

## Chapter 2 Securities Markets

### TRUE/FALSE

- T 1. A major function of organized securities markets is to facilitate the transfers of securities among investors.
- T 2. A "round lot" is the general unit for trading in a security.
- T 3. The purchase of 53 shares of IBM is an odd lot.
- F 4. If a stock is quoted 20.04-20.25, an investor can sell the stock for 20.25.
- T 5. If a stock is quoted 12.79-13.02, an investor can buy the stock for 13.02.
- T 6. The spread between the bid and ask prices should be viewed as one of the costs of investing.
- T 7. Market makers guarantee to buy and sell at least one round lot at the prices they quote.
- F 8. The level of securities prices is set by market makers.
- T 9. The New York Stock Exchange is an example of a secondary market.
- T 10. Publicly-owned stock that is not listed on an exchange (NYSE) is traded in the over-the-counter markets such as the Nasdaq stock market.
- F 11. Bid and ask price quotations for over-the-counter stocks are not available through the internet.
- F 12. Stockbrokers set bid and ask prices.
- F 13. Investors who are "bearish" purchase securities.
- F 14. A short sale is a sale that occurs quickly after the stock is purchased.

- F 15. Once a stock has been sold, the investor receives a confirmation (often on-line) specifying the amount to be remitted (i.e., paid).
- T 16. Securities must be paid for by the settlement date.
- F 17. The margin requirement is set by the SEC.
- F 18. The margin requirement sets the maximum cash investment the individual investor must remit.
- T 19. If the investor buys stock on margin and the price subsequently declines, the percentage loss is magnified.
- T 20. Once securities are purchased, they are usually registered in the brokerage firm's name.
- T 21. After purchasing stock, an investor may place a stop loss order to sell if the stock's price declines.
- T 22. Selling short is selling borrowed securities.
- F 23. Investors are insured against loss from brokerage firm failure by the SEC.
- F 24. A short position is premised on securities prices rising.
- T 25. U. S. citizens may invest in foreign stocks by purchasing American Depositary Receipts (ADRs).
- F 26. ADRs pay dividends in foreign currencies.
- T 27. Publicly owned companies must provide the SEC with information that may affect the value of the firm's securities.
- F 28. The purpose of the full disclosure laws is so investors will not make poor investments.
- F 29. The SEC cannot suspend trading in a firm's stock.
- T 30. The purpose of the federal securities laws is to provide investors with data and facts so they can make informed investment decisions.

F 31. The Securities Investor Protection Corporation (SIPC) protects individuals from poor investments.

F 32. The maintenance margin requirement sets the minimum an investor must remit to purchase a stock.

T 33. If an investor buys stock on margin and the price of the stock rises, the investor will not receive a margin call from the broker.

F 34. Sarbanes-Oxley created the Public Company Accounting Oversight Board whose task is to regulate securities prices.

T 35. The objective of Sarbanes-Oxley was to create a stronger firewall between investment banking activities and the role of financial analysts.

F 36. The primary role of organized securities exchanges is to raise capital (money) for firms.

T 37. A direct transfer of funds from savers to firms occurs when new securities are issued in the primary market.

T 38. The direct sale of new securities to a pension plan is a private placement, and the securities do not have to be registered with the SEC.

T 39. In an "underwriting" the investment banker guarantees the firm selling the securities a specified amount of funds.

F 40. In a "best effort" sale of securities, the risk of the sale rests with the investment banker.

T 41. The syndicate's role in an underwriting is to sell the new issue of securities.

F 42. If the underwriter overprices a new issue, the market price of the securities will rise.

T 43. A prospectus is required when a corporation issues new securities that are sold to the general public.

F 44. The SEC establishes the price of a new issue of stock.

T 45. The cost of an underwriting (to the firm issuing the securities) is the difference between the price of the public and the proceeds received by the firm.

- T 46. A new issue of corporate securities sold to the general public must be registered with the SEC.
- F 47. The SEC establishes the price of a new stock issue.
- F 48. If the price of an initial public offering of stock rises, the windfall gain goes to the firm selling the securities.
- F 49. A "lock-up" refers to a security transaction with an assured profit.
- F 50. A shelf-registration involves the selling of new securities without having them registered with the SEC.

