

Practice questions

Multiple Choice

1. XYZ has \$25,000 of debt outstanding and a book value of equity of \$25,000. The company has 10,000 shares outstanding and a stock price of \$10. If the unlevered beta is 0.75 and the marginal tax rate is 20%, what is XYZ's levered beta?
 - a. 0.75
 - b. 0.8
 - c. 0.85
 - d. 0.9
2. The Collection Co. has a current beta of 1.6. The market risk premium is 7 percent and the risk-free rate of return is 3 percent. By how much will the cost of equity increase if the company expands their operations such that their company beta rises to 1.9?
 - a. 0.30 percent
 - b. 0.90 percent
 - c. 1.50 percent
 - d. 2.10 percent
 - e. 2.70 percent
3. Blue Ribbon, Inc. wants to have a weighted average cost of capital of 10 percent. The firm has an aftertax cost of debt of 4 percent and a cost of equity of 12 percent. What debt-equity ratio is needed for the firm to achieve their targeted weighted average cost of capital?
 - a. .25
 - b. .33
 - c. .50
 - d. .67
 - e. .75
4. If a firm uses its WACC as the discount rate for all of the projects it undertakes then the firm will tend to:
 - I. reject some positive net present value projects.
 - II. accept some negative net present value projects.
 - III. favor high risk projects over low risk projects.
 - IV. maintain its current level of risk.
 - a. I and III only
 - b. III and IV only
 - c. I, II, and III only
 - d. I, II, and IV only
 - e. I, II, III, and IV

5. Wayne's of New York specializes in clothing for female executives living and working in the financial district of New York City. Allen's of PA. specializes in clothing for women who live and work in the rural areas of Western Pennsylvania. Both firms are currently considering expanding their clothing line to encompass working women in the rural upstate region of New York state. Wayne's currently has a cost of capital of 11 percent while Allen's cost of capital is 9 percent. The expansion project has a projected net present value of \$36,900 at a 9 percent discount rate and a net present value of \$13,200 at an 11 percent discount rate. Which firm or firms should expand into rural New York state?
 - a. Wayne's only
 - b. Allen's only
 - c. both Wayne's and Allen's
 - d. neither Wayne's nor Allen's
 - e. cannot be determined from the information provided

6. You are considering a project that will generate sales of \$89,000, costs of \$56,000, and annual depreciation of \$26,000. What is the value of the operating cash flow if the tax rate is 34 percent?
 - a. \$28,380
 - b. \$30,620
 - c. \$47,780
 - d. \$59,000

7. If a firm is operating with the optimal amount of debt, then the:
 - a. financial distress costs must equal the present value of the tax shield on debt.
 - b. value of the levered firm will exceed the value of the firm if it were unlevered.
 - c. value of the firm is equal to $V_U + T_C \times D$.
 - d. value of the firm is equal to $V_L + T_C \times D$.
 - e. debt-equity ratio is equal to 1.0.

8. The basic lesson of M&M Theory is that the value of a firm is dependent upon the:
 - a. capital structure of the firm.
 - b. total cash flows of the firm.
 - c. percentage of a firm to which the bondholders have a claim.
 - d. tax claim placed on the firm by the government.
 - e. size of the stockholders' claims on the firm.

9. Lester's Meat Market is currently an all equity firm that has 24,000 shares of stock outstanding at a market price of \$25 a share. The firm has decided to leverage its operations by issuing \$200,000 of debt at an interest rate of 8 percent. This new debt will be used to repurchase shares of the outstanding stock. The restructuring is expected to increase the earnings per share. What is the minimum level of earnings before interest and taxes that the firm is expecting? Ignore taxes.
- a. \$48,000
 - b. \$52,400
 - c. \$57,620
 - d. \$60,200
 - e. \$61,340
10. Denver Dry Goods has expected earnings before interest and taxes of \$14,600, an unlevered cost of capital of 15 percent, and a tax rate of 35 percent. The company also has \$3,500 of debt that carries a 6 percent coupon. The debt is selling at par value. What is the value of this firm?
- a. \$63,267
 - b. \$64,184
 - c. \$64,492
 - d. \$65,211
 - e. \$66,267
11. Back Woods Coffee has expected earnings before interest and taxes of \$34,500, an unlevered cost of capital of 14 percent, and debt with both a book and face value of \$20,000. The debt has an annual 7 percent coupon. The tax rate is 35 percent. What is the value of the firm?
- a. \$167,179
 - b. \$174,015
 - c. \$177,778
 - d. \$203,518
 - e. \$241,414
12. A firm has a market value equal to its book value. Currently, the firm has excess cash of \$800 and other assets of \$4,200. Equity is worth \$5,000. The firm has 200 shares of stock outstanding and net income of \$350. What will the new earnings per share be if the firm uses all its excess cash to complete a stock repurchase?
- a. \$1.51
 - b. \$1.75
 - c. \$1.96
 - d. \$2.00
 - e. \$2.08

