Equity Market

Multiple Choice Problems

PROBLEMS

1. Which of the following is *not* a characteristic of common equity?

   A. It represents an ownership interest in the company.
   B. Shareholders participate in the decision-making process.
   C. The company is obligated to make periodic dividend payments.

2. The type of equity voting right that grants one vote for each share of equity owned is referred to as:

   A. Proxy voting.
   B. Statutory voting.
   C. Cumulative voting.

3. All of the following are characteristics of preference shares *except*:

   A. They are either callable or putable.
   B. They generally do not have voting rights.
   C. They do not share in the operating performance of the company.

4. Participating preference shares entitle shareholders to:

   A. Participate in the decision-making process of the company.
   B. Convert their shares into a specified number of common shares.
   C. Receive an additional dividend if the company's profits exceed a predetermined level.

5. Which of the following statements about private equity securities is *incorrect*?

   A. They cannot be sold on secondary markets.
   B. They have market-determined quoted prices.
   C. They are primarily issued to institutional investors.

6. Venture capital investments:

   A. Can be publicly traded.
   B. Do not require a long-term commitment of funds.
   C. Provide mezzanine financing to early-stage companies.

7. Which of the following statements *most accurately* describes one difference between private and public equity firms?

   A. Private equity firms are focused more on short-term results than public firms.
   B. Private equity firms' regulatory and investor relations operations are less costly than those of public firms.
   C. Private equity firms are incentivized to be more open with investors about governance and compensation than public firms.

12. Calculate the total return on a share of equity using the following data:
Purchase price: $50
Sale price: $42
Dividend paid during holding period: $2

A. −12.0%
B. −14.3%
C. −16.0%

$P_0 = 50$
$P_1 = 42$
$D = 2$

$\frac{42-50+2}{50} = -0,12$

13. If a U.S.-based investor purchases a euro-denominated ETF and the euro subsequently depreciates in value relative to the dollar, the investor will have a total return that is:

A. Lower than the ETF's total return.
B. Higher than the ETF's total return.
C. The same as the ETF's total return.

1 USD = 20 → 0,05
1 USD = 28 → 0,036

$r_{EX} = \frac{0,036 - 0,05}{0,05}$

r_{EX} → NEGATIVE

14. Which of the following is *incorrect* about the risk of an equity security? The risk of an equity security is:

A. Based on the uncertainty of its cash flows.
B. Based on the uncertainty of its future price.
C. Measured using the standard deviation of its dividends.

15. From an investor's point of view, which of the following equity securities is the *least* risky?

A. Putable preference shares.
B. Callable preference shares.
C. Noncallable preference shares.

16. Which of the following is *least likely* to be a reason for a company to issue equity securities on the primary market?

A. To raise capital.
B. To increase liquidity.
C. To increase return on equity.

17. Which of the following is *not* a primary goal of raising equity capital?

A. To finance the purchase of long-lived assets.
B. To finance the company's revenue-generating activities.
C. To ensure that the company continues as a going concern.

18. Which of the following statements is *most accurate* in describing a company's book value?

A. Book value increases when a company retains its net income.
B. Book value is usually equal to the company's market value.
C. The ultimate goal of management is to maximize book value.

19. Calculate the book value of a company using the following information:

Number of shares outstanding	100,000
Price per share	€52
Total assets	€12,000,000
Total liabilities	€7,500,000
Net Income	€2,000,000

TOTAL ASSETS − TOTAL LIABILITIES

BV = 12.000.000 − 7.500.000 = 4.500.000

BOOK VALUE = 4.500.000

$r_m - r_F = 4{,}5$

$r_m = 4{,}5 + r_F = 4{,}5 + 4{,}5 = 12\%$

A. €4,500,000
B. €5,200,000
C. €6,500,000

20. Which of the following statements is *least accurate* in describing a company's market value?

A. Management's decisions do not influence the company's market value.
B. Increases in book value may not be reflected in the company's market value.
C. Market value reflects the collective and differing expectations of investors.

21. Calculate the 2009 return on equity (ROE) of a stable company using the following data:

Total sales	£2,500,000
Net income	£2,000,000
Beginning of year total assets	£50,000,000
Beginning of year total liabilities	£35,000,000
Number of shares outstanding at the end of 2009	1,000,000
Price per share at the end of 2009	£20

$ROE = \frac{NI}{Equim}$

$ROE = \frac{2000.000}{15\,000.000}$

$ROE = 0{,}133$

A. 10.0%
B. 13.3%
C. 16.7%

22. Holding all other factors constant, which of the following situations will *most likely* lead to an increase in a company's return on equity?

A. The market price of the company's shares increases.
B. Net income increases at a slower rate than shareholders' equity.
C. The company issues debt to repurchase outstanding shares of equity.

