AFTER STUDYING THIS CHAPTER, YOU SHOULD BE ABLE TO:

• Define what is meant by finance.
• Explain why finance should be studied.
• Describe the basic requirements of an effective financial system.
• Identify the major financial institutions and their roles in the financial system.
• Describe the four types of financial markets.
• Identify major types of securities traded in the securities markets.
• Describe the financial functions performed in the financial system.
• Identify and discuss some career opportunities in finance.

As we progress through this book, we will start each new chapter with a brief review of previously covered materials. This will provide you with a reference base for understanding the transition from topic to topic. After completing the text, you will not be at the end, but rather at the beginning, of what we hope is a successful business career—possibly one in finance.

The financial environment within which we live and work is comprised of a financial system, institutions, and markets. Part 1 of Finance focuses on developing an understanding of the financial institutions and markets that operate to make the financial system work efficiently. Chapter 2 describes the U.S. monetary system, including how it is intertwined with the capital formation process and how it has evolved. Current types of money in use are described and we discuss why it is important to control the growth of the money supply. In following chapters, we turn our attention to understanding how financial institutions, policy makers, and international developments impact how the financial system functions.

While it is impossible to predict what life has in store for each of us in terms of health, family, and career, everyone can be a productive member of society. Nearly all of us will take part in making social, political, and economic decisions. A basic understanding of the financial environment that encompasses the economy and financial system will help you in making informed economic choices.

Let us begin with the following quote by George Santayana, U.S. philosopher and poet:

Those who cannot remember the past are condemned to repeat it.

While this quotation refers to the need to know something about “history” so that individuals can avoid repeating past “bad” social, political, and economic decisions, it is equally important to the field of finance. It is the responsibility of all individuals
to be able to make informed public choices involving the financial environment. By understanding the financial environment and studying the financial system, institutions and markets, investments, and financial management, individuals will be able to make informed economic and financial choices that will lead to better financial health and success. After studying the materials in this book, you will be better informed to make choices that affect the economy and the financial system, as well as be better prepared for a business career—possibly even one in the field of finance.

**WHAT IS FINANCE?**

The financial environment encompasses the financial system, institutions, markets, and individuals that make the economy operate efficiently. Finance is the study of how individuals, institutions, governments, and businesses acquire, spend, and manage money and other financial assets. Understanding finance is important to all students regardless of discipline or area of study because there are financial implications in nearly all business and economic decisions. The decision to spend or consume (new clothes or dinner at a fancy restaurant) now rather than save or invest (for spending or consuming hopefully more in the future) is an everyday decision that we all face.

Figure 1.1 depicts the financial environment in terms of the financial system and the three areas of finance—insti tutions and markets, investments, and financial management. Notice that while we identify three distinct finance areas, these areas do not operate in isolation but rather interact or intersect with each other. Our

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**Figure 1.1**
The Financial Environment
focus in this book is to provide the reader with exposure to all three areas, as well as show how they are integrated. Of course, students pursuing a major or area of emphasis in finance will take multiple courses in one or more of these areas.

**Financial institutions** are organizations or intermediaries that help the financial system operate efficiently and transfer funds from savers and investors to individuals, businesses, and governments that seek to spend or invest the funds in physical assets (inventories, buildings, and equipment). **Financial markets** are physical locations or electronic forums that facilitate the flow of funds amongst investors, businesses, and governments. **Investments** involve the sale or marketing of securities, the analysis of securities, and the management of investment risk through portfolio diversification. **Financial management** involves financial planning, asset management, and fund raising decisions to enhance the value of businesses.

Finance has its origins in economics and accounting. Economists use a supply-and-demand framework to explain how the prices and quantities of goods and services are determined in a free-market economic system. Accountants provide the record-keeping mechanism for showing ownership of the financial instruments used in the flow of financial funds between savers and borrowers. Accountants also record revenues, expenses, and profitability of organizations that produce and exchange goods and services.

Efficient methods of production and specialization of labor can exist only if there is an effective means of paying for raw materials and final products. Businesses can obtain the money needed to buy capital goods such as machinery and equipment only if a mechanism has been established for making savings available for investment. Similarly, federal and other governmental units, such as state and local governments and tax districts, can carry out their wide range of activities only if efficient means exist for raising money, for making payments, and for borrowing.

Financial institutions, financial markets, and investment and financial management are crucial elements of the financial environment and well-developed financial systems. Financial institutions are intermediaries, such as banks, insurance companies, and investment companies that engage in financial activities to aid the flow of funds from savers to borrowers or investors. Financial markets provide the mechanism for allocating financial resources or funds from savers to borrowers. Individuals make decisions as investors and financial managers. Investors include savers and lenders as well as equity investors. While we focus on financial managers in this book, we recognize that individuals also must be continuously involved in managing their personal finances. Investment management involves decision-making relating to issuing and investing in stocks and bonds. Financial management in business involves decision-making relating to the efficient use of financial resources in the production and sale of goods and services. The goal of the financial manager in a profit-seeking organization is to maximize the owners’ wealth. This is accomplished through effective financial planning and analysis, asset management, and the acquisition of financial capital. Financial managers in not-for-profit organizations aim to provide a desired level of services at acceptable costs and perform the same financial management functions as their for-profit counterparts.

As we progress through this book, we offer two themes within the financial institutions and markets, investments, and financial management topic areas. In each chapter we provide boxed materials relating to small business practice and personal financial planning. Successful businesses typically progress through a series of life-cycle stages—from the idea stage through to exiting the business. More specifically, the successful business typically moves through five stages: development stage, startup stage, survival stage, rapid growth stage, and
Entrepreneurial finance is the study of how growth-driven, performance-focused, early-stage (from development through early rapid growth) firms raise financial capital and manage their operations and assets. Our small business practice boxes focus on operating and financial issues faced by early-stage firms. Personal finance is the study of how individuals prepare for financial emergencies, protect against premature death and the loss of property, and accumulate wealth over time. Our personal financial planning boxes focus on planning decisions made by individuals in regards to saving and investing their financial resources.

