; those who have no other position within the corporation are ***outside directors*** or ***independent directors***. In the case of Emerson Electric Co., for example, there were 18 directors in 2002, six inside directors and 13 outside directors. Generally it is believed that the greater the proportion of outside directors, the greater the board's independence from the management of the company. The proportion of

[2] Many states have allowed some types of business, such as accounting firms, that were previously restricted to the partnership form to become limited liability companies (a form of business discussed later in this chapter).

outside directors on corporate boards varies significantly. For example, in 2002 only 44% of Kraft Foods' board are outsiders, whereas 89% of Texas Instrument's board is comprised of outside directors.

The state recognizes the existence of the corporation in the corporate charter. Corporate laws in many states follow a uniform set of laws referred to as the ***Model Business Corporations Act***.[3] Once created, the corporation can enter into contracts, adopt a legal name, sue or be sued, and continue in existence forever. Though owners may die, the corporation continues to live. The liability of owners is limited to the amounts they have invested in the corporation through the shares of ownership they purchased.

Unlike the sole proprietorship and partnership, the corporation is a taxable entity. It files its own income tax return and pays taxes on its income. That income is determined according to special provisions of the federal and state tax codes and is subject to corporate tax rates different from personal income tax rates.

If the board of directors decides to distribute cash to the owners, that money is paid out of income left over after the corporate income tax has been paid. The amount of that cash payment, or dividend, must also be included in the taxable income of the owners (the shareholders). Therefore, a portion of the corporation's income (the portion paid out to owners) is subject to double taxation: once as corporate income and once as the individual owner's income.

The dividend declared by the directors of a corporation is distributed to owners in proportion to the numbers of shares of ownership they hold. If Owner A has twice as many shares as Owner B, he or she will receive twice as much money.

The ownership of a corporation, also referred to as *stock* or *equity*, is represented as shares of stock. A corporation that has just a few owners who exert complete control over the decisions of the corporation is referred to as a ***close corporation*** or a ***closely-held corporation***. A corporation whose ownership shares are sold outside of a closed group of owners is referred to as a ***public corporation*** or a ***publicly-held corporation***. Mars Inc., producer of M&M candies and other confectionery products, is a closely-held corporation; Hershey Foods, also a producer of candy products among other things, is a publicly-held corporation.

The shares of public corporations are freely traded in securities markets, such as the New York Stock Exchange. Hence, the ownership of a publicly-held corporation is more easily transferred than the ownership of a proprietorship, a partnership, or a closely-held corporation.

[3] A Model act is a statute created and proposed by the National Conference of Commissioners of Uniform State Laws. A Model act is available for adoption—with or without modification—by state legislatures.

Companies whose stock is traded in public markets are required to file an initial registration statement with the ***Securities and Exchange Commission*** (SEC), a federal agency created to oversee the enforcement of U. S. securities laws. The statement provides financial statements, articles of incorporation, and descriptive information regarding the nature of the business, the debt and stock of the corporation, the officers and directors, any individuals who own more than 10% of the stock, among other items.

Other Forms of Business

In addition to the proprietorship, partnership, and corporate forms of business, an enterprise may be conducted using other forms of business, such as the master limited partnership, the professional corporation, the limited liability company, and the joint venture.

A ***master limited partnership*** is a partnership with limited partner ownership interests that are traded on an organized exchange. For example, more than two dozen master limited partnerships are listed on the New York Stock Exchange, including the Boston Celtics, Cedar Fair, and Red Lion Inns partnerships. Ownership interests, which represent a specified ownership percentage, are traded in much the same way as the shares of stock of a corporation. One difference, however, is that a corporation can raise new capital by issuing new ownership interests, whereas a master limited partnership cannot. It is not possible to sell more than a 100% interest in the partnership, yet it is possible to sell additional shares of stock in a corporation. Another difference is that the income of a master limited partnership is taxed only once, as partners' individual income.

Another variant of the corporate form of business is the professional corporation. A ***professional corporation*** is an organization that is formed under state law and treated as a corporation for federal tax law purposes, yet that has unlimited liability for its owners—the owners are personally liable for the debts of the corporation. Businesses that are likely to form such corporations are those that provide services and require state licensing, such as physicians', architects', and attorneys' practices, since it is generally felt that it is in the public interest to hold such professionals responsible for the liabilities of the business.

