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CHAPTER 1

What Is Finance?

A truly great business must have an enduring 'moat' that protects excellent returns on invested capital. The dynamics of capitalism guarantee that competitors will repeatedly assault any business 'castle' that is earning high returns. Therefore a formidable barrier such as a company's being the low cost producer (GEICO, Costco) or possessing a powerful world-wide brand (Coca-Cola, Gillette, American Express) is essential for sustained success. Business history is filled with 'Roman Candles,' companies whose moats proved illusory and were soon crossed.

—Warren Buffett, Letter to Shareholders of Berkshire Hathaway, February 2008

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Finance is the application of economic principles to decision-making that involves the allocation of money under conditions of uncertainty. In other words, in finance we worry about money and we worry about the future. Investors allocate their funds among financial assets in order to accomplish their objectives, and businesses and governments raise funds by issuing claims against themselves and then use those funds for operations.

Finance provides the framework for making decisions as to how to get funds and what we should do with them once we have them. It is the financial system that provides the platform by which funds are transferred from those entities that have funds to those entities that need funds.

The foundations for finance draw from the field of economics and, for this reason, finance is often referred to as *financial economics*. For example, as you saw with the quote by Warren Buffett at the beginning of this chapter, competition is important in the valuation of a company. The ability to keep

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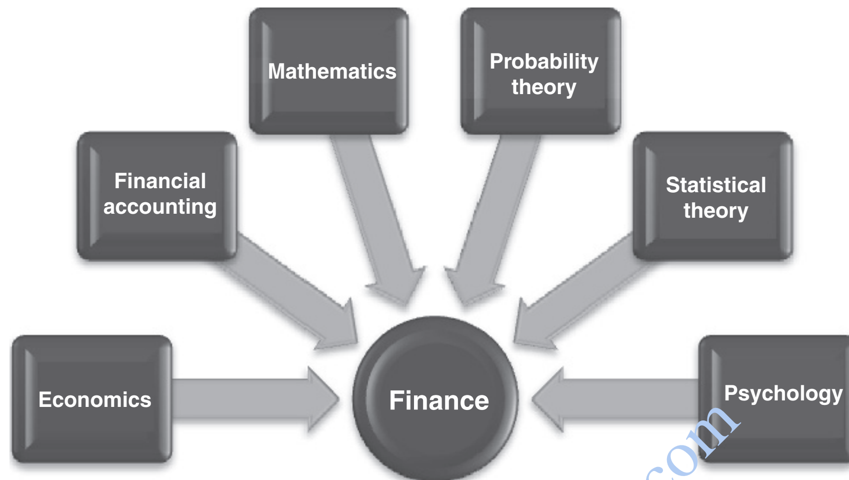

EXHIBIT 1.1 Finance and Its Relation to Other Fields

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competitors at bay is valuable because it ensures that the company can continue to earn economic profits.[1]

FINANCE IS . . .

- analytical, using statistical, probability, and mathematics to solve problems.
- based on economic principles.
- uses accounting information as inputs to decision-making.
- global in perspective.
- the study of how to raise money and invest it productively.

The tools used in financial decision-making, however, draw from many areas outside of economics: financial accounting, mathematics, probability theory, statistical theory, and psychology, as we show in Exhibit 1.1.

We can think of the field of finance as comprised of three areas: capital markets and capital market theory, financial management, and investment

[1] *Economic profits* are earnings beyond the cost of capital used to generate those earnings. In other words, economic profits are those in excess of normal profits—those returns expected based on the investment's risk.

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EXHIBIT 1.2 The Three Areas within the Field of Finance

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management, as we illustrate in Exhibit 1.2. And, as this exhibit illustrates, the three areas are all intertwined, based on a common set of theories and principles. In the balance of this chapter, we discuss each of these specialty areas.

CAPITAL MARKETS AND CAPITAL MARKET THEORY

The field of *capital markets and capital market theory* focuses on the study of the financial system, the structure of interest rates, and the pricing of risky assets. The financial system of an economy consists of three components: (1) financial markets; (2) financial intermediaries; and (3) financial regulators. For this reason, we often refer to this area as *financial markets and institutions*.

