# Chapter 1 Introduction to Finance

#### Summary

This chapter begins the study of finance by introducing students to the discipline. We begin by broadly defining finance as the study of managing money. Since everyone must deal with money in one context or another, the study of finance should be universally important. Finance can be distinguished from accounting by noting that the accounting function reports what has already happened while finance involves making decisions that affect the future.

We next introduce the three main areas of study in finance. *Markets and Institutions* deal with the financial intermediaries who can be either suppliers or users of funds. The institutions that participate in the financial markets bring the suppliers and the users of funds together. The financial markets establish security prices so that all of the funds supplied are used and the markets clear.

*Investments* is the study of how money is converted into more money over time. It includes how investment portfolios are created and how securities are selected.

Corporate finance deals with financial problems and issues that firms face. These include evaluating whether or not projects should be taken, how projects should be financed, and evaluating the financial health of the firm.

We continue our introduction to finance by providing a single governing goal. The *goal* of the financial manager is to maximize shareholder wealth. Maximizing profits fails to consider the timing and riskiness of the firm and may be shortsighted. Wealth maximization requires the financial manager to maximize the price of the firm's stock. This requires taking a long-term view of cash flows since the stock price is determined by the current value of all future cash flows.

The chapter concludes with five foundation assumptions that touch on much that will be discussed later in the text. The foundation assumptions are:

- 1. Greater returns demand greater risk;
- 1. Good deals disappear fast;
- 1. The value of money depends on when it is received;
- 1. Cash is king;
- 1. Not everyone knows the same things.

## **Learning Objectives**

- 1. Understand the Four Facets of Finance: the role of the financial manager, careers in finance, personal finance, and academic finance
- 2. Understand the Function of the Financial System
- 3. Distinguish between Money and Capital Markets
- 4. Learn the Difference between Primary and Secondary Markets
- 5. Learn about the Structure and Governance of Corporations
- 6. Learn Six Important Ideas in Finance

## **Key Points for Classroom Discussion**

- 1. Goal of the Financial Manager
- 2. What are agency costs and why do they arise?
- 3. The maxims of finance
  - Greater returns demand greater risk
  - b. Good deals disappear fast
  - c. The value of money depends on when it is received
  - d. Cash is king
  - e. Not everyone knows the same things

## **Chapter Outline**

- I. The Financial System
- II. Money and Capital Markets
  - a. The Money Markets
  - b. The Capital Markets
- III. Primary and Capital Markets
  - a. Primary Markets
  - b. Secondary Markets
  - c. The role of Primary and Secondary Markets
- IV. Corporate Governance
  - a. Forms of Business Organization
  - b. Corporations and Governance
  - c. Goals of Financial Management
  - d. The Role of the Financial Manager
- V. Five Key Concepts: The Maxims of Finance
  - a. The Value of Money Depends on When it is Received
  - b. Greater Returns Require Taking Greater Risks
  - c. Good Deals Disappear Fast
  - d. Cash is King
  - e. Not Everyone Knows the Same Things
  - f. Rate of Return Returns matter

# **Key Terms**

Agency cost
Asymmetric information
Capital markets
Corporate finance
Diversification
Efficient markets
Financial institutions
Financial markets
Financial system
Investments
Money markets
Opportunity cost
Portfolio
Real rate of interest
Risk-return tradeoff

# **Quick Quiz**

1.	Why is the goal of the financial manager not to maximize profits?

2. How can shareholders tell if managers are doing a good job?

# Solution to Quick Quiz

- 1. The goal of maximizing profits can be short term. The manger may sacrifice long-term earning to achieve near term profits. Additionally, profit maximizing does not take into account the riskiness of the firm.
- 2. Shareholders can determine whether managers are doing well by reviewing how the firm's stock price is performing.

## **Discussion Problems and Questions**

1. Why is profit maximization *not* an appropriate goal for firm managers?

Profit maximization may prevent the manager from focusing on the long run. Often current period profits must be forgone to increase long-term growth. Profit maximization also ignores the riskiness of the firm's investments.

2. Wealth maximization is the goal of financial managers. What, specifically, can the financial manager do to improve stockholder wealth? Discuss this issue in terms of the firm attributes that actually influence stockholder wealth.

Stockholder wealth is increased when the firm's stock price is increased. Any activity that increases the stock price will increase stockholder wealth. Stock prices are affected by the amount, timing and riskiness of future cash flows. Financial managers must focus on increasing cash flows, reducing risk and the timing of the cash flows.

- 3. Discuss the following in terms of agency costs.
  - a. Why are financial managers not as concerned about bondholder wealth as they are about stockholder wealth?

Stockholders hire, fire and set the compensation of the firm's managers. Bondholders do not have any control over these aspects of the firm.

b. What do bondholders do to protect themselves?

To protect themselves from managers, bondholders must write restrictive provisions in their bond documents, which prevent managers from increasing the risk of the firm or from creating superior claims on assets.

a. Why should financial managers be concerned with keeping bondholders satisfied?