WHY STUDY FINANCE?

There are several reasons to study finance.

1. You should want to be able to make informed economic decisions.

As we will see, the operation of the financial system and the performance of the economy are influenced by policy makers. Individuals elect many of these policy makers, such as the president and congresspersons. Since these elected officials have the power to alter the financial system by passing new laws and their decisions can impact on the level of economic activity, it is important that individuals be informed when making political and economic choices. Do you want a balanced budget, lower taxes, free international trade, low inflation, full employment? Whatever your financial and economic goals may be, you need to be an informed participant if you wish to “make a difference.” Every individual should attain a basic understanding of finance as it applies to the financial system. Part 1 of this book focuses on understanding the roles of financial institutions and markets and how the financial system works.

2. You should want to acquire a basic knowledge of investments for business and personal reasons.

An understanding of finance should help you better understand how the institution, government unit, or business that you work for finances its operations. At a personal level the understanding of investments will enable you to better manage your existing financial resources, and provide the basis for making sound decisions for accumulating wealth over time. Thus, in addition to understanding finance basics relating to the financial system and the economy, you also need to develop an understanding of the factors that influence interest rates and security prices. Part 2 of this book focuses on understanding the characteristics of stocks and bonds, how they are valued, securities markets, and how to make risk versus return investment decisions.

3. You should want to acquire a basic understanding of financial management or business finance for career or professional enhancement reasons.

Even if your “business interest” is in a non-finance career or professional activity, you likely will need to interact with finance professionals both within and outside your firm or organization. To do so will require a basic knowledge of the concepts, tools, and applications of financial management. Part 3 of this book focuses on providing you with an understanding of how finance is applied within a business firm by focusing on decision making by financial managers.

Of course, you may be interested in pursuing a career in finance or at least want to know what people who work in finance actually do. We will begin describing career opportunities in finance later in this chapter and will continue to provide Career Opportunities in Finance boxes throughout the book.
OVERVIEW OF THE FINANCIAL SYSTEM

An effective financial system is a complex mix of government and policy makers, a monetary system, financial institutions, and financial markets that interact to expedite the flow of financial capital from savings into investment. Figure 1.2 depicts a simplified view of the U.S. financial system. First, an effective financial system must have several sets of policy makers who pass laws and make decisions relating to fiscal and monetary policies. These policy makers include the President, Congress, the U.S. Treasury, and the Federal Reserve Board. Since the U.S. operates within a global economy, political and economic actions of foreign policy makers impact, although indirectly, on the U.S. financial system and its operations.

Second, an effective financial system needs an efficient monetary system for creating and transferring money. Third, an effective financial system also must have financial institutions that support capital formation either by channeling savings into investment in physical assets or by fostering direct financial investments by individuals in financial institutions and businesses. We refer to these activities as the savings-investment process. Fourth, an effective financial system must have financial markets that facilitate the transfer of financial assets amongst individuals, institutions, businesses, and governments.

The monetary system must provide an efficient medium for exchanging goods and services. A way to measure prices, called a unit of account, is a basic requirement. The unit of account in the United States is the U.S. dollar. The unit of account must be universally accepted if exchange is to function smoothly. Its value

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**FIGURE 1.2**
Overview of the U.S. Financial System

- **Policy Makers**
  - President, Congress, & U.S. Treasury
  - Federal Reserve Board
  - Role: pass laws & set fiscal & monetary policies

- **Monetary System**
  - Federal Reserve Central Bank
  - Commercial Banking System
  - Role: create & transfer money

- **Financial Institutions**
  - Role: accumulate & lend/invest savings

- **Financial Markets**
  - Role: market & facilitate transfer of financial assets
CHAPTER ONE  O  The Financial Environment

must remain reasonably stable if it is to be used widely. And there must be convenient means to pay for goods and services purchased, whether the purchase is a pack of chewing gum or a business worth millions of dollars. In addition to establishing money as the medium of exchange in the U.S., the monetary system must also be able to create and transfer money and checks that reflect different amounts of money and which can be easily transferred or moved throughout the financial system. We discuss the U.S. monetary system in detail in Chapter 2.

A financial system must make possible the creation of productive capital on a scale large enough to meet the demands of the economy. Productive capital formation takes place whenever resources are used to produce buildings, machinery, or other equipment for the production of goods for consumers or producers. In a simple economy, such as a self-sufficient, one-person farm, this process takes place directly. For example, the farmer creates capital by building a new barn. In a highly developed economy, productive capital formation typically takes place indirectly. If individuals, businesses, or governmental units do not need to spend all of their current income, they save some of it. If these savings are placed with a financial institution, they will be made available in the form of loans to others who use them to buy buildings, machinery, or equipment. The indirect process of productive capital formation can work only if the proper legal instruments and financial institutions exist. Then savers will feel secure transferring their savings to businesses and other institutions that need the savings. The role of depository and other institutions in the financial system is discussed in Chapter 3.

Financial markets are necessary for productive capital formation. Financial markets are needed to transfer financial assets, such as stocks and bonds, and to convert such assets into cash. They encourage investment by providing the means for savers to convert their financial assets quickly and easily into cash when needed. For example, millions of people are willing to invest billions of dollars in IBM, General Electric, and other companies because the New York Stock Exchange makes it possible to sell their shares to other investors easily and quickly.

Figure 1.2 shows that policy makers, such as the Congress or Federal Reserve Board of Governors, can impact on and even change one or more of the basic requirements or elements of the U.S. financial system. We will cover the Federal

INTERNET ACTIVITY

Go to the Business Week website at www.businessweek.com and identify three major business developments or topics. How are these business topics related to the financial environment?

SMALL BUSINESS PRACTICE

Importance of Small Firms in the U.S. Economy

As the American economy moves from the industrial age to the information age, dramatic changes have been taking place in the importance of small businesses. While large firms with 500 or more employees continued to downsize and restructure throughout the 1990s, small firms provided the impetus for economic growth.