More recently, companies are using a hybrid form of business, the ***limited liability company*** (LLC), which combines the best features of a partnership and a corporation. In 1988 the Internal revenue Service ruled that the LLC be treated as a partnership for tax purposes, while its owners are not liable for its debts. Since this ruling, every state has passed legislation permitting limited liability companies.

Though state laws vary slightly, in general, the owners of the LLC have limited liability. The IRS considers the LLC to be taxed as a partnership if the company has no more than two of the following characteristics: (1) limited liability, (2) centralized management, (3) free transferability of ownership interests, and (4) continuity of life. If the company has more than two of these, it will be treated as a corporation for tax purposes, subjecting the income to taxation at both the company level and the owners'.

A ***joint venture***, which may be structured as either a partnership or as a corporation, is a business undertaken by a group of persons or entities (such as a partnership or corporation) for a specific business activity and, therefore, does not constitute a continuing relationship among the parties. For tax and other legal purposes, a joint venture partnership is treated as a partnership and a joint venture corporation is treated as a corporation.

U.S. corporations have entered into joint ventures with foreign corporations, enhancing participation and competition in the global marketplace. For example, the Coca-Cola Company entered a joint venture with FEMSA, Mexico's largest beverage company, in 1993, expanding its opportunities within Mexico. Joint ventures are an easy way of entering a foreign market and of gaining an advantage in a domestic market. For example, Burger King, the second largest fast food chain in America, entered the Japanese market through a joint venture with Japan Tobacco Inc., which is two-thirds owned by Japan's Ministry of Finance, to form Burger King Japan. This joint venture gives Burger King (owned by the British firm, Grand Metropolitan PLC) a fighting chance in competing against McDonald's almost 2,000 outlets in Japan.

Joint ventures are becoming increasingly popular as a way of doing business. Participants—whether individuals, partnerships, or corporations—get together to exploit a specific business opportunity. Afterward, the venture can be dissolved. Recent alliances among communication and entertainment firms have sparked thought about what the future form of doing business will be. Some believe that what lies ahead is a virtual enterprise—a temporary alliance without all the bureaucracy of the typical corporation—that can move quickly and decisively to take advantage of profitable business opportunities.

Prevalence

The advantages and disadvantages of the three major forms of business from the point of view of financial decision-making are summarized in Exhibit 1.1. Firms tend to evolve from proprietorship to partnership to corporation as they grow and as their needs for financing increase. Sole proprietorship is the choice for starting a business, whereas the corporation is the choice to accommodate growth. The great majority of business firms in the United States are sole proprietorships, but most business income is generated by corporations.

The Objective of Financial Management

So far we have seen that financial managers are primarily concerned with investment decisions and financing decisions within business organizations. The great majority of these decisions are made within the corporate business structure, which better accommodates growth and is responsible for 89% of U.S. business income. Hence, most of our discussion in the remainder of this book focuses on financial decision-making in corporations, but many of the issues apply generally to all forms of business.

EXHIBIT 1.1 **Characteristics of the Three Basic Forms of Business**

Sole Proprietorship

Advantages

1. The proprietor is the sole business decision-maker.
2. The proprietor receives all income from business.
3. Income from the business is taxed once, at the individual taxpayer level.

Disadvantages

1. The proprietor is liable for all debts of the business (unlimited liability).
2. The proprietorship has a limited life.
3. There is limited access to additional funds.

General Partnership

Advantages

1. Partners receive income according to terms in partnership agreement.
2. Income from business is taxed once as the partners' personal income.
3. Decision-making rests with the general partners only.

Disadvantages

1. Each partner is liable for all the debts of the partnership.
2. The partnership's life is determined by agreement or the life of the partners.
3. There is limited access to additional funds.

Corporation

Advantages

1. The firm has perpetual life.
2. Owners are not liable for the debts of the firm; the most that owners can lose is their initial investment.
3. The firm can raise funds by selling additional ownership interest.
4. Income is distributed in proportion to ownership interest.

Disadvantages

1. Income paid to owners is subjected to double taxation.
2. Ownership and management are separated in larger organizations.

One such issue concerns the objective of financial decision-making. What goal (or goals) do managers have in mind when they choose between financial alternatives—say, between distributing current income among shareholders and investing it to increase future income? There is actually one financial objective: the maximization of the economic well-being, or wealth, of the owners. Whenever a decision is to be made, management should choose the alternative that most increases the wealth of the owners of the business.

