Chapter 18 Exercises

Self-Check Questions

1. Answer these three questions about early-stage corporate finance:
   a. Why do very small companies tend to raise money from private investors instead of through an IPO?
   b. Why do small, young companies often prefer an IPO to borrowing from a bank or issuing a bond as they grow?
   c. Who has better information about whether a small firm is likely to earn profits, a venture capitalist or a potential bondholder, and why?
2. From a firm's point of view, how is a bond similar to a bank loan? How are they different?
3. Calculate the equity each of these people has in their home:
   a. Fred just bought a house for $200,000 by giving 10% as a down payment and borrowing the rest from the bank.
   b. Freda bought a house for $150,000 in cash, but if she were to sell it now, it would sell for $250,000.
   c. Frank bought a house for $100,000. He put 20% down and borrowed the rest from the bank. However, the value of the house has now increased to $160,000 and he has paid off $20,000 of the bank loan.
4. Which has a higher average return over time: stocks, bonds, or a savings account? Explain your answer.
5. Investors sometimes fear that a high-risk investment is especially likely to have low returns. Is this fear true? Does high risk mean the return must be low?
6. What is the total amount of interest collected from a $5,000 loan after three years with a simple interest rate of 6%?
7. If you receive $500 in simple interest on a loan that you made for $10,000 for five years, what was the interest rate you charged?
8. You open a five-year CD for $1,000 that pays 2% interest compounded annually. What is the value of that CD at the end of the five years?

Review Questions

9. What are the most common ways for startup firms to raise financial capital?
10. Why can firms not just use their own profits for financial capital, with no need for outside investors?
11. Why are banks more willing to lend to well-established firms?
12. What is a bond?
13. What does a share of stock represent?
14. When do firms receive money from the sale of stock in their firm, and when do they not receive money?
15. What is a dividend?
16. What is a capital gain?
17. What's the difference between a private company and a public company?
18. How do the shareholders who own a company choose the actual managers of the company?
19. Why are banks called "financial intermediaries"?
20. Name several different kinds of bank accounts. How are they different?
21. Why are bonds somewhat risky to buy, even though they make predetermined payments based on a fixed rate of interest?
22. Why should a financial investor care about diversification?

23. What is a mutual fund?

24. What is an index fund?

25. How is buying a house to live in a type of financial investment?

26. Why is it hard to forecast future movements in stock prices?

27. What two key choices can U.S. citizens make to increase their relative wealth?

28. Is investing in housing always a very safe investment?

Critical Thinking Questions

29. If you owned a small firm that had become somewhat established, but you needed a surge of financial capital to carry out a major expansion, would you prefer to raise the funds through borrowing or by issuing stock? Explain why or why not.

30. Explain how a company can fail when the safeguards that should be in place fail.

31. What are some reasons why the investment strategy of a thirty-year-old might differ from the investment strategy of a sixty-five-year-old?

32. Explain why a financial investor in stocks can't earn high capital gains simply by buying companies with a demonstrated record of high profits.

33. Explain what happens in an economy when the financial markets limit access to capital. How does this affect economic growth and employment?

34. You and your friend have opened an account on E-Trade and have each decided to select five similar companies in which to invest. You are diligent in monitoring your selections, tracking prices, current events, and actions taken by the company. Your friend hangs out at the gym and doesn't seem to have a care in the world. Explain what might be the performance for each of your portfolios at the end of the year.

35. How do bank failures cause the economy to go into recession?

Problems

36. The Darkroom Windowshade Company has 100,000 shares of stock outstanding. The investors in the firm own the following numbers of shares: Investor 1 has 20,000 shares; Investor 2 has 18,000 shares; Investor 3 has 15,000 shares; Investor 4 has 10,000 shares; Investor 5 has 7,000 shares; and Investors 6–11 have 5,000 shares each. What is the minimum number of investors it would take to vote to change the top management of the company? If Investors 1 and 2 agree to vote together, can they be certain of always getting their way in how the company will be run?

37. Imagine that a $10,000 ten-year bond was issued at an interest rate of 6%. You are thinking about buying this bond one year before the end of the ten years, but interest rates are now 9%.

    a. Given the change in interest rates, would you expect to pay more or less than $10,000 for the bond?

    b. Calculate what you would actually be willing to pay for this bond.

38. Suppose Ford Motor Company issues a five-year bond with a face value of $5,000 that pays an annual coupon payment of $150.

    a. What is the interest rate that Ford is paying on the borrowed funds?

    b. Suppose the market interest rate rises from 3% to 4% a year after Ford issues the bonds. Will the value of the bond increase or decrease?

39. How much money do you have to put into a bank account that pays 10% interest compounded annually to have $10,000 in ten years?

40. Many retirement funds charge an administrative fee equal to 0.25% on managed assets. Suppose that Alex and Spencer each invest $5,000 in the same stock this year. Alex invests directly and earns 5% a year. Spencer uses a retirement fund and earns 4.75%. After thirty years, how much more will Alex have than Spencer?