Between 1976 and 1990 firms with fewer than 500 employees provided over one-half of total employment and 65 percent of net new jobs in the U.S. During the 1990s, small firms provided almost all of the net new jobs. For example, data for the 1992–1996 period show that small firms were responsible for creating nearly 12 million new jobs while large firms exhibited a decline in their number of employees.

Why have small firms been so successful in creating new jobs? A recent white paper by the Small Business Administration suggests two reasons. First, small firms provide a crucial role in technological change and productivity growth. Market economies change rapidly and small firms are able to adjust quickly. Second, small firms provide the mechanism and incentive for millions of individuals to pursue the opportunity for economic success.

Others may argue that it is the entrepreneurial spirit and activity that account for the importance of small firms in the U.S. economy. Whatever the reason(s), the ongoing growth of small businesses continues to be an important stimulus to the economy as we enter the 21st century.

Source: Small Business Administration, Office of Advocacy.
Reserve System in Chapter 4 and discuss how policy makers influence the economy and the financial system in Chapter 5. Economic policy and political decisions made in foreign financial systems have an external impact on the U.S. financial system by influencing international trade and the flow of financial capital among countries. For example, economic recession and political developments in southeast Asia during the latter part of the 1990s caused U.S. policy makers to take actions to reduce the impact of these developments on the U.S. financial system and the global economy. We will discuss international trade and finance implications from a global perspective in Chapter 6.

Figure 1.2 also indicates that the monetary system, savings-investment process, and financial markets must rely on and make use of financial institutions and financial assets to carry out the financial system’s necessary financial functions. For a financial system to operate effectively and efficiently, it is necessary to create and transfer money, accumulate and lend/invest savings, and market and transfer financial assets or securities. In the next section we provide a brief discussion of the types of financial institutions that are currently an important part of the U.S. financial system. This is followed by a brief discussion of the types of U.S. financial markets. Then our attention turns to key types of financial securities that are traded in the securities markets.

### TYPES OF FINANCIAL INSTITUTIONS

The current system of financial institutions in the United States, like the monetary system, evolved over time to meet the needs of the country’s citizens and to facilitate the savings-investment process. Individuals may save and grow their savings with the assistance of financial institutions. While individuals can invest directly in the securities of business firms and government units, most individuals invest indirectly through financial institutions who do the lending and investing for them. **Financial intermediation** is the process by which individual savings are accumulated in financial institutions and, in turn, lent or invested.

Figure 1.3 shows the major types of financial institutions grouped into four categories—depository institutions, contractual savings organizations, securities firms, and finance firms.

<table>
<thead>
<tr>
<th>Financial Institutions Categories</th>
<th>Primary Sources of Funds</th>
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<tbody>
<tr>
<td><strong>DEPOSITORY INSTITUTIONS</strong></td>
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<tr>
<td>Commercial banks</td>
<td>Individual savings</td>
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<tr>
<td>Savings and bond associations</td>
<td>Individual savings</td>
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<tr>
<td>Savings banks</td>
<td>Individual savings</td>
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<tr>
<td>Credit unions</td>
<td>Individual savings</td>
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<tr>
<td><strong>CONTRACTUAL SAVINGS ORGANIZATIONS</strong></td>
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<tr>
<td>Insurance companies</td>
<td>Premiums paid on policies</td>
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<tr>
<td>Pension funds</td>
<td>Employee/employer contributions</td>
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<tr>
<td><strong>SECURITIES FIRMS</strong></td>
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<tr>
<td>Investment companies (mutual funds)</td>
<td>Individual savings (investments)</td>
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<tr>
<td>Investment banking firms</td>
<td>Other financial institutions</td>
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<td>Brokerage firms</td>
<td>Other financial institutions</td>
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<td><strong>FINANCE FIRMS</strong></td>
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<td>Finance companies</td>
<td>Other financial institutions</td>
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<td>Mortgage banking firms</td>
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firms, and finance companies. **Depository institutions** accept deposits or savings from individuals and then lend these pooled savings to businesses, governments, and individuals. Depository institutions include commercial banks and thrift institutions. Commercial banks play a very important financial intermediation role by collecting deposits from individuals and lending to businesses and individuals. Thrift institutions, which include savings and loan associations (S&Ls), savings banks, and credit unions, accumulate individual savings and provide credit primarily to individuals. Like commercial banks, S&Ls lend to both businesses and individuals. Savings banks and credit unions focus on providing consumer and home mortgage loans to individuals seeking to purchase items such as automobiles and houses.

**Contractual savings organizations** collect premiums and contributions from participants and provide retirement benefits and insurance against major financial losses. Insurance companies provide financial protection to individuals and businesses for life, property, liability, and health uncertainties. Customers, called policyholders, pay premiums to insurance companies that invest these funds until the insured claims must be paid. Pension funds receive contributions from employees and/or their employers and invest the proceeds on behalf of the employees. Many business organizations provide private pension plans for their employees. State and some local governments also provide pension (retirement) funds for employees. Like depository institutions, both insurance companies and pension funds are actively involved in the financial intermediation process of gathering the funds of individuals (premium payments and employee contributions) and investing these pooled funds so that businesses can grow and government units can provide more benefits for its citizens.

**Securities firms** accept and invest individual savings and also facilitate the sale and transfer of securities between investors. Investment companies sell shares in their firms to individuals and others and invest the pooled proceeds in corporate and government securities. One type of investment company, commonly called mutual funds, is dominant in size and investor popularity. Mutual funds are open-end funds because they can issue an unlimited number of their shares to their investors and use the pooled proceeds to purchase corporate and government securities. Mutual funds grow by investing the funds of their existing investors in securities that will pay or distribute cash and will appreciate in value. Successful mutual funds are able to attract more investor funds and, in turn, invest in more securities. Like depository institutions and contractual savings organizations, investment companies (particularly mutual funds) perform an important financial intermediation function.