Several important topics included in this specialty area of finance are the pricing efficiency of financial markets, the role and investment behavior of the players in financial markets, the best way to design and regulate financial markets, the measurement of risk, and the theory of asset pricing. The pricing efficiency of the financial markets is critical because it deals with whether investors can "beat the market." If a market is highly *price efficient*, it is extremely difficult for investors to earn returns that are greater than those expected for the investment's level of risk—that is, it is difficult for investors to beat the market. An investor who pursues an investment strategy that seeks to "beat the market" must believe that the sector of the financial market to which the strategy is applied is not highly price efficient. Such a strategy seeking to "beat the market" is called an *active strategy*. Financial theory tells us that if a capital market is efficient, the optimal

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strategy is not an active strategy, but rather is a *passive strategy* that seeks to match the performance of the market.

In finance, beating the market means outperforming the market by generating a return on investment beyond what is expected after adjusting for risk and transaction costs. To be able to quantitatively determine what is "expected" from an investment after adjusting for risk, it is necessary to formulate and empirically test theories about how assets are priced or, equivalently, valuing an asset to determine its fair value.

A cow for her milk
A hen for her eggs,
And a stock, by heck,
For her dividends.

An orchard for fruit,
Bees for their honey,
And stocks, besides,
For their dividends.

—John Burr Williams
"Evaluation of the Rule of Present Worth,"
Theory of Investment Value, 1937

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The fundamental principle of valuation is that the value of any financial asset is the present value of the expected cash flows. Thus, the valuation of a financial asset involves (1) estimating the expected cash flows; (2) determining the appropriate interest rate or interest rates that should be used to discount the cash flows; and (3) calculating the present value of the expected cash flows. For example, in valuing a stock, we often estimate future dividends and gauge how uncertain are these dividends. We use basic mathematics of finance to compute the present value or discounted value of cash flows. In the process of this calculation of the present value or discounted value, we must use a suitable interest rate, which we will refer to as a *discount rate*. Capital market theory provides theories that guide investors in selecting the appropriate interest rate or interest rates.

FINANCIAL MANAGEMENT

Financial management, sometimes called *business finance* or *corporate finance*, is the specialty area of finance concerned with financial decision-making within a business entity. Although financial management is often

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referred to as corporate finance, the principles of financial management also apply to other forms of business and to government entities. Financial managers are primarily concerned with investment decisions and financing decisions within organizations, whether that organization is a sole proprietorship, a partnership, a limited liability company, a corporation, or a governmental entity.

Regarding investment decisions, we are concerned with the use of funds—the buying, holding, or selling of all types of assets: Should a business purchase a new machine? Should a business introduce a new product line? Sell the old production facility? Acquire another business? Build a manufacturing plant? Maintain a higher level of inventory?

Financing decisions are concerned with the procuring of funds that can be used for long-term investing and financing day-to-day operations. Should financial managers use profits raised through the company's revenues or distribute those profits to the owners? Should financial managers seek money from outside of the business? A company's operations and investments can be financed from outside the business by incurring debt—such as through bank loans or the sale of bonds—or by selling ownership interests. Because each method of financing obligates the business in different ways, financing decisions are extremely important. The financing decision also involves the dividend decision, which involves how much of a company's profit should be retained and how much to distribute to owners.

A company's financial strategic plan is a framework of achieving its goal of maximizing owner's wealth. Implementing the strategic plan requires both long-term and short-term financial planning that brings together forecasts of the company's sales with financing and investment decision-making. Budgets are employed to manage the information used in this planning; performance measures are used to evaluate progress toward the strategic goals.

The *capital structure* of a company is the mixture of debt and equity that management elects to raise to finance the assets of the company. There are several economic theories about how the company should be financed and whether an optimal capital structure (that is, one that maximizes a company's value) exists.

Investment decisions made by the financial manager involve the long-term commitment of a company's scarce resources in long-term investments. We refer to these decisions as *capital budgeting decisions*. These decisions play a prominent role in determining the success of a business enterprise. Although there are capital budgeting decisions that are routine and, hence, do not alter the course or risk of a company, there are also strategic capital budgeting decisions that either affect a company's future market position in its current product lines or permit it to expand into new product lines in the future.

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A financial manager must also make decisions about a company's current assets. *Current assets* are those assets that could reasonably be converted into cash within one operating cycle or one year, whichever takes longer. Current assets include cash, marketable securities, accounts receivable, and inventories, and support the long-term investment decisions of a company.

Another critical task in financial management is the *risk management* of a company. The process of risk management involves determining which risks to accept, which to neutralize, and which to transfer. The four key processes in risk management are risk:

1. Identification
2. Assessment
3. Mitigation
4. Transference

The traditional process of risk management focuses on managing the risks of only parts of the business (products, departments, or divisions), ignoring the implications for the value of the company. Today, some form of *enterprise risk management* is followed by large corporations, which is risk management applied to the company as a whole. Enterprise risk management allows management to align the risk appetite and strategies across the company, improve the quality of the company's risk response decisions, identify the risks across the company, and manage the risks across the company.