13. A firm has a market value equal to its book value. Currently, the firm has excess cash of \$2,000 and other assets of \$13,000. Equity is worth \$15,000. The firm has 1,000 shares of stock outstanding and net income of \$2,500. By what percent does the stock price per share change if the firm pays out its excess cash as a cash dividend?
- a. - 16.67 percent
 - b. - 13.33 percent
 - c. 0.00 percent
 - d. 13.33 percent
 - e. 16.67 percent
14. Which one of the following will increase net working capital? Assume the current ratio is greater than 1.0.
- a. using cash to pay an accounts payable
 - b. using cash to pay a long-term debt
 - c. selling inventory at a profit
 - d. collecting an accounts receivable
 - e. granting a customer a discount for early payment
15. Which of the following are sources of cash?
- I. reducing the level of inventory
 - II. receiving a payment from a customer
 - III. selling additional equity shares
 - IV. retiring bonds
- a. I and III only
 - b. I and IV only
 - c. II and III only
 - d. I, II, and III only
 - e. I, III, and IV only
16. Which of the following will increase the operating cycle?
- I. increasing the inventory turnover rate
 - II. increasing the payables period
 - III. decreasing the receivable turnover rate
 - IV. decreasing the inventory level
- a. I only
 - b. III only
 - c. II and IV only
 - d. I and IV only
 - e. II and III only

17. Center Enterprises currently has an operating cycle of 58 days. You are analyzing some operational changes which are expected to increase the accounts receivable period by 4 days and decrease the inventory period by 3 days. The accounts payable turnover rate is expected to increase from 9 to 12 times per year. If all of these changes are adopted, what will Center's new operating cycle be?
- a. 56 days
 - b. 57 days
 - c. 59 days
 - d. 60 days
 - e. 65 days
18. Evans, Inc. has an inventory period of 36 days, an accounts payable period of 44 days, and an accounts receivable turnover rate of 20. What is the length of the cash cycle?
- a. 10.25 days
 - b. 12.00 days
 - c. 26.25 days
 - d. 60.00 days
 - e. 61.75 days
19. Wyler, Inc. has a beginning cash balance of \$380 on March 1. The firm has projected sales of \$550 in February, \$700 in March, and \$800 in April. The cost of goods sold is equal to 75 percent of sales. Goods are purchased one month prior to the month of sale. The accounts payable period is 30 days and the accounts receivable period is 15 days. The firm has monthly cash expenses of \$200. What is the projected ending cash balance at the end of March? Assume that every month has 30 days.
- a. \$205.00
 - b. \$280.00
 - c. \$317.50
 - d. \$392.50
 - e. \$430.00

Short-answer questions

I have placed the relevant chapters from the sources that we use. You are certainly welcome to use other sources.

1. What is corporate governance? Do we need corporate governance?
 - Clayman, Frison, Troughton, ch.1
2. What are the two types of risks that influence beta? Give a brief description of each. What type of risk does the unlevered beta represent?
 - Clayman, Frison, Troughton, ch.3
3. How does the NPV rule help ensure that managers create wealth for a firm's shareholders?
 - Clayman, Frison, Troughton, ch.2
 - Class notes
4. In the Modigliani and Miller theory of capital structure (assume the case where there are taxes and bankruptcy costs), the cost of equity increases as the amount of debt increases. So why don't financial managers use as little debt as possible to keep the cost of equity down? After all, aren't financial managers supposed to maximize the value of a firm?
 - Clayman, Frison, Troughton, ch.5
5. Explain how dividends affect individual shareholders differently than an equal amount of funds spent on a repurchase.
 - Ross, Westerfield, and Jaffe, ch.19

Short problems

Please go over calculations made in case 2, case 3, and case 6. There will be a short problem-solving section that will involve a series of calculations similar to these cases.