

# An Introduction to the Foundations of Financial Management

## Learning Objectives

After reading this chapter, you should be able to:

|                                                                                                                                                                                                  |                                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
|  <b>1</b> Identify the goal of the firm.                                                                         | <b>The Goal of the Firm</b>                                 |
|  <b>2</b> Understand the basic principles of finance, their importance, and the importance of ethics and trust. | <b>Five Principles That Form the Foundations of Finance</b> |
|  <b>3</b> Describe the role of finance in business.                                                            | <b>The Role of Finance in Business</b>                      |
|  <b>4</b> Distinguish between the different legal forms of business.                                           | <b>The Legal Forms of Business Organization</b>             |
|  <b>5</b> Explain what has led to the era of the multinational corporation.                                    | <b>Finance and the Multinational Firm: The New Role</b>     |

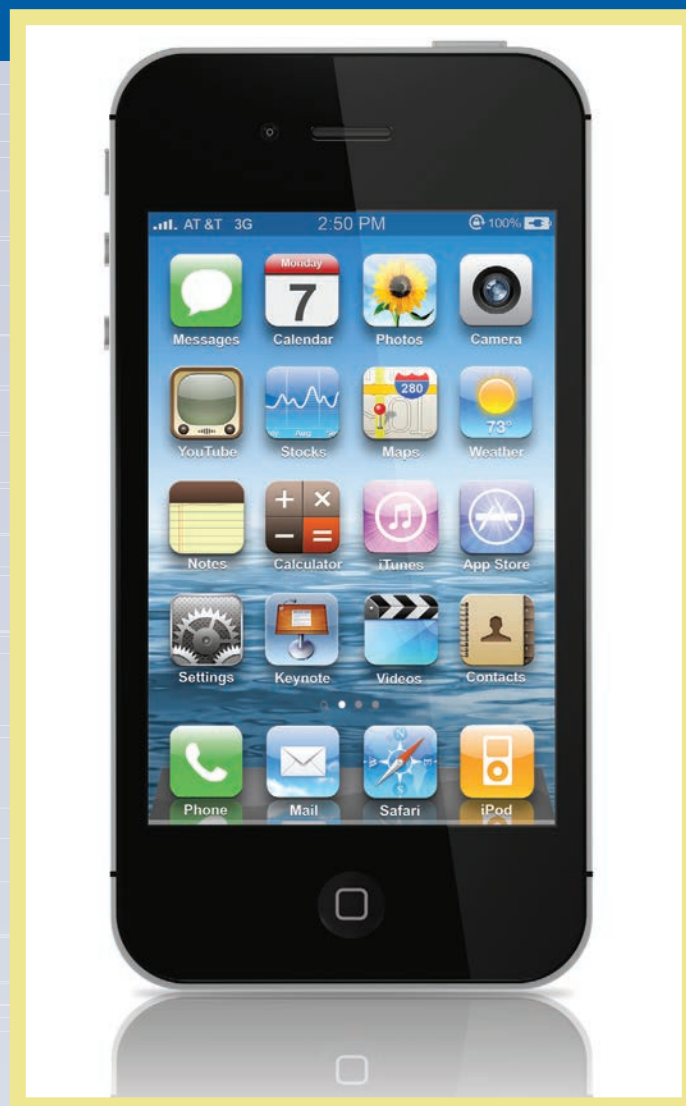
Apple Computer (AAPL) ignited the personal computer revolution in the 1970s with the Apple II and reinvented the personal computer in the 1980s with the Macintosh. But by 1997, it looked like it might be nearing the end for Apple. Mac users were on the decline, and the company didn't seem to be headed in any real direction. It was at that point that Steve Jobs reappeared, taking back his old job as CEO of Apple, the company he cofounded in 1976. To say the least, things began to change. In fact, between then and April 2012, the price of Apple's common stock climbed by over one hundred and sixteen-fold!

How did Apple accomplish this? The company did it by going back to what it does best, which is to produce products that make the optimal trade-off between ease of use, complexity, and features. Apple took its special skills and applied them to more than just computers, introducing new products such as the iPod, iTunes, the sleek iMac, the MacBook Air, iPod Touch, and the iPhone along with its unlimited "apps." Although all these products have done well, the success of the iPod has been truly amazing. Between the introduction of the iPod in October 2001 and the beginning of 2005, Apple sold more than 6 million of the devices. Then, in 2004, it came out with the iPod Mini, about the length and width of a business card, which has also been a huge success, particularly among women. How successful

has this new product been? By 2004, Apple was selling more iPods than its signature Macintosh desktop and notebook computers.

How do you follow up on the success of the iPod? You keep improving your products and you keep developing and introducing new products that consumers want. With this in mind, in October 2011, Apple unveiled its iPhone 4S, selling over 4 million phones in the first week. Then, in March 2012, during the same week that Apple's App Store downloads topped 25 billion, Apple introduced the New iPad, selling over 3 million units in the first week. In effect, Apple seems to have a never-ending supply of new, exciting products that we all want.

How did Apple make a decision to introduce the original iPod and now the iPad? The answer is by identifying a customer need, combined with sound financial management. Financial management deals with the maintenance and creation of economic value or wealth by focusing on decision making with an eye toward creating wealth. As such, this text deals with financial decisions such as when to introduce a new product, when to invest in new assets, when to replace existing assets, when to borrow from banks, when to sell stocks or bonds, when to extend credit to a customer, and how much cash and inventory to maintain. All of these aspects of financial management were factors in Apple's decision to introduce and continuously improve the iPod, Apple TV, iPhone, and iPad, and the end result is having a major financial impact on Apple.



In this chapter, we lay the foundation for the entire book by explaining the key goal that guides financial decision making: maximizing shareholder wealth. From there we introduce the thread that ties everything together: the five basic principles of finance. Finally, we discuss the legal forms of business. We close the chapter with a brief look at what has led to the rise in multinational corporations.

## The Goal of the Firm

The fundamental goal of a business is to create value for the company's owners (that is, its shareholders). This goal is frequently stated as "maximization of shareholder wealth." Thus, the goal of the financial manager is to create wealth for the shareholders, by making decisions that will maximize the price of the existing common stock. Not only does this goal directly benefit the shareholders of the company but it also provides benefits to society as scarce resources are directed to their most productive use by businesses competing to create wealth.

We have chosen maximization of shareholder wealth—that is, maximizing the market value of the existing shareholders' common stock—because all financial decisions ultimately affect the firm's stock price. Investors react to poor investment or dividend decisions by causing the total value of the firm's stock to fall, and they react to good decisions by pushing up the price of the stock. In effect, under this goal, good decisions are those that create wealth for the shareholder.

**b**<sup>1</sup> Identify the goal of the firm.

Obviously, there are some serious practical problems in using changes in the firm's stock to evaluate financial decisions. Many things affect stock prices; to attempt to identify a reaction to a particular financial decision would simply be impossible, but fortunately that is unnecessary. To employ this goal, we need not consider every stock price change to be a market interpretation of the worth of our decisions. Other factors, such as changes in the economy, also affect stock prices. What we do focus on is the effect that our decision *should have* on the stock price if everything else were held constant. The market price of the firm's stock reflects the value of the firm as seen by its owners and takes into account the complexities and complications of the real-world risk. As we follow this goal throughout our discussions, we must keep in mind one more question: Who exactly are the shareholders? The answer: Shareholders are the legal owners of the firm.