The Measure of Owner's Economic Well-Being

The price of a share of stock at any time, or its ***market value***, represents the price that buyers in a free market are willing to pay for it. The ***market value of shareholders' equity*** is the value of all owners' interest in the corporation. It is calculated as the product of the market value of one share of stock and the number of shares of stock outstanding:

Market value of shareholders' equity
= Market value of a share of stock × Number of shares of stock outstanding

The number of shares of stock outstanding is the total number of shares that are owned by shareholders. For example, at the end of June 2002 there were 2,040 million Walt Disney Company shares outstanding. The price of Disney stock at the end of June 2002 was $18.90 per share. Therefore, the market value of Disney's equity at the end of June 2002 was over $38.5 billion.

Investors buy shares of stock in anticipation of future dividends and increases in the market value of the stock. How much are they willing to pay today for this future—and hence uncertain—stream of dividends? They are willing to pay exactly what they believe it is worth today, an amount that is called the ***present value***, an important financial concept explained in Chapter 7. The present value of a share of stock reflects the following factors:

- The uncertainty associated with receiving future payments.
- The timing of these future payments.
- Compensation for tying up funds in this investment.

The market price of a share is a measure of owners' economic well-being. Does this mean that if the share price goes up, management is doing a good job? Not necessarily. Share prices often can be influenced by factors beyond the control of management. These factors include expectations regarding the economy, returns available on alternative investments (such as bonds), and even how investors view the firm and the idea of investing.

These factors influence the price of shares through their effects on expectations regarding future cash flows and investors' evaluation of those cash flows. Nonetheless, managers can still maximize the value of owners' equity, given current economic conditions and expectations. They do so by carefully considering the expected benefits, risk, and timing of the returns on proposed investments.

Economic Profit versus Accounting Profit: Share Price versus Earnings Per Share

When you studied economics, you saw that the objective of the firm is to maximize profit. In finance, however, the objective is to maximize owners' wealth. Is this a contradiction? No. We have simply used different terminology to express the same goal. The difference arises from the distinction between accounting profit and economic profit.

Economic profit is the difference between revenues and costs, where costs include both the actual business costs (the explicit costs) and the implicit costs. The implicit costs are the payments that are necessary to secure the needed resources, the ***cost of capital***. With any business enterprise, someone supplies funds, or capital, that the business then invests. The supplier of these funds may be the business owner, an entrepreneur, or banks, bondholders, and shareholders. The cost of capital depends on both the time value of money—what could have been earned on a risk-free investment—and the uncertainty associated with the investment. The greater the uncertainty associated with an investment, the greater the cost of capital.

Consider the case of the typical corporation. Shareholders invest in the shares of a corporation with the expectation that they will receive future dividends. But shareholders could have invested their funds in any other investment, as well. So what keeps them interested in keeping their money in the particular corporation? Getting a return on their investment that is better than they could get elsewhere, considering the amount of uncertainty of receiving the future dividends. If the corporation cannot generate economic profits, the shareholders will move their funds elsewhere.

Accounting profit, however, is the difference between revenues and costs, recorded according to accounting principles, where costs are primarily the actual costs of doing business. The implicit costs—opportunity cost and normal profit—which reflect the uncertainty and timing of future cash flows, are not taken into consideration in accounting profit. Moreover accounting procedures, and hence the computation of accounting profit, can vary from firm to firm. For both these reasons, accounting profit is not a reasonable gauge of shareholders' return on their investment, and the maximization of accounting profit is not equivalent to the maximization of shareholder wealth.[4]

Many U. S. corporations, including Coca–Cola, Briggs & Stratton, and Boise Cascade, are embracing a relatively new method of evaluating and rewarding management performance that is based on the idea of compensating management for economic profit, rather than for accounting profit. The most prominent of recently developed techniques to evaluate a firm's performance are economic value–added and market value-added.[5]

Economic value-added (*EVA*®) is another name for the firm's economic profit. Key elements of estimating economic profit are:

1. calculating the firm's operating profit from financial statement data, making adjustments to accounting profit to better reflect a firm's operating results for a period,
2. calculating the cost of capital, and
3. comparing operating profit with the cost of capital.

The difference between the operating profit and the cost of capital is the estimate of the firm's economic profit, or economic value–added.

A related measure, ***market value added*** (*MVA*), focuses on the market value of capital, as compared to the cost of capital. The key elements of market value added are:

1. calculating the market value of capital,
2. calculating the amount of capital invested (i.e., debt and equity), and
3. comparing the market value of capital with the capital invested.