Investment banking firms sell or market new securities issued by businesses to individual and institutional investors. Brokerage firms assist individuals who want to purchase new securities issues or who want to sell previously purchased securities. Investment banking and brokerage activities are often combined in the same firms. However, unlike mutual funds, investment banking and brokerage firms are not actively involved in financial intermediation. Rather than gathering the savings of individuals, these firms obtain their financial capital to carry out their activities from their own resources or from other financial institutions.

**Finance firms** provide loans directly to consumers and businesses, as well as help borrowers obtain mortgage loans on real property. Some consumer-focused finance companies finance installment loan purchases of automobiles and other durable goods, while others provide small loans to individuals and households. Businesses that are unable to obtain financing from commercial banks often turn to finance companies that make commercial or business loans. Mortgage banking
firms, sometimes just called mortgage companies, “originate” real estate mortgages by bringing together borrowers and institutional investors. However, finance organizations usually don’t perform financial intermediation roles since they obtain their own financing from other financial institutions rather than from individual savers. We cover depository, contractual savings, and finance companies in greater detail in Chapter 3. Securities firms are further covered in Part 2, Investments.

Few of today’s financial institutions existed during the American colonial period. Only commercial banks and insurance companies (life and property) can be traced back prior to 1800. Savings banks and S&Ls began developing during the early 1800s. Investment banking firms (and organized securities exchanges) also can be traced back to the first half of the 1800s. No new major financial intermediaries evolved during the last half of the nineteenth century. Credit unions, pension funds, mutual funds, and finance companies began during the early part of the twentieth century. Thus, throughout much of the 1900s and into the 21st century, emphasis has been on redefining and restructuring existing financial institutions rather than introducing new ones.

TYPES OF FINANCIAL MARKETS

There are four types of financial markets—securities markets, mortgage markets, derivatives markets, and currency exchange markets. Most of us have some idea about the markets for securities. Securities markets are physical locations or electronic forums where debt and equity securities are sold and traded. Debt securities are obligations to repay borrowed funds. Federal, state, and local governments can issue debt securities, while business corporations and financial institutions can issue both debt and equity securities. Equity securities are ownership rights in businesses and institutions. Corporations can raise funds either through a private placement that involves issuing new securities directly to specific investors or through a public offering that involves selling new securities to the general public.

There are primary and secondary markets for debt and equity securities. The initial offering of debt and equity securities to the public takes place in primary securities markets. Proceeds, after issuing costs, from the sale of new securities goes to the issuing business or government issuer. The primary market is the only “market” where the security issuer directly benefits (receives funds) from the sale of its securities.
Secondary securities markets for securities facilitate the transfer of previously issued securities from existing investors to new investors. Security transactions or transfers typically take place on organized security exchanges or in the electronic over-the-counter market. Individuals and other investors can actively buy and sell existing securities in the secondary market. While these secondary market investors may make gains or losses on their security investments, the issuer of the securities does not benefit (nor does it lose) from these activities. The secondary market for securities is typically divided into short-term (money) and long-term (capital) market categories. We discuss primary and secondary securities markets in detail in Chapter 11.

Mortgage markets are markets in which mortgage loans, backed by real property in the form of buildings and houses, are originated and sometimes trade. Mortgage loans are usually long-term loans backed by real property and typically are repaid in monthly installments of interest and a partial repayment of the loan amount that was borrowed. If a mortgage loan is not repaid by the borrower, the lender can seize and sell the pledged real property under foreclosure laws. While it continues to be difficult to buy and sell individual home mortgages in a secondary market, standardized high-quality mortgages have been “pooled” together in recent years into mortgage-backed securities that have active secondary markets. Home mortgage loans to individuals are made available primarily through depository institutions and mortgage companies, which we cover in Chapter 3.

Derivatives markets facilitate the purchase and sale of derivative securities, which are financial contracts that derive their values from underlying securities or from other related financial assets. A familiar form of derivative security is the opportunity to buy or sell a corporation’s equity securities for a specified price and within a certain amount of time. Derivative securities may be used to speculate on the future price direction of the underlying financial assets, or to reduce price risk associated with holding the underlying financial assets. Organized exchanges handle standardized derivative security contracts, while negotiated contracts are handled in electronic markets often involving commercial banks or other financial institutions. We discuss derivative securities in the Learning Extension to Chapter 11.

Currency exchange markets are electronic markets in which banks and institutional traders buy and sell various currencies on behalf of businesses and other clients. In the global economy, consumers may want to purchase goods produced, or services provided, in other countries. Likewise, an investor residing in one country may wish to hold securities issued in another country. For example, a U.S. consumer may wish to purchase a product in a foreign country. If the product is priced in the foreign country’s currency, it may be necessary to exchange U.S. dollars for the foreign currency in order to complete the transaction. Businesses that sell their products in foreign countries usually receive payment in the foreign currencies. However, because the relative values of currencies may change, firms often use the currency exchange markets to reduce the risk of holding too much of certain currencies. We discuss currency exchange rates and currency exchange markets in Chapter 6.

**Types of Securities**

Money is the fundamental measure of wealth. In addition to money, an individual or a business also measures its wealth in terms of the real and financial assets or claims that it holds. Real assets include the direct ownership of land, buildings or homes, equipment, inventories, durable goods, and precious metals.
Financial assets or claims are debt instruments, equity securities, and other financial contracts that are backed by real assets. Financial assets or claims are debt instruments, equity securities, and other financial contracts that are backed by real assets. A loan to you to purchase an automobile usually provides for the lender to hold the auto title (ownership) until the loan is repaid. Long-term debt issued by a corporation may represent a claim against specific assets, such as buildings and equipment, or the general assets of the issuer. A mortgage loan to you will be backed by the house against which the loan is being made.

Relatively few of the many types of financial assets actually require the use of secondary financial markets. Checkable deposits, such as checking accounts and share drafts, and time deposits, such as savings accounts held in depository institutions, are also examples of financial assets. In fact, all kinds of promissory notes or IOUs represent financial assets to their holders. When the public holds currency issued by the U.S. government, the currency is a financial asset. At the same time, it is a financial liability to the government.