## Concept Check

1. What is the goal of the firm?
2. How would you apply this goal in practice?

**b<sup>2</sup>** Understand the basic principles of finance, their importance, and the importance of ethics and trust.

## Five Principles That Form the Foundations of Finance

To the first-time student of finance, the subject matter may seem like a collection of unrelated decision rules. This could not be further from the truth. In fact, our decision rules, and the logic that underlies them, spring from five simple principles that do not require knowledge of finance to understand. These five principles guide the financial manager in the creation of value for the firm's owners (the stockholders).

As you will see, while it is not necessary to understand finance to understand these principles, it is necessary to understand these principles in order to understand finance. Although these principles may at first appear simple or even trivial, they provide the driving force behind all that follows, weaving together the concepts and techniques presented in this text, and thereby allowing us to focus on the logic underlying the practice of financial management. Now let's introduce the five principles.



### Principle 1: Cash Flow Is What Matters

You probably recall from your accounting classes that a company's profits can differ dramatically from its cash flows, which we will review in Chapter 3. But for now understand that cash flows, not profits, represent money that can be spent. Consequently, it is cash flow, not profits, that determines the value of a business. For this reason when we analyze the consequences of a managerial decision we focus on the resulting cash flows, not profits.

In the movie industry, there is a big difference between accounting profits and cash flow. Many a movie is crowned a success and brings in plenty of cash flow for the studio but doesn't produce a profit. Even some of the most successful box office hits—*Forrest Gump*, *Coming to America*, *Batman*, *My Big Fat Greek Wedding*, and the TV series *Babylon 5*—realized no accounting profits at all after accounting for various movie studio costs. That's because "Hollywood Accounting" allows for overhead costs not associated with the movie to be added on to the true cost of the movie. In fact, the movie *Harry Potter and the Order of the Phoenix*, which grossed almost \$1 billion worldwide, actually lost \$167 million according to the accountants. Was *Harry Potter and the Order of the Phoenix* a successful movie? It sure was—in fact it was the 16th highest grossing film of all time. Without question, it produced cash, but it didn't make any profits.

There is another important point we need to make about cash flows. Recall from your economics classes that we should always look at marginal, or **incremental, cash flows** when making a financial decision. The incremental cash flow to the company as a whole is *the difference between the cash flows the company will produce both with and without the investment it's thinking about making*. To understand this concept, let's think about the incremental cash flows of the *Pirates of the Caribbean* movies. Not only did Disney make money on the

**incremental cash flow** the difference between the cash flows a company will produce both with and without the investment it is thinking about making.

movies, but it also increased the number of people attracted to Disney theme parks to go on the “Pirates of the Caribbean” ride. So, if you were to evaluate a *Pirates of the Caribbean* movie, you’d want to include its impact on sales throughout the entire company.

## Principle 2: Money Has a Time Value



Perhaps the most fundamental principle of finance is that money has a “time” value. Very simply, a dollar received today is more valuable than a dollar received one year from now because we can invest the dollar we have today to earn interest so that at the end of one year we will have more than one dollar.

For example, suppose you have a choice of receiving \$1,000 either today or one year from now. If you decide to receive it a year from now, you will have passed up the opportunity to earn a year’s interest on the money. Economists would say you suffered an “opportunity loss” or an “opportunity cost.” The cost is the interest you could have earned on the \$1,000 if you invested it for one year. The concept of opportunity costs is fundamental to the study of finance and economics. Very simply, the **opportunity cost** of any choice you make is *the highest-valued alternative that you had to give up when you made the choice*. So if you loan money to your brother at no interest, money that otherwise would have been loaned to a friend for 8 percent interest (who is equally likely to repay you), then the opportunity cost of making the loan to your brother is 8 percent.

**opportunity cost** the cost of making a choice in terms of the next best alternative that must be foregone.

In the study of finance, we focus on the creation and measurement of value. To measure value, we use the concept of the time value of money to bring the future benefits and costs of a project, measured by its cash flows, back to the present. Then, if the benefits or cash inflows outweigh the costs, the project creates wealth and should be accepted; if the costs or cash outflows outweigh the benefits or cash inflows, the project destroys wealth and should be rejected. Without recognizing the existence of the time value of money, it is impossible to evaluate projects with future benefits and costs in a meaningful way.

## Principle 3: Risk Requires a Reward

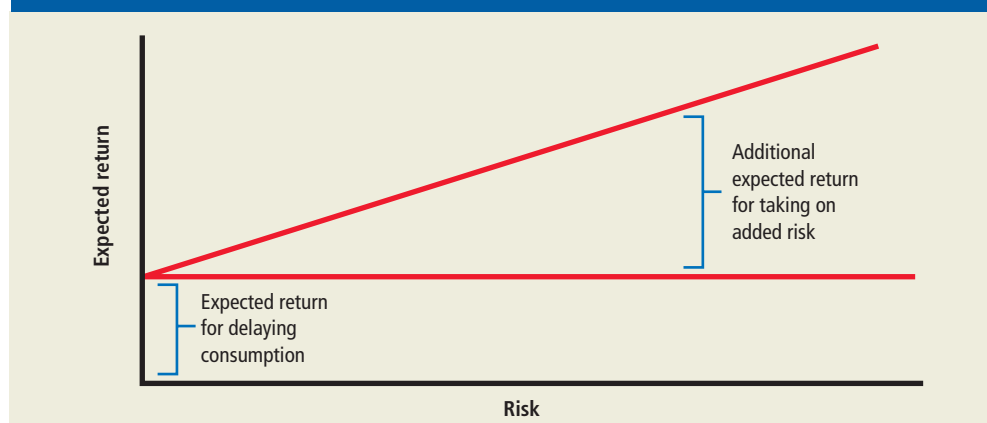


Even the novice investor knows there are an unlimited number of investment alternatives to consider. But without exception, investors will not invest if they do not expect to receive a return on their investment. They will want a return that satisfies two requirements:

- ◆ *A return for delaying consumption.* Why would anyone make an investment that would not at least pay them something for delaying consumption? They won’t—even if there is no risk. In fact, investors will want to receive at least the same return that is available for risk-free investments, such as the rate of return being earned on U.S. government securities.
- ◆ *An additional return for taking on risk.* Investors generally don’t like risk. Thus, risky investments are less attractive—*unless* they offer the prospect of higher returns. That said, the more unsure people are about how an investment will perform, the higher the return they will demand for making that investment. So, if you are trying to persuade investors to put money into a risky venture you are pursuing, you will have to offer them a higher expected rate of return.

Figure 1-1 (on page 6) depicts the basic notion that an investor’s rate of return should equal a rate of return for delaying consumption plus an additional return for assuming risk. For example, if you have \$5,000 to invest and are considering either buying stock in International Business Machines (IBM) or investing in a new bio-tech startup firm that has no past record of success, you would want the startup investment to offer the prospect of a higher expected rate of return than the investment in an established company like IBM.