The difference between the market value of capital and the amount of capital invested is the market value added. In theory, the market value added is the present value of all expected future economic profits.

The application of economic profit is relatively new in the measurement of performance, yet the concept of economic profit is not new. What this recent emphasis on economic profit has accomplished is to focus attention away from accounting profit and toward clearing the cost of capital hurdle.

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[4] When economic profit is zero, as an example, investors are getting a return that just compensates them for bearing the risk of the investment. When accounting profit is zero, investors would be much better off investing elsewhere and just as well off by keeping their money under their mattresses.

[5] One of the first to advocate using economic profit in compensating management is G. Bennett Stewart III, *The Quest for Value* (New York: HarperCollins Publishers, Inc., 1991).

Share Prices and Efficient Markets

We have seen that the price of a share of stock today is the present value of the dividends and share price the investor expects to receive in the future. What if these expectations change?

Suppose you buy a share of stock of IBM. The price you are willing to pay is the present value of future cash flows you expect from dividends paid on one share of IBM stock and from the eventual sale of that share. This price reflects the amount, the timing, and the uncertainty of these future cash flows. Now what happens if some news—good or bad—is announced that changes the expected IBM dividends? If the market in which these shares are traded is efficient, the price will fall very quickly to reflect that news.

In an efficient market, the price of assets—in this case shares of stock—reflects all publicly available information. As information is received by investors, share prices change rapidly to reflect the new information. How rapidly? In U.S. stock markets, which are efficient markets, information affecting a firm is reflected in share prices of its stock within minutes.

What are the implications for financing decisions? In efficient markets, the current price of a firm's shares reflects all publicly available information. Hence, there is no good time or bad time to issue a security. When a firm issues stock, it will receive what that stock is worth—no more and no less. Also, the price of the shares will change as information about the firm's activities is revealed. If the firm announces a new product, investors will use whatever information they have to figure out how this new product will change the firm's future cash flows and, hence, the value of the firm—and the share price—will change accordingly. Moreover, in time, the price will be such that investors' economic profit approaches zero.

Financial Management and the Maximization of Owners' Wealth

Financial managers are charged with the responsibility of making decisions that maximize owners' wealth. For a corporation, that responsibility translates into maximizing the value of shareholders' equity. If the market for stocks is efficient, the value of a share of stock in a corporation should reflect investors' expectations regarding the future prospects of the corporation. The value of a stock will change as investors' expectations about the future change. For financial managers' decisions to add value, the present value of the benefits resulting from decisions must outweigh the associated costs, where costs include the costs of capital.

If there is a separation of the ownership and management of a firm—that is, the owners are not also the managers of the firm—there are additional issues to confront. What if a decision is in the best interests of the firm, but not in the best interest of the manager? How can owners insure that managers are watching out for the owners' interests? How can owners motivate managers to make decisions that are best for the owners? We will address these issues, and more, in the next section.

THE AGENCY RELATIONSHIP

If you are the sole owner of a business, then you make the decisions that affect your own well-being. But what if you are a financial manager of a business and you are not the sole owner? In this case, you are making decisions for owners other than yourself; you, the financial manager, are an agent. An ***agent*** is a person who acts for—and exerts powers of—another person or group of persons. The person (or group of persons) the agent represents is referred to as the ***principal***. The relationship between the agent and his or her principal is an ***agency relationship***. There is an agency relationship between the managers and the shareholders of corporations.

Problems with the Agency Relationship

In an agency relationship, the agent is charged with the responsibility of acting for the principal. Is it possible the agent may not act in the best interest of the principal, but instead act in his or her own self-interest? Yes—because the agent has his or her own objective of maximizing personal wealth.

In a large corporation, for example, the managers may enjoy many fringe benefits, such as golf club memberships, access to private jets, and company cars. These benefits (also called perquisites, or "perks") may be useful in conducting business and may help attract or retain management personnel, but there is room for abuse. What if the managers start spending more time at the golf course than at their desks? What if they use the company jets for personal travel? What if they buy company cars for their teenagers to drive? The abuse of perquisites imposes costs on the firm—and ultimately on the owners of the firm. There is also a possibility that managers who feel secure in their positions may not bother to expend their best efforts toward the business. This is referred to as shirking, and it too imposes a cost to the firm.