Debt and equity securities are the primary types of financial claims that are actively traded in secondary markets. Money markets are the markets where debt securities with maturities of one year or less are traded. Capital markets include debt securities with maturities longer than one year and equity securities. Figure 1.4 indicates the major types of securities that are issued in primary securities markets and are traded in secondary securities markets. Three debt securities with maturities of one year or less are considered to be major money market securities. A treasury bill is short-term debt obligations issued by the U.S. federal government to meet its short-term borrowing needs when imbalances exist between tax revenues and government expenditures. Treasury bills are generally issued with maturities between three months (technically 90 days) and one year. Investors buy Treasury bills for safety and liquidity reasons. First, it is extremely unlikely that the federal government will default on its debt obligations. Second, there is a very active secondary money market for Treasury bills so that investors can easily sell them at any time before maturity if cash needs arise.

A negotiable certificate of deposit, or negotiable CD, is a short-term debt instrument issued by depository institutions to individual or institutional depositors. Negotiable certificates of deposit are issued by commercial banks in denominations of $100,000 or more with typical maturities ranging from one month to one year. Negotiable CDs are money market securities with an active secondary market that allows short-term investors to easily match their cash or liquidity needs when they arise. It is important, of course, to recognize that negotiable CDs differ from smaller-denomination CD time deposits offered by depository institutions to individual depositors. Small deposit CDs are nonnegotiable and must be redeemed with the issuer and thus no secondary securities market exists for them. In fact, owners of nonnegotiable CDs redeemed before maturity usually are charged an interest deduction penalty.

Businesses also often find it necessary to borrow short-term to meet temporary imbalances between when cash is received from sales and when bills must be paid. Commercial paper is a short-term unsecured promissory note issued by a high credit-quality corporation. Maturities on commercial paper are generally one to three months in length. However, since there is a very active secondary money market for commercial paper, purchasers can easily sell their commercial paper holdings at any time to meet their cash needs.

Bonds and stocks are the principal securities traded in the capital markets. Bonds are debt securities with maturities greater than one year. Three major types of bonds, along with corporate stocks, are identified under the capital markets category in Figure 1.4. A treasury bond is a debt security issued by the
U.S. federal government with a typical maturity ranging from five to 20 years. Treasury bonds are sold to raise funds needed to reconcile longer-term imbalances between tax receipts and government expenditures. These bonds have very low risks of default and investors know that they are easily marketable in the secondary securities market. For example, if an investor initially purchases a 20-year federal government bond and later identifies another investment opportunity, the bond can be easily sold in the secondary capital market. A municipal bond is a debt security issued by a state or local government. Maturities on state and local government bonds, like Treasury bonds, often are in the five-year to 20-year range. However, municipal bonds issued to build airports or bridges may have their maturities set approximately equal to the expected lives of the assets being financed. Some investors find municipal bonds to be attractive investments because the interest paid on these securities are exempt from federal income taxes, and also because these bonds can be sold in a secondary securities market.

Bonds and stocks may be issued by corporations and are considered to be capital market securities. Corporate bonds are typically issued with five- to 20-year maturities with proceeds often being used for capital expenditures for plant and equipment investments. Common stocks, the most prevalent type of stocks, represent ownership shares in corporations. Corporations issue new shares of their common stocks in the primary market to raise funds for capital expenditures and investments in inventories. Active secondary markets exist for trading common stocks after they are initially issued.

**INTERNATIONAL SECURITIES AND MARKETS**

Debt and equity markets also are well developed in many foreign countries. Corporations domiciled in foreign countries are able to issue bonds and stocks in their own home currencies and markets. Corporations also can sell their stocks in securities markets outside their home countries as a way of broadening investor recognition and raising more funds. For example, a U.S. corporation may simultaneously sell a new stock issue in the United States and in Germany and Italy.

Corporations and governments also can sell debt securities in the Eurobond and foreign bond markets. A Eurobond is a bond denominated in U.S. dollars that is sold to investors located outside the United States. For example, a German corporation may sell a $20-million Eurobond to German and Swiss investors that will pay interest and repay the amount borrowed at maturity in U.S. dollars. Likewise,
a U.S. corporation may issue its own $20-million U.S. dollar-denominated Eurobond for sale to German and Dutch investors. In contrast, a foreign bond is a bond issued by a corporation or government that is denominated in the currency of a foreign country where it is sold. For example, a U.S. corporation may issue a bond denominated in euros to investors in Belgium and the Netherlands. The euro is the common currency that has replaced the individual currencies of 12 member countries of the European Union.¹

International money markets also are important to business borrowers that are interested in matching their currency inflows and outflows for a given country or countries. For example, a U.S.-based corporation may have a foreign subsidiary that produces and sells products in European countries that have adopted the euro as their common currency. If the U.S. corporation’s subsidiary is short of euros for conducting day-to-day business operations, the subsidiary may borrow short-term by issuing commercial paper denominated in euros in Italy. Likewise, during periods when there are excess euros from operations, the U.S. foreign subsidiary may exchange its excess euros for a negotiable CD issued by a German bank. We discuss currency exchange relationships in Chapter 6 and international aspects of finance throughout this book.

**FINANCIAL FUNCTIONS IN THE U.S. FINANCIAL SYSTEM**

In the U.S. economy, the government and private financial institutions of many kinds have developed instruments and procedures to perform the financial functions listed in Figure 1.5. These financial functions may, in turn, be viewed as characteristics of the financial system that evolved to support the U.S. market

1Some confusion occurs when discussing the euro currency and a Eurobond. While the euro is a multi-country currency, the term Eurobond (which has been around much longer) refers not to the currency but rather to a bond denominated in U.S. dollars sold outside the United States.
The monetary system is responsible for creating and transferring money. Financial institutions efficiently accumulate savings and then lend or invest these savings. Financial institutions play important roles in the savings-investment process both through financial intermediation activities and in facilitating direct investments by individuals. Financial markets, along with certain securities firms, are responsible for marketing and transferring financial assets or claims.