Notice that we keep referring to the *expected* return rather than the *actual* return. As investors, we have expectations about what returns our investments will earn. However, we can’t know for certain what they *will* be. For example, if investors could have seen into the future, no one would have bought stock in AEterna Zentaris, Inc. (AEZS), the late-stage drug development company, on April 2, 2012. Why? Because on that day AEterna Zentaris

**FIGURE 1-1** The Risk–Return Trade-off

reported its colon cancer treatment failed to improve survival rates in a late-stage clinical trial. The result was that within minutes of the announcement, the company's stock price dropped by a whopping 66 percent.

The risk–return relationship will be a key concept as we value stocks, bonds, and proposed new investment projects throughout this text. We will also spend some time determining how to measure risk. Interestingly, much of the work for which the 1990 Nobel Prize for economics was awarded centered on the graph in Figure 1-1 and how to measure risk. Both the graph and the risk–return relationship it depicts will reappear often in our study of finance.



### Principle 4: Market Prices Are Generally Right

**efficient market** a market in which the prices of securities at any instant in time fully reflect all publicly available information about the securities and their actual public values.

To understand how securities such as bonds and stocks are valued or priced in the financial markets, it is necessary to have an understanding of the concept of an efficient market. An **efficient market** is *one where the prices of the assets traded in that market fully reflect all available information at any instant in time*.

Security markets such as the stock and bond markets are particularly important to our study of finance since these markets are the place where firms can go to raise money to finance their investments. Whether a security market such as the New York Stock Exchange (NYSE) is efficient depends on the speed with which newly released information is impounded into prices. Specifically, an efficient stock market is characterized by a large number of profit-driven individuals who act very quickly by buying (or selling) shares of stock in response to the release of new information.

If you are wondering just how vigilant investors in the stock market are in watching for good and bad news, consider the following set of events. While Nike (NKE) CEO William Perez flew aboard the company's Gulfstream jet one day in November 2005, traders on the ground sold off a significant amount of Nike's stock. Why? Because the plane's landing gear was malfunctioning, and they were watching TV coverage of the event! Before Perez landed safely, Nike's stock dropped 1.4 percent. Once Perez's plane landed, Nike's stock price immediately bounced back. This example illustrates that in the financial market there are ever-vigilant investors who are looking to act even *in the anticipation* of the release of new information.

Another example of the speed with which stock prices react to new information deals with Disney. Beginning with *Toy Story* in 1995, Disney (DIS) and Pixar (PIXR) were on a roll, making animated hits one after another, including *A Bug's Life*, *Toy Story 2*, *Monsters, Inc.*, *Finding Nemo*, and *The Incredibles*. So in 2006, the hopes for the animated movie *Cars* were very high. However, in the movie's opening weekend, it grossed only \$60 million, or about \$10 million less than investors expected. How did the stock market respond? On the Monday following the opening weekend, Disney stock opened over 2 percent lower.

Apparently, the news of the disappointing box office receipts was reflected in Disney's opening stock price, even before it traded!

The key learning point here is the following: Stock market prices are a useful barometer of the value of a firm. Specifically, managers can expect their company's share prices to respond quickly to investors' assessment of their decisions. If investors on the whole agree that the decision is a good one that creates value, then they will push up the price of the firm's stock to reflect that added value. On the other hand, if investors feel that a decision is bad for share prices, then the firm's share value will be driven down.

Unfortunately, this principle doesn't always work perfectly in the real world. You just need to look at the housing price bubble that helped bring on the economic downturn in 2008–2009 to realize that prices and value don't always move in lockstep. Like it or not, the psychological biases of individuals impact decision making, and as a result, our decision-making process is not always rational. Behavioral finance considers this type of behavior and takes what we already know about financial decision making and adds in human behavior with all its apparent irrationality.

We'll try and point out the impact of human behavior on decisions throughout our study. But understand that the field of behavioral finance is a work in progress—we understand only a small portion of what may be going on. We can say, however, that behavioral biases have an impact on our financial decisions. As an example, people tend to be overconfident and many times mistake skill for luck. As Robert Shiller, a well-known economics professor at Yale put it, “people think they know more than they do.”<sup>1</sup> This overconfidence applies to their abilities, their knowledge and understanding, and forecasting the future. Since they have confidence in their valuation estimates, they may take on more risk than they should. These behavioral biases impact everything in finance, from investment analysis, to analyzing new projects, to forecasting the future.

## Principle 5: Conflicts of Interest Cause Agency Problems



Throughout this book we will describe how to make financial decisions that increase the value of a firm's shares. However, managers do not always follow through with these decisions. Often they make decisions that actually lead to a decrease in the value of the firm's shares. When this happens, it is frequently because the managers' own interests are best served by ignoring shareholder interests. In other words, there is a conflict of interest between what is best for the managers and the stockholders. For example, it may be the case that shutting down an unprofitable plant is in the best interests of the firm's stockholders, but in so doing the managers will find themselves out of a job or having to transfer to a different job. This very clear conflict of interest might lead the management of the plant to continue running the plant at a loss.

Conflicts of interest lead to what are referred to by economists as an agency cost or **agency problem**. That is, managers are the agents of the firm's stockholders (the owners) and if the agents do not act in the best interests of their principal, this leads to an agency cost. Although the goal of the firm is to maximize shareholder value, in reality the agency problem may interfere with the implementation of this goal. *The agency problem results from the separation of management and the ownership of the firm.* For example, a large firm may be run by professional managers or agents who have little or no ownership in the firm. Because of this separation of the decision makers and owners, managers may make decisions that are not in line with the goal of maximizing shareholder wealth. They may approach work less energetically and attempt to benefit themselves in terms of salary and perquisites at the expense of shareholders.

Managers might also avoid any projects that have risk associated with them—even if they are great projects with huge potential returns and a small chance of failure. Why is this so? Because if the project doesn't turn out, these agents of the shareholders may lose their jobs.

The costs associated with the agency problem are difficult to measure, but occasionally we see the problem's effect in the marketplace. If the market feels management is damaging

**agency problem** problems and conflicts resulting from the separation of the management and ownership of the firm.

<sup>1</sup>See Robert J. Shiller, *Irrational Exuberance*, Broadway Books, 2000, page 142.

shareholder wealth, there may be a positive reaction in stock price to the removal of that management. For example, on the announcement of the death of Roy Farmer, the CEO of Farmer Brothers (FARM), a seller of coffee-related products, Farmer Brothers' stock price rose about 28 percent. Generally, the tragic loss of a company's top executive raises concerns over a leadership void, causing the share price to drop, but in the case of Farmer Brothers, investors thought a change in management would have a positive impact on the company.

If the firm's management works for the owners, who are the shareholders, why doesn't the management get fired if it doesn't act in the shareholders' best interest? In theory, the shareholders pick the corporate board of directors and the board of directors in turn picks the management. Unfortunately, in reality the system frequently works the other way around. Management selects the board of director nominees and then distributes the ballots. In effect, shareholders are offered a slate of nominees selected by the management. The end result is that management effectively selects the directors, who then may have more allegiance to managers than to shareholders. This, in turn, sets up the potential for agency problems, with the board of directors not monitoring managers on behalf of the shareholders as it should.