Finally, there is the possibility that managers will act in their own self-interest, rather than in the interest of the shareholders when those interests clash. For example, management may fight the acquisition of their firm by some other firm even if the acquisition would benefit shareholders. Why? In most takeovers, the management personnel of the acquired firm generally lose their jobs. Envision that some company is making an offer to acquire the firm that you manage. Are you happy that the acquiring firm is offering the shareholders of your firm more for their stock than its current market value? If you are looking out for their best interests, you should be. Are you happy about the likely prospect of losing your job? Most likely not.

Many managers faced this dilemma in the merger mania of the 1980s. So what did they do? Among the many tactics,

- Some fought acquisition of their firms—which they labeled ***hostile takeovers***—by proposing changes in the corporate charter or even lobbying for changes in state laws to discourage takeovers.
- Some adopted lucrative executive compensation packages—called ***golden parachutes***—that were to go into effect if they lost their jobs.

Such defensiveness by corporate managers in the case of takeovers, whether it is warranted or not, emphasizes the potential for conflict between the interests of the owners and the interests of management.

Costs of the Agency Relationship

There are costs involved with any effort to minimize the potential for conflict between the principal's interest and the agent's interest. Such costs are called ***agency costs***, and they are of three types: monitoring costs, bonding costs, and residual loss.

Monitoring costs are costs incurred by the principal to monitor or limit the actions of the agent. In a corporation, shareholders may require managers to periodically report on their activities via audited accounting statements, which are sent to shareholders. The accountants' fees and the management time lost in preparing such statements are monitoring costs. Another example is the implicit cost incurred when shareholders limit the decision-making power of managers. By doing so, the owners may miss profitable investment opportunities; the foregone profit is a monitoring cost.

The board of directors of corporation has a ***fiduciary duty*** to shareholders; that is the legal responsibility to make decisions (or to see that decisions are made) that are in the best interests of shareholders. Part of that responsibility is to ensure that managerial decisions are also in the best interests of the shareholders. Therefore, at least part of the cost of having directors is a monitoring cost.

Bonding costs are incurred by agents to assure principals that they will act in the principal's best interest. The name comes from the agent's promise or bond to take certain actions. A manager may enter into a contract that requires him or her to stay on with the firm even though another company acquires it; an implicit cost is then incurred by the manager, who foregoes other employment opportunities.

Even when monitoring and bonding devices are used, there may be some divergence between the interests of principals and those of agents. The resulting cost, called the ***residual loss***, is the implicit cost that results because the principal's and the agent's interests cannot be perfectly aligned even when monitoring and bonding costs are incurred.

Motivating Managers: Executive Compensation

One way to encourage management to act in shareholders' best interests, and so minimize agency problems and costs, is through executive compensation—how top management is paid. There are several different ways to compensate executives, including:

Salary. The direct payment of cash of a fixed amount per period.

Bonus. A cash reward based on some performance measure, say earnings of a division or the company.

Stock appreciation right. A cash payment based on the amount by which the value of a specified number of shares has increased over a specified period of time (supposedly due to the efforts of management).

Performance shares. Shares of stock given the employees, in an amount based on some measure of operating performance, such as earnings per share.

Stock option. The right to buy a specified number of shares of stock in the company at a stated price—referred to as an *exercise price* at some time in the future. The exercise price may be above, at, or below the current market price of the stock.

Restricted stock grant. The grant of shares of stock to the employee at low or no cost, conditional on the shares not being sold for a specified time.

The salary portion of the compensation—the minimum cash payment an executive receives—must be enough to attract talented executives. But a bonus should be based on some measure of performance that is in the best interests of shareholders—not just on the past year's accounting earnings. For example, a bonus could be based on gains in market share. Recently, several companies have adopted programs that base compensation, at least in part, on value added by managers as measured by economic profits.

The basic idea behind stock options and restricted stock grants is to make managers owners, since the incentive to consume excessive perks and to shirk are reduced if managers are also owners. As owners, managers not only share the costs of perks and shirks, but they also benefit financially when their decisions maximize the wealth of owners. Hence, the key to motivation through stock is not really the *value* of the stock, but rather *ownership* of the stock. For this reason, stock appreciation rights and performance shares, which do not involve an investment on the part of recipients, are not effective motivators.

Stock options do work to motivate performance if they require owning the shares over a long time period; are exercisable at a price *above* the current market price of the shares, thus encouraging managers to get the share price up, and require managers to tie up their own wealth in the shares.