**Creating Money**

Since money is something that is accepted as payment for goods, services, and debts, its value lies in its purchasing power. Money is the most generalized claim to wealth, since it can be exchanged for almost anything else. Most transactions in today’s economy involve money, and most would not take place if money were not available.

One of the most significant functions of the monetary system within the financial system is creating money, which serves as a medium of exchange. In the United States, the Federal Reserve System is primarily responsible for the amount of money that is created, although most of the money is actually created by depository institutions. A sufficient amount of money is essential for economic activity to take place at an efficient rate. Too little money constrains economic growth. Too much money often results in increases in the prices of goods and services.

**Transferring Money**

Individuals and businesses hold money for purchases or payments they expect to make in the near future. One way to hold money is in checkable deposits at depository institutions. When money is held in this form, payments can easily be made by check. The check is an order to the depository institution to transfer money to the party who received the check. This is a great convenience, since checks can be written for the exact amount of payments, can be safely sent in the mail, and provide a record of payment. Institutions can also transfer funds between accounts electronically, making payments without paper checks. Funds transfers can be made by telephone or at automated teller machines (ATMs) connected to a bank’s computer.

**Accumulating Savings**

A function performed by financial institutions is the accumulation or gathering of individual savings. Most individuals, businesses, and organizations do not want to take the risks involved in having cash on hand. Even if cash amounts are relatively small, they are put into a depository institution for safekeeping. When all the deposits are accumulated in one place, they can be used for loans and investments in amounts much larger than any individual depositor could supply. Depository institutions regularly conduct advertising campaigns and other promotional activities to attract deposits.

**Lending and Investing Savings**

Another basic function of financial institutions is lending and investing. The money that has been put into these intermediaries may be loaned to businesses, farmers, consumers, institutions, and governmental units. It may be loaned for varying time periods and for different purposes, such as to buy equipment or to pay current bills. Some financial institutions make loans of almost all types. Others specialize in only one or two types of lending. Still other financial institutions invest all or part
of their accumulated savings in the stock of a business or in debt obligations of businesses or other institutions.

**MARKETING FINANCIAL ASSETS**

New financial instruments and securities are created and sold in the primary securities market. For example, a business may want to sell shares of ownership, called stock, to the general public. It can do so directly, but the process of finding individuals interested in investing funds in that business is likely to be difficult, costly, and time-consuming. A particular financial intermediary, an investment banking firm, can handle the sale of shares of ownership. The function of the investment banking firm is essentially one of merchandising. Brokerage firms market existing or “seasoned” instruments and securities.

**TRANSFERRING FINANCIAL ASSETS**

Several types of financial institutions facilitate or assist the processes of lending and selling securities. Brokerage firms market and facilitate the transferring of existing or “seasoned” instruments and securities. Also, if shares of stock are to be sold to the general public, it is desirable to have a ready market in which such stocks can be resold when the investor desires. Organized stock exchanges and the over-the-counter market provide active secondary markets for existing securities. The ability to buy and sell securities both quickly and at “fair market values” is important in an efficient financial system.

**CAREERS IN FINANCE**

Career opportunities in finance are available in areas of financial management, depository financial institutions, contractual savings and real property organizations, and securities markets and investment firms. While you may aspire to own your own business or be a chief executive officer (CEO) or chief financial officer (CFO) in a major corporation, most of us must begin our careers in an entry-level position. Following are some of the ways to get started in a finance career.

1. **Financial management**

   Larger businesses typically divide their finance activities into treasury and control functions, whereas smaller firms often combine these functions. The treasurer is responsible for managing the firm’s cash, acquiring and managing the firm’s assets, and selling stocks and bonds to raise the financial capital necessary to conduct business. The controller is responsible for cost accounting, financial accounting, and tax record-keeping activities. Entry-level career opportunities include:

   • Cash management analyst: involves monitoring and managing the firm’s day-to-day cash inflows and outflows
   • Capital expenditures analyst: involves estimating cash flows and evaluating asset investment opportunities
   • Credit analyst: involves evaluating credit applications and collecting amounts owed by credit customers
   • Financial analyst: involves evaluating financial performance and preparing financial plans
   • Cost analyst: involves comparing actual operations against budgeted operations
   • Tax analyst: involves preparing financial statements for tax purposes

**INTERNET ACTIVITY**

Go to the Wall Street Journal web site on “business careers” at www.careerjournal.com and identify articles relating to finance careers. What trends can you identify?

**CONCEPT CHECK**

What are the financial functions that take place in the financial system?
Students are advised today to prepare for several business careers during their working lifetimes. Corporate America continues to restructure and reinvent itself. At the same time, new industries associated with the information age are developing and old industries are dropping by the wayside. These developments make it even more likely that each of you will have the opportunity for multiple business careers.

Graduates of Harvard College are periodically surveyed concerning their work experiences and careers. For example, a Fortune magazine article in the mid-1990s surveyed the Harvard College class of 1970 concerning their 25-year business careers. Of the responding graduates, over one-half had worked for four or more employers while one-fourth had been fired (or in kinder terms were “involuntarily terminated”). Over one-half of the men and women respondents had experienced at least two substantially different careers and in many instances significant retraining was required.

Remember as you read this book that even if you don’t currently plan on a career in finance, learning about finance might become very important to you later in your working lifetime. And, no matter where your business career takes you, there will always be a need to know and understand your personal finances.