The root cause of agency problems is conflicts of interest. Whenever they exist in business, there is a chance that individuals will do what is in their best interests rather than the best interests of the organization. For example, in 2000 Edgerrin James was a running back for the Indianapolis Colts and was told by his coach to get a first down and then fall down. That way the Colts wouldn't be accused of running up the score against a team they were already beating badly. However, since James' contract included incentive payments associated with rushing yards and touchdowns, he acted in his own self-interest and ran for a touchdown on the very next play.

We will spend considerable time discussing monitoring managers and trying to align their interests with those of shareholders. As an example, managers can be monitored by rating agencies and by auditing financial statements, and compensation packages may be used to align the interests of managers and shareholders. Additionally, the interests of managers and shareholders can be aligned by establishing management stock options, bonuses, and perquisites that are directly tied to how closely managers' decisions coincide with the interest of shareholders. In other words, what is good for shareholders must also be good for managers. If that is not the case, managers will make decisions in their best interest rather than maximizing shareholder wealth.

## The Current Global Financial Crisis

Beginning in 2007 the United States experienced its most severe financial crisis since the Great Depression of the 1930s. As a result, some financial institutions collapsed while the government bailed others out, unemployment skyrocketed, the stock market plummeted, and the United States entered into a recession. Although the recession is now officially over, the economy still faces the lingering effects of the financial crisis that continue in the form of both a high rate of unemployment and a dramatic rise in our country's debt. Europe continues to face a financial crisis of its own. Many members of the European Union (EU) are experiencing severe budget problems, including Greece, Italy, Ireland, Portugal, and Spain. These nations are all unable to balance their budgets and face a very real prospect of defaulting on payments tied to government loans.

While many factors contributed to the financial crisis, the most immediate cause has been attributed to the collapse of the real estate market in the United States and the resulting real estate loan (mortgage) defaults. The focus of the loan defaults has been on what are commonly referred to as subprime loans. These are loans made to borrowers whose ability to repay them is highly doubtful. When the market for real estate began to falter in 2006, many of the homebuyers with subprime mortgages began to default. As the economy contracted during the recession, people lost their jobs and could no longer make their mortgage loan payments, resulting in even more defaults.

To complicate the problem, most real estate mortgages were packaged in portfolios and resold to investors around the world. This process of packaging mortgages is called

*securitization*. Basically, securitization is a very useful tool for increasing the supply of new money that can be lent to new homebuyers. Here's how mortgages are securitized: First, homebuyers borrow money by taking out a mortgage to finance a home purchase. The lender, generally a bank, savings and loan, or mortgage broker that made the loan, then sells the mortgage to another firm or financial institution that pools together a portfolio of many different mortgages. The purchase of the pool of mortgages is financed through the sale of securities (called *mortgage-backed securities*, or MBS) that are sold to investors who can hold them as an investment or resell them to other investors. This process allows the mortgage bank or other financial institution that made the original mortgage loan to get its money back out of the loan and lend it to someone else. Thus, securitization provides liquidity to the mortgage market and makes it possible for banks to loan more money to homebuyers.

Ok, so what's the catch? As long as lenders properly screen the mortgages to make sure the borrowers are willing and able to repay their home loans and real estate values remain higher than the amount owed, everything works fine. However, if lenders make loans to individuals who really cannot afford to make the payments and real estate prices drop precipitously as they began to do in 2006, there will be problems and many mortgages (especially those where the amount of the loan was a very high percentage of the property value) will be "under water." That is, the homeowner will owe more than the home is worth. When this occurs homeowners may start to default on their mortgage loans. This is especially true when the economy goes into a recession and people lose their jobs and, correspondingly, the ability to make their mortgage payments. This was the scenario in 2006. In essence, this was a perfect storm of bad loans, falling housing prices, and a contracting economy.

Where are we now? As of this writing, in 2012, the recession is officially over, having ended in 2009; however, despite this pronouncement there is evidence that the economy is still not back to normal. Unemployment numbers are still higher than historical norms for nonrecession years. Moreover, these unemployment numbers do not accurately reflect what has become known as underemployment, whereby individuals are taking jobs but these jobs do not take advantage of the individuals' employment credentials (for example, college professors driving taxi cabs). Finally, the risk of financial crisis in many European countries remains at a very high level. Despite a series of financial "fixes" to the imbalances in the budgets of Greece, Spain, and several other European countries, for example, the budgetary woes in Europe continue into 2012.

## Avoiding Financial Crisis—Back to the Principles

Four significant economic events that have occurred during the last decade all point to the importance of keeping our eye closely affixed to the five principles of finance: the dot.com bubble; the accounting scandals headlined by Enron, WorldCom, and Bernie Madoff; the housing bubble; and, finally, the recent economic crisis. Specifically, the problems that firms encounter in times of crisis are often brought on by, and made worse as a result of, not paying close attention to the foundational principles of finance. To illustrate, consider the following:

- ◆ **Forgetting Principle 1: Cash Flow Is What Matters** (*Focusing on earnings instead of cash flow*). The financial fraud committed by Bernie Madoff, WorldCom, and others at the turn of the 21st century was a direct result of managerial efforts to manage the firm's reported earnings to the detriment of the firm's cash flows. The belief in the importance of current period earnings as the most critical determinant of the market valuation of the firm's shares led some firms to sacrifice future cash flows in order to maintain the illusion of high and growing earnings.
- ◆ **Forgetting Principle 2: Money Has a Time Value** (*Focusing on the short run*). When trying to put in place a system that would align the interests of managers and shareholders, many firms tied managerial compensation to short-run performance. Consequently, the focus shifted in many firms from what was best in the long run to what was best in the short run.

- ◆ **Forgetting Principle 3: Risk Requires a Reward** (*Excessive risk taking due to underestimation of risk*). Relying on historical evidence, managers often underestimated the real risks that their decisions entailed. This underestimation of the underlying riskiness of their decisions led managers to borrow excessively. This excessive use of borrowed money (or financial leverage) led to financial disaster and bankruptcy for many firms as the economy slipped into recession. Moreover, the financial crisis was exacerbated by the fact that many times companies simply didn't understand how much risk they were taking on. For example, AIG (AIG), the giant insurance company that the government bailed out, was involved in investments whose value is based on the price of oil in 50 years. Let's face it, no one knows what the price of oil will be in a half a century—being involved in this type of investment is blind risk.
- ◆ **Forgetting Principle 4: Market Prices Are Generally Right** (*Ignoring the efficiency of financial markets*). Huge numbers of so-called hedge funds sprang up over the last decade and entered into investment strategies that presupposed that security prices could be predicted. Many of these same firms borrowed heavily in an effort to boost their returns and later discovered that security markets were a lot smarter than they thought and consequently realized huge losses on their highly leveraged portfolios.
- ◆ **Forgetting Principle 5: Conflicts of Interest Cause Agency Problems** (*Executive compensation is out of control*). Executive compensation in the United States is dominated by performance-based compensation in the form of stock options and grants. The use of these forms of compensation over the last decade in the face of one of the longest bull markets in history has resulted in tremendous growth in executive compensation. The motivations behind these methods of compensation are primarily tied to a desire to make managers behave like stockholders (owners). Unfortunately, this practice has resulted in pay for nonperformance in many cases and a feeling among the general public that executive compensation is excessive. We are reminded again that solving the principal-agent problem is not easy to do, but it has to be done!