Currently, there is a great deal of concern in some corporations because executive compensation is not linked to performance. In recent years, many U.S. companies have downsized, restructured, and laid off many employees and allowed the wages of employees who survive the cuts to stagnate. At the same time, corporations have increased the pay of top executives through both salary and lucrative stock options. If these changes lead to better value for shareholders, shouldn't the top executives be rewarded?

There are two issues here. First, such a situation results in anger and disenchantment among both surviving employees and former employees. Second, the downsizing, restructuring, and lay-offs may not result in immediate (or even, eventual) increased profitability. Consider AT&T in 1995: In a year in which the company restructured, barely made a profit, eliminated 40,000 jobs, and its stock had lackluster returns, the chief executive officer (CEO) received salary and bonuses of $5.2 million and options valued at $11 million. If the restructuring pays off in the long-run, the CEO's pay may be justified, but meanwhile, there may be some unhappy AT&T shareholders: The average annual return on AT&T stock over the period 1996–2001 was –23.19%.[6]

Another problem is that compensation packages for top management are designed by the board of directors, which often includes top management. Moreover, reports disclosing these compensation packages to shareholders (the proxy statements) are often confusing. Both problems can be avoided by adequate and understandable disclosure of executive compensation to shareholders, and with compensation packages determined by board members who are not executives of the firm.

[6] Joann S. Lublin, "AT&T Board Faces Protest Over CEO Pay," *Wall Street Journal* (April 16, 1996), pp. A3, A6.

Owners have one more tool with which to motivate management—the threat of firing. As long as owners can fire managers, managers will be encouraged to act in the owners' interest. However, if the owners are divided or apathetic—as they often are in large corporations—or if they fail to monitor management's performance and the reaction of directors to that performance, the threat may not be credible. The removal of a few poor managers can, however, make this threat palpable.

Shareholder Wealth Maximization and Accounting "Irregularities"

Recently, there have been a number of scandals and allegations regarding the financial information that is being reported to shareholders and the market. Financial results reported in the income statements and balance sheets of some companies indicated much better performance than the true performance or much better financial condition than actual. Examples include Xerox, which was forced to restate earnings for several years because it had inflated pre-tax profits by $1.4 billion, Enron, which is accused of inflating earnings and hiding substantial debt, and Worldcom, which failed to properly account for $3.8 billion of expenses. Along with these financial reporting issues, the independence of the auditors and the role of financial analysts have been brought to the forefront.[7]

It is unclear at this time the extent to which these scandals and problems were the result of simply bad decisions or due to corruption. The eagerness of managers to present favorable results to shareholders and the market appears to be a factor in several instances. And personal enrichment at the expense of shareholders seems to explain some cases. Whatever the motivation, chief executive officers (CEOs), chief financial officers (CFOs), and board members are being held directly accountable for financial disclosures. For example, in 2002, the Securities and Exchange Commission ordered sworn statements attesting to the accuracy of financial statements. The first deadline for such statements resulted in several companies restating financial results.

The accounting scandals are creating an awareness of the importance of corporate governance, the importance of the independence of the public accounting auditing function, the role of financial analysts, and the responsibilities of CEOs and CFOs.

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[7] For example, the public accounting firm of Arthur Andersen was found guilty of obstruction of justice in 2002 for their role in the shredding of documents relating to Enron. As an example of the problems associated with financial analysts, the securities firm of Merrill Lynch paid a $100 million fine for their role in hyping stocks to help win investment-banking business.

Shareholder Wealth Maximization and Social Responsibility

When financial managers assess a potential investment in a new product, they examine the risks and the potential benefits and costs. If the risk-adjusted benefits do not outweigh the costs, they will not invest. Similarly, managers assess current investments for the same purpose; if benefits do not continue to outweigh costs, they will not continue to invest in the product but will shift their investment elsewhere. This is consistent with the goal of shareholder wealth maximization and with the allocative efficiency of the market economy.

Discontinuing investment in an unprofitable business may mean closing down plants, laying off workers, and, perhaps destroying an entire town that depends on the business for income. So decisions to invest or disinvest may affect great numbers of people.

All but the smallest business firms are linked in some way to groups of persons who are dependent to a degree on the business. These groups may include suppliers, customers, the community itself, and nearby businesses, as well as employees and shareholders. The various groups of persons that depend on a firm are referred to as its ***stakeholders***; they all have some *stake* in the outcome of the firm. For example, if the Boeing Company lays off workers or increases production, the effects are felt by Seattle and the surrounding communities.