#### MULTIPLE CHOICE

- c 1. A broker
- a. stresses one type of investment
  - b. makes a market in securities
  - c. buys securities for customers' accounts
  - d. underwrites stock but not corporate bonds
- a 2. The spread is the
- a. difference between the bid and ask prices
  - b. commission charged by the broker
  - c. difference between the purchase and sale prices
  - d. difference between the commissions charged by full service and discount/online brokers
- b 3. A market maker
- 1. sells stock at the ask price
  - 2. buys stock at the ask price
  - 3. sells stock at the bid price
  - 4. buys stock at the bid price
- a. 1 and 2
  - b. 1 and 4
  - c. 2 and 3
  - d. 3 and 4
- a 4. If the quote on stock is reduced, that implies
- 1. supply exceeded demand
  - 2. demand exceeded supply

- 3. the price was too high
  - 4. the price was too low
    - a. 1 and 3
    - b. 1 and 4
    - c. 2 and 3
    - d. 2 and 4
- d 5. Daily securities transactions that are reported in the financial media generally include
- 1. the volume of transactions
  - 2. the high and low prices for the day
  - 3. the net change in price from the previous day
    - a. 1 and 2
    - b. 1 and 3
    - c. 2 and 3
    - d. all of the above
- b 6. A registered representative
- a. makes a market
  - b. buys and sells for customers' accounts
  - c. represents brokerage firms with the NYSE
  - d. sets the spread
- a 7. The cost of investing includes
- 1. commissions
  - 2. the spread
  - 3. dividends
    - a. 1 and 2
    - b. 1 and 3
    - c. 2 and 3
    - d. all of the above
- c 8. Investors are insured from brokerage firm losses by
- a. the SEC
  - b. the Federal Reserve
  - c. the SIPC
  - d. the FDIC
- a 9. Securities regulations protect investors by
- a. requiring disclosures of information by firms
  - b. stopping investors from buying overpriced stock
  - c. reducing competition among brokers
  - d. establishing commission schedules
- d 10. Inside information
- a. is obtained from inside brokerage firms
  - b. is reported in a firm's financial statements

- c. must be disclosed to the SEC
  - d. may not be legally used to obtain security profits
- a 11. If a stock is bought on margin,
  - a. part of the cost of investment is borrowed
  - b. the commissions on the investment are increased
  - c. the cost of the investment is reduced
  - d. the interest on the borrowed funds is set by the Securities and Exchange Commission (SEC)
- a 12. The margin requirement is set by the
  - a. Federal Reserve
  - b. SEC
  - c. FDIC
  - d. SIPC
- a 13. Short selling is
  - a. selling borrowed securities
  - b. selling stock owned for less than a year
  - c. selling an odd lot
  - d. selling against the investor's broker's advice
- c 14. American Depositary Receipts represent
  - a. American stocks traded abroad
  - b. European stocks traded in Europe
  - c. foreign stocks traded in the U.S.
  - d. American and foreign stocks traded OTC
- d 15. Short selling requires
  - 1. no collateral
  - 2. a margin payment
  - 3. delivering securities owned
  - 4. borrowing securities to deliver
    - a. 1 and 3
    - b. 1 and 4
    - c. 2 and 3
    - d. 2 and 4
- b 16. Gains will result from a short sale if
  - a. stock prices rise
  - b. stock prices fall
  - c. stock prices remain stable
  - d. The answer is indeterminate.
- c 17. The value of an ADR will tend to increase if
  - 1. the value of the dollar rises

- 2. the value of the dollar falls
  - 3. foreign stock markets rise
  - 4. foreign stock markets fall
    - a. 1 and 3
    - b. 1 and 4
    - c. 2 and 3
    - d. 2 and 4
- a 18. The Sarbanes-Oxley law
- a. reduces potential conflicts of between securities analysts and investment bankers
  - b. legalizes the sale of securities by investment bankers
  - c. requires corporate directors to own stock
  - d. mandates that securities analysts file their recommendations with the SEC.
- c 19. Which of the following is not part of the underwriting process?
- a. the prospectus
  - b. the originating house
  - c. the SIPC
  - d. the SEC
- a 20. The syndicate
- 1. facilitates the sale of new securities
  - 2. is formed by the originating house
  - 3. creates a secondary market in stocks
    - a. 1 and 2
    - b. 1 and 3
    - c. 2 and 3
    - d. all of the above

- a 21. If the offer price of a new issue is too low,
  - 1. demand will exceed supply
  - 2. supply will exceed demand
  - 3. the price of the securities will rise
  - 4. the price of the securities will fall
    - a. 1 and 3
    - b. 1 and 4
    - c. 2 and 3
    - d. 2 and 4
  
- c 22. The final prospectus does not include
  - a. the firm's balance sheet
  - b. the price of the securities sold to the public
  - c. the underwriter's profit on the sale
  - d. the underwriting discount
  
- a 23. A new issue of corporate securities sold to the general public must be
  - a. registered with the SEC
  - b. initially sold through brokers
  - c. offered initially to existing stockholders
  - d. bought by specialists in corporate securities
  