Bondholders supply money to managers by buying bonds. This money in turn supports the company's investments, operations, and pays dividends.

- 4. Discuss the following in terms of the risk-return tradeoff.
  - a. Distinguish between actual returns and expected returns.

Actual returns can only be computed after time has passed. They are the increase in wealth that has occurred over some interval. Expected returns are what investors believe they will receive in the future.

b. Distinguish between expected returns and required returns.

While expected returns are what an investor believes he or she will receive, required return is the return an investor considers to be the minimum expected return, which will induce that investor to risk the investor's wealth on that particular investment.

a. Which must rise with increasing risk?

The required return increases as the level of risk increases.

b. If the expected return is less than the required return, will the investor buy the security?

If expected return is less than required rate, an investor would not purchase the stock. An investor will not give up their consumption to receive less in compensation.

c. Will the actual return always be greater for higher-risk securities?

No, actual returns are not determined by expectations but by company performance. Actual returns are often considerably above or below specific investor's expectations, though "on average: the returns of higher-risk securities are above the returns on lower-risk securities."

5. In an efficient market, if the required return is 10%, what will be the expected return? Explain your answer.

If the market is efficient, the required return and the expected return must be the same. If they were not, investors would buy or sell in such a way as to drive the two returns together.

6. Why are financial managers so concerned with computing cash flows when accounting earnings and income is more readily available?

The value of a share of stock is logically a direct reflection of the size and timing of the dividends that will be paid in the future. Since dividends are paid with cash, cash flows are more closely related to the company's ability to pay dividends than earnings.

7. An investor was reviewing a company with the intent of purchasing shares of stock. In the annual report the president is quoted as saying that the firm's primary goal is to increase the value of stockholder's equity. However, after additional reading, the investor learned of possibly contradictory actions by the firm. Discuss each of the following with respect to how the firm's stock price, customers, and employees may react (i.e., will they approve or disapprove?).

a. The company contributed \$5 million to the local hospital development fund. The firm is the major employer in a small town and the hospital is in the danger of closing.

Stock price could fall if revenues do not get greater increase as a result of the goodwill generated by the donation. Customers worried that the prices would increase to cover the cost. Employees might be skeptical because it may cause them not to get a pay raise anytime in the near future. This example is from an actual situation involving a hospital in a small town. In order to keep the hospital's door open, the major employer donated money to the hospital, which in turn helped the community.

b. The company is spending \$500 million to open a new plant in Korea. The new plant will not be operational for 5 years, so the firm's net income will fall during this period.

Stock price would go up since we must assume management would have computed the cost and revenues after adjusting for the time value of money. Customers might think the product might be cheaper now being made over seas. Employees could be worried that the company will downsize and jobs will be lost.

c. The firm is increasing its use of debt financing. The risk of the firm is not significantly increased by the additional debt.

The price of stock would increase if the cost of debt were less than the cost of equity. Customers may be concerned if the company has very high debt. Employees could be worried that something will go wrong and the company will lose money and go bankrupt.

d. The firm is embarking on a plan to upgrade its production process using new, untried technology. If the new systems work, substantial savings could result. If the systems fail, orders will be delayed or unfilled and many customers can be expected to go elsewhere.

The stock may be viewed as significantly more risky and fall. The expansion may cause risk to increase substantially, but cash flows may not. Customers may wait and see what happens to the new product or they may seek a new alternative now. Employees may search for other jobs because there is a chance the upgrade may fail.

 The firm will decrease its dividend payout ratio. The firm proposes no new investment opportunities. The stock price will probably fall. Usually a decrease in the dividend payout ratio signals poor future cash prospects. Employees may see no new opportunities and look for other job opportunities.

### **Sample Problems**

- 1. Expected earnings per share \$5.00. The current price of the stock is \$50.
  - a. What is the current expected return?

Expected Return = 
$$EPS$$
 =  $$5.00$  =  $10\%$ 
Investment  $$50.00$ 

b. If the stock price rises to \$60 because of increased demand, what will the expected return be?

Expected Return = 
$$\$5.00$$
 = 8.33%  $\$60.00$ 

c. If the stock price falls to \$45 because a news release states that the firm is now more risky, what will the expected return be?

Expected Return = 
$$\frac{$5.00}{$45.00}$$
 = 11.11%

d. Which maxim best explains the change in return computed in part c?

Good Deals Disappear Fast: If the markets are efficient price must adjust to reflect news.

- 2. Expected earnings per share \$1.50. The current price of the stock is \$35.
  - a. What is the current expected return?

Expected Return = 
$$EPS$$
 =  $$1.50$  =  $4.29\%$ 
Investment  $$35.00$ 

b. If the stock price rises to \$40 because of increased demand, what will the expected return be?

Expected Return = 
$$\frac{\$1.50}{\$40.00}$$
 = 3.75%

c. If the stock price falls to \$30 because a news release states that the firm is now more risky, what will the expected return be?

Expected Return = 
$$\frac{\$1.50}{\$30.00}$$
 = 5%