In this edition of *Foundations of Finance* we believe that now, perhaps more than at any time in our memory, adhering to the fundamental principles of finance is critical. In addition, to further emphasize the “back to principles theme” we include a feature called “Cautionary Tales” that highlights specific examples where a failure to adhere to one or more of the five principles led to problems.

## The Essential Elements of Ethics and Trust

While not one of the five principles of finance, ethics and trust are essential elements of the business world. In fact, without ethics and trust nothing works. This statement could be applied to almost everything in life. Virtually everything we do involves some dependence on others. Although businesses frequently try to describe the rights and obligations of their dealings with others using contracts, it is impossible to write a perfect contract. Consequently, business dealings between people and firms ultimately depend on the willingness of the parties to trust one another.

Ethics or, rather, a lack of ethics in finance is a recurring theme in the news. Financial scandals at Enron, WorldCom, Arthur Andersen, and Bernard L. Madoff Investment Securities demonstrate the fact that ethical lapses are not forgiven in the business world. Not only is acting in an ethical manner morally correct, it is a necessary ingredient to long-term business and personal success.

Ethical behavior is easily defined. It's simply “doing the right thing.” But what is the right thing? For example, Bristol-Myers Squibb (BMY) gives away heart medication to people who can't afford it. Clearly, the firm's management feels this is socially responsible and the right thing to do. But is it? Should companies give away money and products or should they leave such acts of benevolence to the firm's shareholders? Perhaps the shareholders should decide if they personally want to donate some of their wealth to worthy causes.

Like most ethical questions, there is no clear-cut answer to the dilemma posited above. We acknowledge that people have a right to disagree about what “doing the right thing”

means and that each of us has his or her personal set of values. These values form the basis for what we think is right and wrong. Moreover, every society adopts a set of rules or laws that prescribe what it believes constitutes “doing the right thing.” In a sense, we can think of laws as a set of rules that reflect the values of a society as a whole.

You might ask yourself, “As long as I’m not breaking society’s laws, why should I care about ethics?” The answer to this question lies in consequences. Everyone makes errors of judgment in business, which is to be expected in an uncertain world. But ethical errors are different. Even if they don’t result in anyone going to jail, they tend to end careers and thereby terminate future opportunities. Why? Because unethical behavior destroys trust, and businesses cannot function without a certain degree of trust. Throughout this book, we will point out some of the ethical pitfalls that have tripped up managers.

## Concept Check

1. According to Principle 3, how do investors decide where to invest their money?
2. What is an efficient market?
3. What is the agency problem and why does it occur?
4. Why are ethics and trust important in business?

## The Role of Finance in Business

Finance is the study of how people and businesses evaluate investments and raise capital to fund them. Our interpretation of an investment is quite broad. When Apple designed its Apple TV, it was clearly making a long-term investment. The firm had to devote considerable expenses to designing, producing, and marketing the device with the hope that it would eventually become an essential living room companion. Similarly, Apple is making an investment decision whenever it hires a fresh new graduate, knowing that it will be paying a salary for at least 6 months before the employee will have much to contribute.

Thus, there are three basic types of issues that are addressed by the study of finance:

1. What long-term investments should the firm undertake? This area of finance is generally referred to as **capital budgeting**.
2. How should the firm raise money to fund these investments? The firm’s funding choices are generally referred to as **capital structure decisions**.
3. How can the firm best manage its cash flows as they arise in its day-to-day operations? This area of finance is generally referred to as **working capital management**.

We’ll be looking at each of these three areas of business finance—capital budgeting, capital structure, and working capital management—in the chapters ahead.

## Why Study Finance?

Even if you’re not planning a career in finance, a working knowledge of finance will take you far in both your personal and professional life.

Those interested in management will need to study topics like strategic planning, personnel, organizational behavior, and human relations, all of which involve spending money today in the hopes of generating more money in the future. For example, GM made a strategic decision to introduce an electric car and invested \$740 million to produce the Chevy Volt, only to find car buyers balk at the \$40,000 sticker price. Similarly, marketing majors need to understand and decide how aggressively to price products and the amount to spend on advertising. Since aggressive marketing today costs money but allows firms to reap rewards in the future, it should be viewed as an investment that the firm needs to finance. Production and operations management majors need to understand how best to manage a firm’s production and control its inventory and supply chain. These are all topics that involve risky choices that relate to the management of money over time, which is the central



Describe the role of finance in business.

**capital budgeting** the decision-making process with respect to investment in fixed assets.

**capital structure decision** the decision-making process with funding choices and the mix of long-term sources of funds.

**working capital management** the management of the firm’s current assets and short-term financing.

focus of finance. *While finance is primarily about the management of money, a key component of finance is the management and interpretation of information.* Indeed, if you pursue a career in management information systems or accounting, the finance managers are likely to be your most important clients. For the student with entrepreneurial aspirations, an understanding of finance is essential—after all, if you can't manage your finances, you won't be in business very long.

Finally, an understanding of finance is important to you as an individual. The fact that you are reading this book indicates that you understand the importance of investing in yourself. By obtaining a higher education degree, you are clearly making sacrifices in the hopes of making yourself more employable and improving your chances of having a rewarding and challenging career. Some of you are relying on your own earnings and the earnings of your parents to finance your education, whereas others are raising money or borrowing it from the **financial markets**, or *institutions and procedures that facilitate financial transactions*.