- c 24. Concerning a new issue of stock, a lock-up refers to
  - a. a guaranteed profit on the initial purchase
  - b. a guaranteed profit to the underwriter
  - c. the requirement that shares purchased by insiders prior to an initial public offering must retain those shares for a specified period
  - d. initial buyers of the stock in the IPO must hold the shares for a specified period of time
  
- b 25. The short-interest ratio
  - a. measures the number of shares sold each day
  - b. may be used to forecast subsequent movements in the price of a stock
  - c. an increase in the ratio suggests short sellers expect the price of the stock to rise
  - d. a reduction in the ratio may be interpreted that stock prices will be stable

## PROBLEMS

1. An investor purchased on margin Orange Computer for \$30 a share. The stock's price subsequently increased to \$50 a share at which time the investor sold the stock. If the margin requirement were 60 percent and the interest rate on borrowed funds were 7 percent, what would be the percentage earned on the investor's funds (excluding commissions)? What would have been the return if the investor had not bought the stock on margin?

2. An investor bought on margin 100 shares of Copier Corp. for \$85 a share. The firm paid an annual dividend of \$4 a share; the margin requirement was 60 percent with an interest rate of 8 percent on borrowed funds, and commissions on the purchase and sale were \$75. The price of the stock rose to \$120 in one year.

a. What is the percentage earned on the investment if the stock is bought for cash (i.e., the investor did not use margin)?

b. What is the percentage earned on the investment if the stock is bought on margin?

3. An investor sells 100 shares short at \$43. The sale requires a margin deposit equal to 60 percent of the proceeds of the sale. If the investor closes the position at \$49, what was the percentage earned or lost on the investment? If the position had been closed when the price of the stock was \$27, what would have been the percent earned or lost on the position?

4. An investor sells 100 shares short at \$43. The sale requires a margin deposit equal to 60 percent of the proceeds of the sale. The company paid a cash dividend of \$2 per share. If the investor closed the position at \$36, what was the percentage earned or lost on the investment?

## SOLUTIONS TO PROBLEMS

1. Cost of the stock: \$30  
Margin requirement:  $(.6)(\$30) = \$18$   
Amount borrowed:  $\$30 - \$18 = \$12$

Percentage return when the investor used margin:  
Profit on the trade = Sale - Cost - Interest  
 $= \$50 - \$30 - .07(\$12) = \$19.16$

Percentage earned on the investor's funds:  
 $\$19.16/\$18 = 106.4\%$

Percentage return when the investor did not use margin:  
Profit in the trade =  $\$50 - \$30 = \$20$

Percentage earned on the investor's funds:  $\$20/\$30 = 66.7\%$ .

2. a. Profit = Cash inflow - Cash outflow  
 $= \text{Sale} - \text{Commissions} - (\text{Cost} + \text{Commissions})$   
 $+ \text{Dividends}$   
 $= \$12,000 - \$75 - (\$8,500 + \$75) + \$400 = \$1,750$

Percentage earned on investor's funds:  
 $\$3,750/\$8,075 = 46.44\%$

- b. Margin required:  $(.6)(\$8,500 + \$75) = \$5,145$   
Amount borrowed:  $(.4)(\$8,500 + \$75) = \$3,430$   
Interest cost:  $(.08)(\$3,430) = \$274.40$

Profit = Sale - Commissions - (Cost + Commissions)  
 $+ \text{Dividends} - \text{Interest}$   
 $= \$12,000 - \$75 - (\$8,500 + \$75) + \$400 - \$274.40$   
 $= \$3,475.60$

Percentage earned on investor's funds:  
 $\$3,475.60/\$5,145 = 67.55\%$

3. Proceeds of the sale  $\$43 \times 100 = \$4,300$   
Margin requirement:  $.6 \times \$4,300 = \$2,580$   
When the price of the stock rises to \$49, the investor loses \$600 ( $\$4,300 - \$4,900$ ). The percentage lost on the invested funds is  
 $(\$600)/\$2,580 = (23.2\%)$ .

When the price of the stock falls to \$27, the investor earns a profit of \$1,600 (\$4,300 - \$2,700). The percentage return is

$$\$1,600/\$2,580 = 62.0\%.$$

These percentage returns do not consider (1) commissions, (2) any interest if the investor borrowed the funds to meet the margin requirement, and (3) any dividends the short seller must pay to the investor from whom the shares were borrowed.

4. This problem repeats the previous problems and adds a dividend payment that the short seller must cover.

Proceeds of the sale  $\$43 \times 100 = \$4,300$

Margin requirement:  $.6 \times \$4,300 = \$2,580$

When the price of the stock falls to \$36, the investor earns a profit of \$700 (\$4,300 - \$3,600). However, the short seller must cover the \$2 dividend, so the net gain is \$500 (\$700 - \$200 = \$500). The percentage return is  $\$500/\$2,580 = 19.4\%$ .