2. Depository financial institutions
Banks and other depository institutions offer the opportunity to start a finance career in consumer or commercial lending. Banks also hold and manage trust funds for individuals and other organizations. Entry-level career opportunities include:

- Loan analyst: involves evaluating consumer and or/commercial loan applications
- Bank teller: involves assisting customers with their day-to-day checking and banking transactions
- Investments research analyst: involves conducting research on investment opportunities for a bank trust department

3. Contractual savings and real property organizations
Insurance companies, pension funds, and real estate firms also provide opportunities for starting a career in finance. These institutions need a variety of employees willing to blend marketing or selling efforts with financial expertise. Entry-level career opportunities include:

- Insurance agent (broker): involves selling insurance to individuals and businesses and participating in the processing of claims
- Research analyst: involves analyzing the investment potential of real property and securities for pension fund holdings
- Real estate agent (broker): involves marketing and selling or leasing residential or commercial property
- Mortgage analyst: involves analyzing real estate loan applications and assisting in the arranging of mortgage financing

4. Securities markets and investment firms
Securities firms and various investment-related businesses provide opportunities to start a finance career in the investments area. Opportunities include buying and selling seasoned securities, analyzing securities for investment potential, marketing new securities issues, and even helping individuals plan and manage their personal financial resources. Entry-level career opportunities include:

- Stockbroker (account executive): involves assisting clients in purchasing stocks and bonds and building investment wealth

INTERNET ACTIVITY
The Monster.com web site at www.monster.com will provide information on current finance jobs that are available. Click on “search jobs” and then “finance/economics” and list some of the entry-level finance positions available.
• Security analyst: involves analyzing and making recommendations on the investment potential of specific securities
• Investment banking analyst: involves conducting financial analysis and valuation of new securities being issued
• Financial planner assistant: involves analyzing individual client insurance needs and investment plans to meet retirement goals

While we have focused on entry-level careers in profit-motivated businesses and financial organizations, careers in finance are also available in government or not-for-profit organizations. Finance opportunities at the federal or state government levels include managing cash funds, making asset expenditure decisions, and issuing debt securities to raise funds. Hospitals and other not-for-profit organizations also need expert financial managers to manage assets, control costs, and obtain funds. Financial and other analysts are hired both by government units and not-for-profit organizations to perform these tasks.

All of these entry-level finance job opportunities can be found in the international setting as well. For example, many businesses engaged in producing and marketing products and services in foreign markets often offer employees opportunities for international job assignments. Large U.S. banks also offer international job experiences through their foreign banking operations. Furthermore, since worldwide securities markets exist, securities analysts and financial planners often must analyze and visit foreign-based firms.

An individual’s “career profile” is provided at the end of each chapter. In addition, several more detailed “career opportunities in finance” boxes are presented in selected chapters. We hope that these materials provide a better understanding of some of the many career opportunities that currently exist in the finance field. We are also sure that new finance job opportunities will occur in the future as the field continues to develop and change.

**THE PLAN OF STUDY**

The subject matter of this book includes the entire scope of the financial environment from the perspective of the financial system and the three areas of finance— institutions and markets, investments, and financial management. You will learn about the markets in which funds are traded and the institutions that participate in and assist these flows of funds. You will learn about the investments area of finance including the characteristics of debt and equity securities that are issued, the markets where securities are traded, and investment risk-return concepts. You will study the financial management principles and concepts that guide financial managers to make sound financial planning, asset acquisition, and financing decisions. International finance applications also are integrated throughout the text.

Part 1 focuses on the financial institutions, markets, and other participants that make the U.S. financial system operate effectively both domestically and within the global economy. Chapter 2 introduces the role of money within the overall financial system and its monetary system component. Chapter 3 focuses on the financial intermediation roles of depository and other financial institutions, as well as how they operate within the financial system. Chapter 4 discusses the Federal Reserve System. Chapter 5 discusses economic objectives, the role and actions of policy makers, and how money and credit are provided to...
Q: You work in the venture capital industry. Please explain what that means.
A: Our firm looks for entrepreneurial companies, especially in the high-tech field, where we can make an equity investment and hopefully produce a high return on our investment over a five-to-nine-year period. We also take an active role with the entrepreneurs to help them succeed.

Q: What kind of help do entrepreneurs need?
A: Most entrepreneurs are experts in their specific fields—computers, electronics, whatever—but they’re not experts in starting a business and making it profitable. We provide experience that can help a small company avoid common mistakes and improve its chance of survival.

Q: But success is not guaranteed.
A: Not at all. According to industry averages, we’ll lose our entire investment in almost half of the companies we fund. And only a handful turn into huge successes like Microsoft or Intel, which started very small. In the case of a big success, we might make fifty times our original investment. But these few big successes must make up for the many that don’t survive.

Q: Describe an entry-level position in venture capital.
A: I started as an investment analyst, which is really an apprentice kind of position. I was assigned to a different partner every six months and I helped those partners evaluate potential investment in new companies. There’s a lot of research involved—in the industry, the technology, the product, the management team of the company—and the investment analyst does a lot of that research. Then we compile our findings into a very comprehensive report that is used to make the investment recommendation.

Q: How were you qualified to evaluate these start-up companies?
A: I have an electrical engineering degree and worked with IBM during and after college. At IBM I was involved with the design of several of its early personal computers, so I learned a lot about the development process of new technology products. Not everyone brings a technology background into this business, but many do. It has helped me a lot. After IBM I got my MBA, which enabled me to gain the financial skills necessary to evaluate investment opportunities.

Q: What skills help you most in your job?
A: There are many aspects to building a successful company, so the job requires a broad set of skills. You have to understand the technology, the finances, tax considerations, the legal and securities aspects, negotiation, and whatever other issues arise. You must be able to successfully interact with many different people. And parallel thinking is also an absolute requirement. If you can’t juggle multiple issues and multiple projects, you would find this a very frustrating business.

Q: What’s the toughest part of this job?
A: It’s difficult to evaluate your results. It may be four, seven, ten years before we can tell if a new company is going to survive, much less succeed. It keeps you humble.
meet the needs of the economy. We conclude Part 1 with a chapter on international trade and finance because of its importance in understanding market economies worldwide.