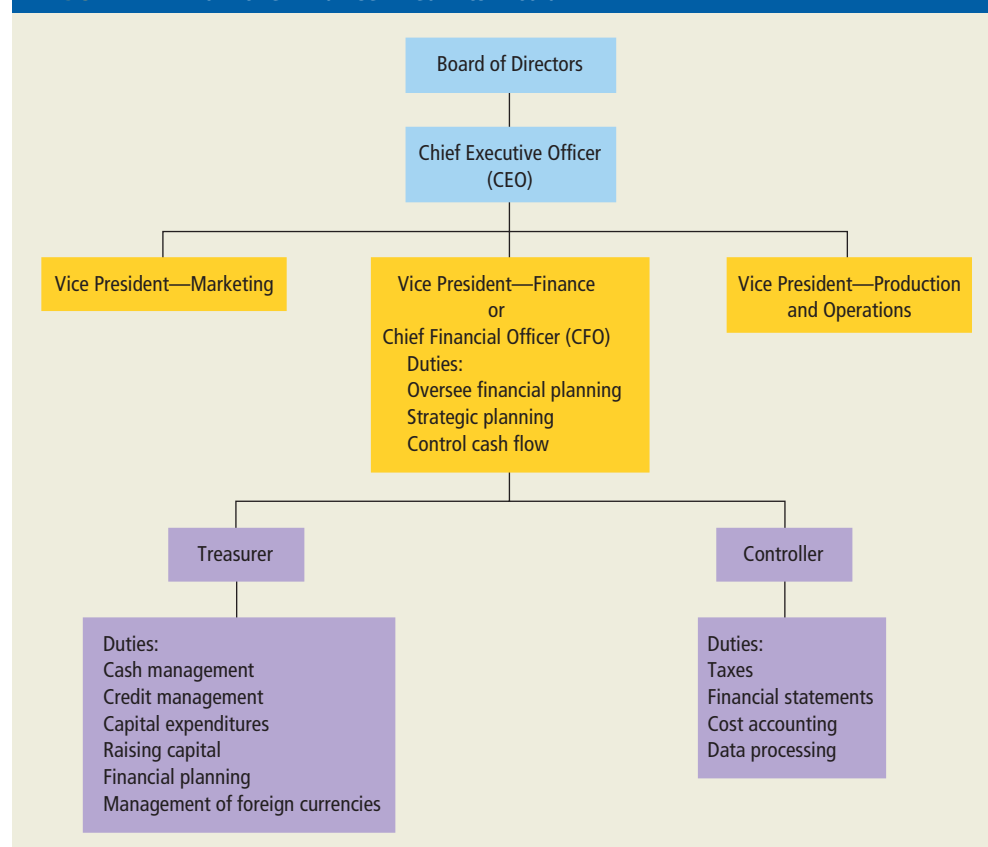
Although the primary focus of this book is on developing corporate finance tools that are used in business, much of the logic and tools we develop apply to the decisions you will have to make regarding your own personal finances. Financial decisions are everywhere, both for you and the firm you work for. In the future, both your business and personal life will be spent in the world of finance. Since you're going to be living in that world, it's time to learn the basics about it.

## The Role of the Financial Manager

A firm can assume many different organizational structures. Figure 1-2 shows a typical presentation of how the finance area fits into a firm. The vice president for finance, also called the chief financial officer (CFO), serves under the firm's chief executive officer (CEO) and is responsible for overseeing financial planning, strategic planning, and controlling the firm's cash flow. Typically, a treasurer and controller serve under the CFO. In a smaller

**financial markets** those institutions and procedures that facilitate transactions in all types of financial claims.

**FIGURE 1-2** How the Finance Area Fits into a Firm



firm, the same person may fill both roles, with just one office handling all the duties. The treasurer generally handles the firm's financial activities, including cash and credit management, making capital expenditure decisions, raising funds, financial planning, and managing any foreign currency received by the firm. The controller is responsible for managing the firm's accounting duties, including producing financial statements, cost accounting, paying taxes, and gathering and monitoring the data necessary to oversee the firm's financial well-being. In this textbook, we focus on the duties generally associated with the treasurer and on how investment decisions are made.

## Concept Check

1. What are the basic types of issues that are addressed by the study of finance?
2. What are the duties of a treasurer? Of a controller?

## The Legal Forms of Business Organization

In the chapters ahead we focus on financial decisions for corporations because, although the corporation is not the only legal form of business available, it is the most logical choice for a firm that is large or growing. It is also the dominant business form in terms of sales in this country. In this section we explain why this is so.

Although numerous and diverse, the legal forms of business organization fall into three categories: the sole proprietorship, the partnership, and the corporation. To understand the basic differences between each form, we need to define each one and understand its advantages and disadvantages. As the firm grows, the advantages of the corporation begin to dominate. As a result, most large firms take on the corporate form.

### Sole Proprietorships

A **sole proprietorship** is a business owned by an individual. The owner retains the title to the business's assets and is responsible, generally without limitation, for the liabilities incurred. The proprietor is entitled to the profits from the business but must also absorb any losses. This form of business is initiated by the mere act of beginning the business operations. Typically, no legal requirement must be met in starting the operation, particularly if the proprietor is conducting the business in his or her own name. If a special name is used, an assumed-name certificate should be filed, requiring a small registration fee. Termination of the sole proprietorship occurs on the owner's death or by the owner's choice. Briefly stated, the sole proprietorship is for all practical purposes the absence of any formal legal business structure.

### Partnerships

The primary difference between a partnership and a sole proprietorship is that the partnership has more than one owner. A **partnership** is an association of two or more persons coming together as co-owners for the purpose of operating a business for profit. Partnerships fall into two types: (1) general partnerships and (2) limited partnerships.

**General Partnerships** In a **general partnership** each partner is fully responsible for the liabilities incurred by the partnership. Thus, any partner's faulty conduct, even having the appearance of relating to the firm's business, renders the remaining partners liable as well. The relationship among partners is dictated entirely by the partnership agreement, which may be an oral commitment or a formal document.

**Limited Partnerships** In addition to the general partnership, in which all partners are jointly liable without limitation, many states provide for **limited partnerships**. The state statutes permit one or more of the partners to have limited liability, restricted to the amount of capital invested in the partnership. Several conditions must be met to qualify as a limited partner. First, at least one general partner must have unlimited liability. Second, the names of the limited partners may not appear in the name of the firm. Third, the limited partners may



**4** Distinguish between the different legal forms of business.

**sole proprietorship** a business owned by a single individual.

**partnership** an association of two or more individuals joining together as co-owners to operate a business for profit.

**general partnership** a partnership in which all partners are fully liable for the indebtedness incurred by the partnership.

**limited partnership** a partnership in which one or more of the partners has limited liability, restricted to the amount of capital he or she invests in the partnership.

**corporation** an entity that legally functions separate and apart from its owners.

not participate in the management of the business. Thus, a limited partnership provides limited liability for a partner who is purely an investor.

## Corporations

The **corporation** has been a significant factor in the economic development of the United States. As early as 1819, U.S. Supreme Court Chief Justice John Marshall set forth the legal definition of a corporation as “an artificial being, invisible, intangible, and existing only in the contemplation of law.”<sup>2</sup> This entity *legally functions separate and apart from its owners*. As such, the corporation can individually sue and be sued and purchase, sell, or own property, and its personnel are subject to criminal punishment for crimes. However, despite this legal separation, the corporation is composed of owners who dictate its direction and policies. The owners elect a board of directors, whose members in turn select individuals to serve as corporate officers, including the company’s president, vice president, secretary, and treasurer. Ownership is reflected in common stock certificates, each designating the number of shares owned by its holder. The number of shares owned relative to the total number of shares outstanding determines the stockholder’s proportionate ownership in the business. Because the shares are transferable, ownership in a corporation may be changed by a shareholder simply remitting the shares to a new shareholder. The shareholder’s liability is confined to the amount of the investment in the company, thereby preventing creditors from confiscating stockholders’ personal assets in settlement of unresolved claims. This is an extremely important advantage of a corporation. After all, would you be willing to invest in USAirways if you would be held liable if one of its planes crashed? Finally, the life of a corporation is not dependent on the status of the investors. The death or withdrawal of an investor does not affect the continuity of the corporation. Its managers continue to run the corporation when stock is sold or when it is passed on through inheritance.