Can a firm maximize the wealth of shareholders and stakeholders at the same time? Probably. If a firm invests in the production of goods and services that meet the demand of consumers in such a way that benefits exceed costs, the firm will be allocating the resources of the community efficiently, employing assets in their most productive use. If later the firm must disinvest—perhaps close a plant—it has a responsibility to assist employees and other stakeholders who are affected. Failure to do so could tarnish its reputation, erode its ability to attract new stakeholder groups to new investments, and ultimately act to the detriment of shareholders.

The effects of a firm's actions on others are referred to as ***externalities***. Pollution is an externality that keeps increasing in importance. Suppose the manufacture of a product creates air pollution. If the polluting firm acts to reduce this pollution, it incurs a cost that either increases the price of its product or decreases profit and the market value of its stock. If competitors do not likewise incur costs to reduce their pollution, the firm is at a disadvantage and may be driven out of business through competitive pressure.

The firm may try to use its efforts at pollution control to enhance its reputation in the hope that this will lead to a sales increase large enough to make up for the cost of reducing pollution. This is called a ***market***

solution: The market places a value on the pollution control and rewards the firm (or an industry) for it. If society really believes that pollution is bad and that pollution control is good, the interests of owners and society can be aligned.

It is more likely, however, that pollution control costs will be viewed as reducing owners' wealth. Then firms must be forced to reduce pollution through laws or government regulations. But such laws and regulations also come with a cost—the cost of enforcement. Again, if the benefits of mandatory pollution control outweigh the cost of government action, society is better off. In such a case, if the government requires all firms to reduce pollution, then pollution control costs simply become one of the conditions under which owner wealth-maximizing decisions are to be made.

SUMMARY

- Finance comprises three areas: financial management, investments, and financial institutions. These three areas are linked together through a common body of knowledge that includes the theories and tools of finance.
- The decision-making of financial managers can be broken down into two broad classes: investment decisions and financing decisions. Investment decisions are those decisions that involve the use of the firm's funds. Financing decisions are those decisions that involve the acquisition of the firm's funds.
- Financial managers assess the potential risks and rewards associated with investment and financing decisions through the application of financial analysis.
- The information necessary for financial decisions and analysis includes the accounting information that describes the company and its industry as well as economic information relating to the company, the industry, and the economy in general.
- A business enterprise may be formed as a sole proprietorship, a partnership, corporation, or a hybrid of one or more of these forms. The hybrid forms include the master limited partnership, the professional corporation, the limited liability company, and the joint venture. The choice of the form of business is influenced by concerns about the life of the enterprise, the liability of its owners, the taxation of income, and access to funds. In turn, the form of business influences financial decision-making through its effect on taxes, governance, and the liability of owners.

- Corporations are entities created by law that limit the liability of owners and subject income to an additional layer of taxation. The corporation's owners—the shareholders—are represented by the board of directors, which oversees the management of the firm.
- The objective of financial decision-making in a business is the maximization of the wealth of owners. For a corporation, this is equivalent to the maximization of the market value of the stock.
- If markets for securities are price efficient, share prices will reflect all available information. When information is revealed to investors, it is rapidly figured into share prices.
- Since managers' self-interest may not be consistent with owners' best interests, owners must devise ways to align mangers' and owners' interests. One means of doing this is through executive compensation. By designing managers' compensation packages to encourage long-term investment in the stock of a corporation, the interests of managers and shareholders can be aligned.
- Recent scandals have created an awareness of the responsibility of CEOs, CFOs, and board members to shareholders and the market.
- Shareholder wealth maximization is consistent with the best interests of stakeholders and society if market forces reward firms for taking actions that are in society's interest or if the government steps in to force actions that are in society's interest.