Part 2 is concerned with the investments area of finance. Chapter 7 discusses the savings and investment process and its major role in the U.S. market economy. This is followed by Chapter 8, which describes the structure of interest rates. Time value of money concepts are covered in Chapter 9, and the characteristics and valuations of bonds and stocks are presented in Chapter 10. Chapter 11 discusses the characteristics and workings of the securities market. Part 2 concludes with Chapter 12, which describes financial return and risk concepts for a single asset or security and for portfolios of securities.

Part 3 focuses on the financial management of businesses. We begin in Chapter 13 with an introduction and overview of the types of business organizations and follow with a review of basic financial statements and financial data important to the financial manager. Chapter 14 discusses the need for, and the way in which to conduct, financial analysis of past performance and concludes with a section on financial planning for the future. Chapter 15 covers the management of working capital, while Chapter 16 focuses on sources of short-term business financing. We then turn our attention in Chapter 17 to the process and methods for conducting capital budgeting analysis. We conclude Part 3 with Chapter 18, which provides a discussion of capital structure and cost of capital concepts.

Of course, as we previously described graphically, the three areas of finance are not independent but rather are continually interacting or overlapping with each other. For example, financial institutions provide an important financial intermediation role by getting individual savings into the hands of businesses so that financial managers can efficiently use and invest those funds. Financial managers also rely heavily on the investments area of finance when carrying out their financial management activities. Corporations often need to raise funds in the primary securities markets and secondary securities markets, in turn, provide investors with the liquidity of being able to buy and sell previously issued securities. Our approach in this book is to provide survey exposure to all three areas of finance.

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<th>INSTITUTIONS AND MARKETS</th>
<th>INVESTMENTS</th>
<th>FINANCIAL MANAGEMENT</th>
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<tr>
<td>Financial institutions and financial markets are necessary components of an efficient financial system. Institutions perform an important financial intermediation role by gathering the savings of individuals and then lending the pooled savings to businesses that want to make investments.</td>
<td>Securities markets are also important components of an efficient financial system. The primary securities market facilitates raising funds by issuing new debt and equity securities. The secondary market for securities facilitates the transfer of ownership of existing securities among investors.</td>
<td>Businesses seek to raise additional funds to finance investment in inventories, equipment, and buildings needed to support growth in sales. Bank loans are important financing sources along with the proceeds from the issuance of new debt and equity securities.</td>
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SUMMARY

Finance is the study of how businesses and others acquire, spend, and manage money and other financial resources. More specifically, finance is composed of three areas—financial institutions and markets, investments, and financial management. However, these three areas are not independent of each other but rather intersect or overlap with each other. A survey approach to the study of finance thus covers all three areas.

An effective financial system requires policy makers, a monetary system, and financial institutions and financial markets to facilitate the flow of financial capital from savings into investments. Policy makers pass laws and set fiscal and monetary policies designed to manage the economy. A monetary system creates and transfers money. Financial institutions accumulate and lend/invest individual savings. Financial markets facilitate the transfer of securities and other financial assets. All of these activities operate together to create a smooth running and efficient financial system.

Four categories of financial institutions play important roles in the operation of the U.S. financial system. They are depository institutions, contractual savings organizations, securities firms, and finance firms. Depository institutions and contractual savings organizations play important roles in the financial intermediation process needed to move savings into investments. There are four types of financial markets—securities markets, mortgage markets, derivatives markets, and currency exchange markets. Treasury bills, negotiable CDs, and commercial paper trade in the money markets for securities. Government bonds and corporate stocks and bonds trade in the capital markets for securities. Debt and equity markets also are available outside the U.S., making it possible for corporations to raise financial capital by issuing securities both domestically and internationally.

KEY TERMS

- capital markets
- commercial paper
- contractual savings organizations
- currency exchange markets
- depository institutions
- derivatives markets
- entrepreneurial finance
- euro
- Eurobond
- finance
- finance firms
- financial assets (claims)
- financial environment
- financial institutions
- financial intermediation
- financial management
- financial markets
- financial system
- foreign bond
- investments
- money markets
- mortgage markets
- municipal bond
- negotiable certificate of deposit (CD)
- personal finance
- primary securities markets
- real assets
- secondary securities markets
- securities firms
- securities markets
- treasury bill
- treasury bond

DISCUSSION QUESTIONS

1. What is the financial environment? What is finance?
2. What are the three areas of finance?
4. Identify and briefly describe several reasons for studying finance.
5. What are the basic requirements of an effective financial system?
6. What is meant by the term financial intermediation?
7. Identify types of depository institutions and describe their primary sources of funds.
8. Identify examples of contractual savings organizations and describe their sources of funds.
9. Identify examples of securities firms and describe their primary sources of funds.
10. Identify examples of finance firms and describe their primary sources of funds.
11. What are the differences between primary and secondary securities markets?
12. Briefly describe the differences between money and capital markets.
13. Identify the four types of major financial markets.
14. Describe three major debt securities that trade in the money markets.
15. Identify several major securities that trade in the capital markets.
16. Briefly explain the difference between a Eurobond and a foreign bond.
17. Identify and briefly describe the financial functions in the financial system.
18. Indicate some of the career opportunities in finance available to business graduates today.
EXERCISES

1. Use information presented in the chapter to identify specific examples of financial intermediaries that operated in the United States prior to 1800. Also, provide specific examples of financial intermediaries that first began operating during the early part of the twentieth century (i.e., in the 1900s).

2. Obtain a current issue of the Federal Reserve Bulletin. Identify recent interest rates in the money and capital markets for U.S. federal government treasury bills and bonds (refer to Figure 1.4). Indicate how much, if any, the interest rates have changed over the past two years by accessing past Federal Reserve Bulletins.

3. Obtain a copy of a current issue of Business Week. Identify and be prepared to discuss articles that relate to one or more of the three areas of finance discussed in the chapter. Read and be prepared to discuss articles and issues under the “Finance” section.

4. Obtain a copy of a current issue of Business Week. Turn to the “International Business” section and identify global or international issues that relate to the study of finance from the perspective of the financial environment.