## Organizational Form and Taxes: The Double Taxation on Dividends

Historically, one of the drawbacks of the corporate form was the double taxation of dividends. This occurs when a corporation earns a profit, pays taxes on those profits (the first taxation of earnings), and pays some of those profits back to the shareholders in the form of dividends, and then the shareholders pay personal income taxes on those dividends (the second taxation of those earnings). This double taxation of earnings does not take place with proprietorships and partnerships. Needless to say, that had been a major disadvantage of corporations. However, in an attempt to stimulate the economy, the tax rate on dividends was cut with the passage of the Tax Act of 2003.

Before the 2003 tax changes, you paid your regular, personal income tax rate on your dividend income, which could be as high as 35 percent. However, with the new law, qualified dividends from domestic corporations and qualified foreign corporations are now taxed at a maximum rate of 15 percent. Moreover, if your personal income puts you in the 10 percent or 15 percent income rate bracket, your dividends will be taxed at only 5 percent, and in 2008, this rate dropped to 0 percent. Unless Congress takes further action, this tax break on dividends will end after 2012 and individuals will once again be taxed at their regular personal tax rate.

## S-Corporations and Limited Liability Companies (LLCs)

One of the problems that entrepreneurs and small business owners face is that they need the benefits of the corporate form to expand, but the double taxation of earnings that comes with the corporate form makes it difficult to accumulate the necessary wealth for expansion. Fortunately, the government recognizes this problem and has provided two business forms

<sup>2</sup>*The Trustees of Dartmouth College v. Woodward*, 4 Wheaton 636 (1819).

that are, in effect, crosses between a partnership and a corporation with the tax benefits of partnerships (no double taxation of earnings) and the limited liability benefit of corporations (your liability is limited to what you invest).

The first is the **S-corporation**, which *provides limited liability while allowing the business's owners to be taxed as if they were a partnership*—that is, distributions back to the owners are not taxed twice as is the case with dividends distributed by regular corporations. Unfortunately, a number of restrictions accompany the S-corporation that detract from the desirability of this business form. Thus, an S-corporation cannot be used for a joint venture between two corporations. As a result, this business form has been losing ground in recent years in favor of the limited liability company.

The **limited liability company (LLC)** is also *a cross between a partnership and a corporation*. Just as with the S-corporation, the LLC retains limited liability for its owners but runs and is taxed like a partnership. In general, it provides more flexibility than the S-corporation. For example, corporations can be owners in an LLC. However, because LLCs operate under state laws, both states and the IRS have rules for what qualifies as an LLC, and different states have different rules. But the bottom line in all this is that the LLC must not look too much like a corporation or it will be taxed as one.

**S-corporation** a corporation that, because of specific qualifications, is taxed as though it were a partnership.

**limited liability company (LLC)** a cross between a partnership and a corporation under which the owners retain limited liability but the company is run and is taxed like a partnership.

## Which Organizational Form Should Be Chosen?

Owners of new businesses have some important decisions to make in choosing an organizational form. Whereas each business form seems to have some advantages over the others, the advantages of the corporation begin to dominate as the firm grows and needs access to the capital markets to raise funds.

Because of the limited liability, the ease of transferring ownership through the sale of common shares, and the flexibility in dividing the shares, the corporation is the ideal business entity in terms of attracting new capital. In contrast, the unlimited liabilities of the sole proprietorship and the general partnership are deterrents to raising equity capital. Between the extremes, the limited partnership does provide limited liability for limited partners, which has a tendency to attract wealthy investors. However, the impracticality of having a large number of partners and the restricted marketability of an interest in a partnership prevent this form of organization from competing effectively with the corporation. Therefore, when developing our decision models we assume we are dealing with the corporate form and corporate tax codes.

## Concept Check

1. What are the primary differences between a sole proprietorship, a partnership, and a corporation?
2. Explain why large and growing firms tend to choose the corporate form.
3. What is an LLC?

## Finance and the Multinational Firm: The New Role

In the search for profits, U.S. corporations have been forced to look beyond our country's borders. This movement has been spurred on by the collapse of communism and the acceptance of the free market system in third-world countries. All this has taken place at a time when information technology has experienced a revolution brought on by the personal computer and the Internet. Concurrently, the United States went through an unprecedented period of deregulation of industries. These changes resulted in the opening of new international markets, and U.S. firms experienced a period of price competition here at home that made it imperative that businesses look across borders for investment opportunities. The end result is that many U.S. companies, including General Electric, IBM, Walt Disney, and American Express, have restructured their operations to expand internationally.

 Explain what has led to the era of the multinational corporation.

The bottom line is what you think of as a U.S. firm may be much more of a multinational firm than you would expect. For example, Coca-Cola earns over 80 percent of its profits from overseas sales and more money from its sales in Japan than it does from all its domestic sales. This is not uncommon. In fact, in 2011, close to 50 percent of the sales of S&P 500 listed companies came from outside the United States.

In addition to U.S. firms venturing abroad, foreign firms have also made their mark in the United States. You need only look to the auto industry to see what effects the entrance of Toyota, Honda, Nissan, BMW, and other foreign car manufacturers have had on the industry. In addition, foreigners have bought and now own such companies as Brooks Brothers, RCA, Pillsbury, A&P, 20th Century Fox, Columbia Pictures, and Firestone Tire & Rubber. Consequently, even if we wanted to, we couldn't keep all our attention focused on the United States, and even more important, we wouldn't want to ignore the opportunities that are available across international borders.

## Concept Check

1. What has brought on the era of the multinational corporation?
2. Has looking beyond U.S. borders been a profitable experience for U.S. corporations?

## Chapter Summaries



### Identify the goal of the firm. (pgs. 3–4)

**SUMMARY:** This chapter outlines the framework for the maintenance and creation of shareholder wealth, which should be the goal of the firm and its managers. The goal of maximization of shareholder wealth is chosen because it deals well with uncertainty and time in a real-world environment. As a result, the maximization of shareholder wealth is found to be the proper goal for the firm.



### Understand the basic principles of finance, their importance, and the importance of ethics and trust. (pgs. 4–11)

**SUMMARY:** The five basic principles of finance are:

1. **Cash Flow Is What Matters**—Incremental cash received and not accounting profits drives value.
2. **Money Has a Time Value**—A dollar received today is more valuable to the recipient than a dollar received in the future.
3. **Risk Requires a Reward**—The greater the risk of an investment, the higher will be the investor's required rate of return, and, other things remaining the same, the lower will be its value.
4. **Market Prices Are Generally Right**—For example, product market prices are often slower to react to important news than are prices in financial markets, which tend to be very efficient and quick to respond to news.
5. **Conflicts of Interest Cause Agency Problems**—Large firms are typically run by professional managers who own a small fraction of the firms' equity. The individual actions of these managers are often motivated by self-interest, which may result in managers not acting in the best interests of the firm's owners. When this happens, the firm's owners will lose value.

While not one of the five principles of finance, ethics and trust are also essential elements of the business world, and without them, nothing works.

