**Abbasov Əkbər\_Maliyyə**

1. In a large corporation, what are the two distinct groups that report to the chief financial officer? Which group is the focus of corporate finance?
2. What are the four primary disadvantages of the sole proprietorship and partnership forms of business organization? What benefits are there to these types of business organization as opposed to the corporate form?
3. Suppose you own stock in a company. The current price per share is $25. Another company has just announced that it wants to buy your company and will pay $35 per share to acquire all the outstanding stock. Your company’s management immediately begins fighting off this hostile bid. Is management acting in the shareholders’ best interests? Why or why not?
4. Who owns a corporation? Describe the process whereby the owners control the firm’s management. What is the main reason that an agency relationship exists in the corporate form of organization? In this context, what kinds of problems can arise?
5. What does it mean when we say the New York Stock Exchange is an auction market? How are auction markets different from dealer markets? What kind of market is NASDAQ?
6. What does liquidity measure? Explain the trade-off a firm facing between high liquidity and low liquidity levels.
7. Under standard accounting rules, it is possible for a company’s liabilities to exceed its assets. When this occurs, the owners’ equity is negative. Can this happen with market values? Why or why not?
8. Mama Roach Exterminators, Inc., has sales of $634,000, costs of $305,000, depreciation expense of $46,000, interest expense of $29,000, and a tax rate of 35 percent. What is the net income for this firm?
9. Prather, Inc., has sales of $14,200, costs of $5,600, depreciation expense of $1,200, and interest expense of $680. If the tax rate is 35 percent, what is the operating cash flow, or OCF?
10. The 2016 balance sheet of Rock ‘N’ Roll Records, Inc., showed current assets of $1,400 and current liabilities of $870. The 2017 balance sheet showed current assets of $1,650 and current liabilities of $920. What was the company’s 2017 change in net working capital, or NWC?
11. First City Bank pays 6 percent simple interest on its savings account balances, whereas Second City Bank pays 6 percent interest compounded annually. If you made a $5,000 deposit in each bank, how much more money would you earn from your Second City Bank account at the end of 10 years?
12. First National Bank charges 13.1 percent compounded monthly on its business loans. First United Bank charges 13.4 percent compounded semiannually. As a potential borrower, which bank would you go to for a new loan?

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1. A first-round draft choice quarterback has been signed to a three-year, $25 million contract. The details provide for an immediate cash bonus of $2 million. The player is to receive $5 million in salary at the end of the first year, $8 million the next, and $10 million at the end of the last year. Assuming a 15 percent discount rate, is this package worth $25 million? If not, how much is it worth?
2. You are looking into an investment that will pay you $12,000 per year for the next 10 years. If you require a 15 percent return, what is the most you would pay for this investment?
3. Investment X offers to pay you $7,000 per year for eight years, whereas Investment Y offers to pay you $9,000 per year for five years. Which of these cash flow streams has the higher present value if the discount rate is 5 percent? If the discount rate is 22 percent?
4. If you put up $28,000 today in exchange for a 8.25 percent, 15-year annuity, what will the annual cash flow be?
5. If you deposit $3,000 at the end of each of the next 20 years into an account paying 10.5 percent interest, how much money will you have in the account in 20 years? How much will you have if you make deposits for 40 years?
6. Dinero Bank offers you a $30,000, seven-year term loan at 8 percent annual interest. What will your annual loan payment be?
7. You receive a credit card application from Shady Banks Savings and Loan offering an introductory rate of 2.5 percent per year, compounded monthly for the first six months, increasing thereafter to 17 percent compounded monthly. Assuming you transfer the $5,000 balance from your existing credit card and make no subsequent payments, how much interest will you owe at the end of the first year?
8. A company is contemplating a long-term bond issue. It is debating whether to include a call provision. What are the benefits to the company from including a call provision? What are the costs? How do these answers change for a put provision?
9. How does a bond issuer decide on the appropriate coupon rate to set on its bonds? Explain the difference between the coupon rate and the required return on a bond.
10. Hawk Enterprises has bonds on the market making annual payments, with 16 years to maturity, and selling for $870. At this price, the bonds yield 7.5 percent. What must the coupon rate be on the bonds?
11. Under what two assumptions can we use the dividend growth model to determine the value of a share of stock? Comment on the reasonableness of these assumptions.
12. The Jackson–Timberlake Wardrobe Co. just paid a dividend of $1.60 per share on its stock. The dividends are expected to grow at a constant rate of 6 percent per year indefinitely. If investors require a 12 percent return on The Jackson–Timberlake Wardrobe Co. stock, what is the current price? What will the price be in three years? In 15 years?
13. Suppose you know that a company’s stock currently sells for $60 per share and the required return on the stock is 12 percent. You also know that the total return on the stock is evenly divided between a capital gains yield and a dividend yield. If it’s the company’s policy to always maintain a constant growth rate in its dividends, what is the current dividend per share?
14. Great Pumpkin Farms just paid a dividend of $3.50 on its stock. The growth rate in dividends is expected to be a constant 5 percent per year indefinitely. Investors require a 16 percent return on the stock for the fi rst three years, a 14 percent return for the next three years, and an 11 percent return thereafter. What is the current share price?
15. North Side Corporation is expected to pay the following dividends over the next four years: $8, $7, $5, and $2. Afterward, the company pledges to maintain a constant 5 percent growth rate in dividends forever. If the required return on the stock is 11 percent, what is the current share price?
16. Suppose the government announces that, based on a just-completed survey, the growth rate in the economy is likely to be 2 percent in the coming year, as compared to 5 percent for the past year. Will security prices increase, decrease, or stay the same following this announcement? Does it make any