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> The first step in the risk management process is to acknowledge the reality of risk. Denial is a common tactic that substitutes deliberate ignorance for thoughtful planning.
>
> —Charles Tremper

INVESTMENT MANAGEMENT

Investment management is the specialty area within finance dealing with the management of individual or institutional funds. Other terms commonly used to describe this area of finance are *asset management*, *portfolio management*, *money management,* and *wealth management*. In industry jargon, an asset manager "runs money."

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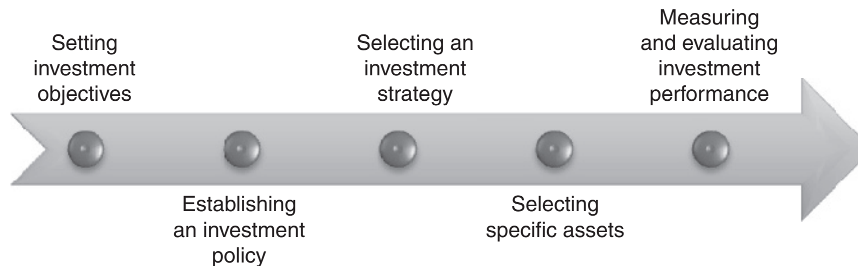

EXHIBIT 1.3 Investment Management Activities

Investment management involves five primary activities, as we detail in Exhibit 1.3. Setting investment objectives starts with a thorough analysis of what the entity or client wants to accomplish. Given the investment objectives, the investment manager develops policy guidelines, taking into consideration any client-imposed investment constraints, legal/regulatory constraints, and tax restrictions. This task begins with the decision of how to allocate assets in the portfolio (i.e., how the funds are to be allocated among the major asset classes). The *portfolio* is simply the set of investments that are managed for the benefit of the client or clients. Next, the investment manager must select a portfolio strategy that is consistent with the investment objectives and investment policy guidelines.

In general, portfolio strategies are classified as either active or passive. Selecting the specific financial assets to include in the portfolio, which is referred to as the portfolio selection problem, is the next step. The theory of portfolio selection was formulated by Harry Markowitz in 1952.[2] This theory proposes how investors can construct portfolios based on two parameters: mean return and standard deviation of returns. The latter parameter is a measure of risk. An important task is the evaluation of the performance of the asset manager. This task allows a client to determine answers to questions such as: How did the asset manager perform after adjusting for the risks associated with the active strategy employed? And, how did the asset manager achieve the reported return?

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ORGANIZATION OF THIS BOOK

We have organized this book in parts to enable you to see how all the pieces in finance come together. In Part One, we provide the basic

[2]Harry M. Markowitz, "Portfolio Selection," *Journal of Finance* 7(1952): 77–91.

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framework of the financial system and the players in this system. In Part Two, we focus on financial management, and discuss financial statements, financial decision-making within a business enterprise, strategy, and decisions including dividends, financing, and investment management.

In Part Three, we focus more on the analytical part of finance, which involves valuing assets, making investment decisions, and analyzing performance. In Part Four, we introduce you to investments, which include derivatives and risk management, as well as portfolio management. In this part, we also explain the basic methods that are used to value stocks and bonds, and some of the theories behind these valuations.

THE BOTTOM LINE

- Finance blends together economics, psychology, accounting, statistics, mathematics, and probability theory to make decisions that involve future outcomes.
- We often characterize finance as comprised of three related areas: capital markets and capital market theory, financial management, and investment management.
- Capital markets and capital market theory focus on the financial system that includes markets, intermediaries, and regulators.
- Financial management focuses on the decision-making of a business enterprise, which includes decisions related to investing in long-lived assets and financing these investments.
- Investment management deals with managing the investments of individuals and institutions.

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QUESTIONS

1. What distinguishes investment management from financial management?
2. What is the role of a discount rate in decision-making?
3. What is the responsibility of the investment manager with respect to the investment portfolio?
4. Distinguish between capital budgeting and capital structure.
5. What are current assets?

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6. If a market is price efficient,
   a. Can an investor “beat the market”?
   b. Which type of portfolio management—active or passive—is best?
7. What does the financing decision of a firm involve?
8. List the general steps in the risk management of a company.
9. What is enterprise risk management?
10. List the five activities of an investment manager.

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