**KEY TERMS**

**Incremental cash flow, page 4** The difference between the cash flows a company will produce both with and without the investment it is thinking about making.

**Opportunity cost, page 5** The cost of making a choice in terms of the next best alternative that must be foregone.

**Efficient market, page 6** A market in which the prices of securities at any instant in time fully reflect all publicly available information about the securities and their actual public values.

**Agency problem, page 7** Problems and conflicts resulting from the separation of the management and ownership of the firm.

**Describe the role of finance in business.** (pgs. 11–13)

**SUMMARY:** Finance is the study of how people and businesses evaluate investments and raise capital to fund them. There are three basic types of issues that are addressed by the study of finance: (1) What long-term investments should the firm undertake? This area of finance is generally referred to as capital budgeting. (2) How should the firm raise money to fund these investments? The firm's funding choices are generally referred to as capital structure decisions. (3) How can the firm best manage its cash flows as they arise in its day-to-day operations? This area of finance is generally referred to as working capital management.

**KEY TERMS**

**Capital budgeting, page 11** The decision-making process with respect to investment in fixed assets.

**Capital structure decision, page 11** The decision-making process with funding choices and the mix of long-term sources of funds.

**Working capital management, page 11** The management of the firm's current assets and short-term financing.

**Financial markets, page 12** Those institutions and procedures that facilitate transactions in all types of financial claims.

**Distinguish between the different legal forms of business.** (pgs. 13–15)

**SUMMARY:** The legal forms of business are examined. The sole proprietorship is a business operation owned and managed by an individual. Initiating this form of business is simple and generally does not involve any substantial organizational costs. The proprietor has complete control of the firm but must be willing to assume full responsibility for its outcomes.

The general partnership, which is simply a coming together of two or more individuals, is similar to the sole proprietorship. The limited partnership is another form of partnership sanctioned by states to permit all but one of the partners to have limited liability if this is agreeable to all partners.

The corporation increases the flow of capital from public investors to the business community. Although larger organizational costs and regulations are imposed on this legal entity, the corporation is more conducive to raising large amounts of capital. Limited liability, continuity of life, and ease of transfer in ownership, which increase the marketability of the investment, have contributed greatly in attracting large numbers of investors to the corporate environment. The formal control of the corporation is vested in the parties who own the greatest number of shares. However, day-to-day operations are managed by the corporate officers, who theoretically serve on behalf of the firm's stockholders.

**KEY TERMS**

**Sole proprietorship, page 13** A business owned by a single individual.

**Partnership, page 13** An association of two or more individuals joining together as co-owners to operate a business for profit.

**General partnership, page 13** A partnership in which all partners are fully liable for the indebtedness incurred by the partnership.

**Limited partnership, page 13** A partnership in which one or more of the partners has limited liability, restricted to the amount of capital he or she invests in the partnership.

**Corporation, page 14** An entity that legally functions separate and apart from its owners.

**S-corporation, page 15** A corporation that, because of specific qualifications, is taxed as though it were a partnership.

**Limited liability company (LLC),**  
**page 15** A cross between a partnership and  
 a corporation under which the owners retain

limited liability but the company is run and is  
 taxed like a partnership.



### **Explain what has led to the era of the multinational corporation.** (pg. 15)

**SUMMARY:** With the collapse of communism and the acceptance of the free market system in third-world countries, U.S. firms have been spurred on to look beyond their own boundaries for new business. The end result has been that it is not uncommon for major U.S. companies to earn over half their income from sales abroad. Foreign firms are also increasingly investing in the United States.

## **Review Questions**

*All Review Questions are available in [MyFinanceLab](#).*

**1-1.** What are some of the problems involved in implementing the goal of maximization of shareholder wealth?

**1-2.** Firms often involve themselves in projects that do not result directly in profits. For example, Apple, which we featured in the chapter introduction, donated \$50 million to Stanford University hospitals and another \$50 million to the African aid organization (Product) RED, a charity fighting against AIDS, tuberculosis, and malaria. Do these projects contradict the goal of maximization of shareholder wealth? Why or why not?

**1-3.** What is the relationship between financial decision making and risk and return? Would all financial managers view risk–return trade-offs similarly?

**1-4.** What is the agency problem and how might it impact the goal of maximization of shareholder wealth?

**1-5.** Define (a) sole proprietorship, (b) partnership, and (c) corporation.

**1-6.** Identify the primary characteristics of each form of legal organization.

**1-7.** Using the following criteria, specify the legal form of business that is favored: (a) organizational requirements and costs, (b) liability of the owners, (c) the continuity of the business, (d) the transferability of ownership, (e) management control and regulations, (f) the ability to raise capital, and (g) income taxes.

**1-8.** There are a lot of great business majors. Check out the Careers in Business Web site at [www.careers-in-business.com](http://www.careers-in-business.com). It covers not only finance but also marketing, accounting, and management. Find out about and provide a short write-up describing the opportunities investment banking and financial planning offer.

**1-9.** Like it or not, ethical problems seem to crop up all the time in finance. Some of the worst financial scandals are examined at <http://projects.exeter.ac.uk/RDavies/arian/scandals/classic.html>. Take a look at the write-ups dealing with “The Credit Crunch,” “The Dot-Com Bubble and Investment Banks,” and “Bernard L. Madoff Investment Securities.” Provide a short write-up on these events.

**1-10.** We know that if a corporation is to maximize shareholder wealth, the interests of the managers and the shareholders must be aligned. The simplest way to align these interests is to structure executive compensation packages appropriately to encourage managers to act in the best interests of shareholders through stock and option awards. However, has executive compensation gotten out of control? Take a look at the Executive Pay Watch Web site at [www.aflcio.org/corporate-watch/paywatch](http://www.aflcio.org/corporate-watch/paywatch) to see to whom top salaries have gone (click on “100 Highest-paid CEOs” on the right-hand side of the page). What are the most recent total compensation packages for the head of Oracle (ORCL), Home Depot (HD), Disney (DIS), and ExxonMobil (XOM)? (Hint: you’ll want to look in the CEO Pay Database in the Executive Pay Watch.)

## **Mini Case**

*This Mini Case is available in [MyFinanceLab](#).*

The final stage in the interview process for an assistant financial analyst at Caledonia Products involves a test of your understanding of basic financial concepts. You are given the following

memorandum and asked to respond to the questions. Whether you are offered a position at Caledonia will depend on the accuracy of your response.

To: Applicants for the position of Financial Analyst

From: Mr. V. Morrison, CEO, Caledonia Products

Re: A test of your understanding of basic financial concepts and of the corporate tax code

Please respond to the following questions:

- a. What is the appropriate goal for the firm and why?
- b. What does the risk–return trade-off mean?
- c. Why are we interested in cash flows rather than accounting profits in determining the value of an asset?
- d. What is an efficient market and what are the implications of efficient markets for us?
- e. What is the cause of the agency problem and how do we try to solve it?
- f. What do ethics and ethical behavior have to do with finance?
- g. Define (1) sole proprietorship, (2) partnership, and (3) corporation.