23. Which of the following measures is the *most difficult* to estimate?

A. The cost of debt.
B. The cost of equity.
C. Investors' required rate of return on debt.

24. A company's cost of equity is often used as a proxy for investors':

A. Average required rate of return.
B. Minimum required rate of return.
C. Maximum required rate of return.

4) $D_1 = 5$, $g = 3\%$, $r = 15$

$V_0 = \frac{5}{0{,}15 - 0{,}03}$

$V_0 = 41{,}667$

5) $D_0 = 5$

$V_0 = \frac{5 \cdot (1 + 0{,}03)}{0{,}15 - 0{,}03} = 42{,}92$

Computational Problems

1. Newmont Mining (NYSE: NEM) has an estimated beta of –0.2. The risk-free rate of return is 4.5 percent, and the equity risk premium is estimated to be 7.5 percent. Using the CAPM, calculate the required rate of return for investors in NEM.

$r = 4{,}5 - 0{,}2 \cdot 7{,}5 = 3\%$

2. The following facts describe Larsen & Toubro Ltd's component costs of capital and capital structure. Based on the information given, calculate Larsen & Toubro's WACC.

Component Costs of Capital	(%)
Cost of equity based on the CAPM:	15.6
Pretax cost of debt:	8.28
Tax rate:	30
Target weight in capital structure:	Equity 80, Debt 20

$12{,}48 + 1{,}1592 = 13{,}6396\%$

3. Vincent Nguyen, an analyst, is examining the stock of British Airways (London Stock Exchange: BAY) as of the beginning of 2008. He notices that the consensus forecast by analysts is that the stock will pay a £4 dividend per share in 2009 (based on 21 analysts) and a £5 dividend in 2010 (based on 10 analysts). Nguyen expects the price of the stock at the end of 2010 to be £250. He has estimated that the required rate of return on the stock is 11 percent. Assume all dividends are paid at the end of the year.

A. Using the DDM, estimate the value of BAY stock at the end of 2009.
B. Using the DDM, estimate the value of BAY stock at the end of 2008.

4. Bolwork Inc. is expected to pay a dividend of $5 per share next year. Bolwork's dividends are expected to grow by 3 percent annually. The required rate of return for Bolwork stock is 15 percent. Based on the dividend discount model, a fair value for Bolwork stock is $___ per share.

41,67

5. Bolwork Inc. has paid a dividend of $5 per share this year. Bolwork's dividends are expected to grow by 3 percent annually. The required rate of return for Bolwork stock is 15 percent. Based on the dividend discount model, a fair value for Bolwork stock is $___ per share.

42,92

6.

2. ~~rd = 15,6~~ $r_e = 15{,}6$, $r_d = 8{,}28$, $t = 0{,}3$

$WACC = 0{,}8 \cdot 15{,}6 + 0{,}2 \cdot 8{,}28 \cdot (1 - 0{,}3)$

$WACC = 13{,}6396 = 12{,}48 + 1{,}1592$

During the period 1960–2007, earnings of the S&P 500 Index companies have increased at an average rate of 8.18 percent per year, and the dividends paid have increased at an average rate of 5.9 percent per year. Assume that:

- Dividends will continue to grow at the 1960–2007 rate.
- The required return on the index is 8 percent.
- Companies in the S&P 500 Index collectively paid $246.6 billion in dividends in 2007.

Estimate the aggregate value of the S&P 500 Index component companies at the beginning of 2008 using the Gordon growth model.

7\.

Great Plains Energy is a public utility holding company that listed its 4.5 percent cumulative perpetual preferred stock series E on the NYSE Euronext in March 1952 (Ticker: GXPPrE). The par value of the preferred stock is $100. If the required rate of return on this stock is 5.6 percent, estimate the value of the stock.

$\frac{0{,}045 \cdot 100}{0{,}056} - 80{,}35$

Interpreting Financial News

Interpret the following comments made by Wall Street analysts and portfolio managers.

a. "The stock market's recent climb has been driven by falling interest rates."
b. "Future stock prices are dependent on the Fed's policy meeting next week."
c. "Given a recent climb in stocks that cannot be explained by fundamentals, a correction is inevitable."

Managing in Financial Markets

As an investment manager, you frequently make decisions about investing in stocks versus other types of investments, and about types of stocks to purchase.
a. You have noticed that investors tend to invest more heavily in stocks after interest rates have declined. You are considering this strategy as well. Is it rational to invest more heavily in stocks once interest rates have declined?

b. Assume that you are about to select a specific stock that will perform well in response to an expected runup in the stock market. You are very confident that the stock market will perform well in the near future. Recently, a friend recommended that you consider purchasing stock of a specific firm because it had decent earnings over the last few years, it has a low beta (reflecting a low degree of systematic risk), and its beta is expected to remain low. You normally rely on beta as a measurement of a firm's systematic risk. Should you seriously consider buying that stock?

c. In the past, your boss assessed your performance based on the actual return on the portfolio of U.S. stocks that you manage. For each quarter in which your portfolio generated an annualized return of at least 20 percent, you received a bonus. Now your boss wants you to develop a method for measuring your performance from managing the portfolio. Offer a method that accurately measures your performance.

d. Assume that you were also asked to manage a portfolio of European stocks. How would your method for measuring your performance in managing this portfolio differ from the U.S. stock portfolio in the previous question?