QUESTIONS

1. Which of following actions are the result of a financing decision? Which of the following actions are the result of an investment decision?
   a. A firm introduces a new product.
   b. A firm issues new bonds.
   c. A corporation issues new shares of stock.
   d. A firm expands its existing manufacturing facilities.
   e. A firm leases a new building to be used in its manufacturing.
2. Suppose you are the financial manager of a large national food processing firm. In your travels, you run across a small regional food processor that you believe will provide your firm with annual returns of over 30%. Returns on your firm's typical investments are around 20%. Should you propose that your firm acquire this regional food processor? What factors need to be considered in this decision?
3. McDonald's Corporation, licensor and operator of a chain of fast-food restaurants, was founded in 1953 as a partnership and within

six months was incorporated. Why would this operator of fast-food restaurants incorporate so soon after being established? What factors influence the decision to incorporate?
4. Briefly describe each of the following forms of business: (a) master limited partnership, (b) professional corporation, (c) joint venture.
5. Corporations contribute the greatest share of business income in the United States, yet there are fewer corporations than sole proprietorships. Explain why these facts seem reasonable, considering the evolution of a firm.
6. If the share price of a corporation's stock declines, does this mean that the management of the company is not maximizing shareholder wealth? If the share price of a corporation's stock increases, does this mean that the management of the company is maximizing shareholder wealth? Explain.
7. Why is the maximizing of shareholder wealth not necessarily equivalent to the maximizing of earnings per share?
8. Through 1997, the Burlington Coat Factory Warehouse Corporation had not paid any dividends. Why were investors willing to pay over $10 for a share of Burlington stock in 1997?
9. The Rising Corporation has had 20 consecutive quarters of increasing earnings per share, but its share price has remained at about the same price over this same time period. Is this consistent? Explain.
10. Which forms of business have limited liability for all owners? Which forms of business have unlimited liability for all owners?
11. Why may a firm's share price increase when the firm announces lower earnings?
12. The Clockwork Corporation would like to issue $2 million in new shares of stock. The President of Clockwork believes that if the company waits two weeks, they could get a better price for their shares. The Chair of the board of directors disputes this. She says that because markets are price efficient, there is no "timing" possible on the stock issue and Clockwork should issue the shares when they need the funds, and not worry about "timing." Who is right?
13. What is an agency cost? Give three examples of agency costs.
14. The Sununu Corporation is having a bit of a problem: The executives are using the corporation's jets for personal reasons, such as traveling on vacation and visiting doctors in other cities. The board of directors wants management to cut down on this type of activity.
    a. In terms of the different types of agency costs, how would we classify the misuse of corporate jets?
    b. What measures can the board take to reduce or eliminate the misuse of the corporate jets?

15. Suppose that you start your own small retail business. As business increases, you expand the hours and hire someone to manage the business during the evening hours.
    a. Describe the agency relationship involved in your business.
    b. What possible problems can arise in this relationship?
    c. How could you reduce the costs associated with this agency relationship?
16. List four kinds of compensation for a firm's management. Identify the arrangements that would be most effective in aligning the interests of shareholders and management.
17. Can shareholder wealth maximization be consistent with a firm's social responsibility? Explain. Consider International Business Machines (IBM), whose headquarters are located in Armonk, New York, but whose manufacturing and sales operations span the globe. Who are IBM's stakeholders? If IBM trims is work force, what obligations does it have to its stakeholders?
18. On Tuesday, February 16, 2000, the L Corp. announced that its fourth quarter 1999 earnings per share rose to 67 cents, up from 55 cents for the fourth quarter of 1991. On the same day, M Corp. announced fourth quarter earnings of 63 cents per share, compared to the previous year's fourth quarter earnings of 66 cents. On February 16, 2000, L Corp.'s share price fell from $27.375 to $25.375 and M Corp.'s share price fell from $40.125 to $37.375. Why would the share prices of both companies fall when these earnings figures are announced?
19. Why would a firm choose to be a closely-held corporation instead of a publicly-held corporation? Why would a firm choose to be a publicly-held corporation instead of a closely-held corporation?
20. Compare performance shares with a restricted stock grant as a means of motivating management to act in shareholders' best interests. Which do you believe is more effective? Explain your reasoning.
21. Mary, Martin, and Michael invested $20,000, $30,000, and $50,000, respectively, in a business enterprise. After operating the business unsuccessfully for five years, they decided to terminate it. At the time they ceased business operations, the assets of the business were worth only $40,000 and the debts of the business were $10,000.
    a. If this business were formed as a partnership, with the sharing of profits and losses based on the proportion of each partner's original investment, what would be the financial consequences of the dissolution of the business to Mary, Martin, and Michael?
    b. If this business were formed as a corporation, with the proportion of ownership based on the proportion of each shareholder's original investment, what would be the financial consequences of the dissolution of the business to Mary, Martin, and Michael?