difference whether the 2 percent figure was anticipated by the market? Explain.

1. Classify the following events as mostly systematic or mostly unsystematic. Is the distinction clear in every case?

a. Short-term interest rates increase unexpectedly.

b. The interest rate a company pays on its short-term debt borrowing is increased by its bank.

c. Oil prices unexpectedly decline.

d. An oil tanker ruptures, creating a large oil spill.

e. A manufacturer loses a multimillion-dollar product liability suit.

f. A Supreme Court decision substantially broadens producer liability for injuries suffered by product users.

1. Indicate whether the following events might cause stocks in general to change price, and whether they might cause Big Widget Corp.’s stock to change price:

a. The government announces that inflation unexpectedly jumped by 2 percent last month.

b. Big Widget’s quarterly earnings report, just issued, generally fell in line with analysts’ expectations.

c. The government reports that economic growth last year was at 3 percent, which generally agreed with most economists’ forecasts.

d. The directors of Big Widget die in a plane crash.

e. Congress approves changes to the tax code that will increase the top marginal corporate tax rate. The legislation had been debated for the previous six months.

1. Based on the following information, calculate the expected return and standard deviation for the two stocks:

|  |  |  |  |
| --- | --- | --- | --- |
| *State of economy* | *Probability of State of economy* | *Rate of return if state occurs* | |
| *Stock A* | *Stock B* |
| *Recession* | *.15* | *.06* | *-.20* |
| *Normal* | *.60* | *.07* | *.13* |
| *Boom* | *.25* | *.11* | *.33* |

1. Consider the following information:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *State of economy* | *Probability of State of economy* | *Rate of return if state occurs* | | |
| *Stock A* | *Stock B* | *Stock C* |
| *Boom* | *.20* | *.30* | *.45* | *.33* |
| *Good* | *.40* | *.12* | *.10* | *.15* |
| *Poor* | *.30* | *.01* | *-.15* | *-.05* |
| *Bust* | *.10* | *-.06* | *-.30* | *-.09* |

a. Your portfolio is invested 30 percent each in A and C, and 40 percent in B. What is the expected return of the portfolio?

b. What is the variance of this portfolio? The standard deviation?

1. A stock has a beta of 1.30 and an expected return of 17 percent. A risk-free asset currently earns 5 percent.

a. What is the expected return on a portfolio that is equally invested in the two assets?

b. If a portfolio of the two assets has a beta of .75, what are the portfolio weights?

c. If a portfolio of the two assets has an expected return of 8 percent, what is its beta?

d. If a portfolio of the two assets has a beta of 2.60, what are the portfolio weights?

How do you interpret the weights for the two assets in this case? Explain.

1. How do you determine the appropriate cost of debt for a company? Does it make a difference if the company’s debt is privately placed as opposed to being publicly traded? How would you estimate the cost of debt for a firm whose only debt issues are privately held by institutional investors?
2. Stock in Country Road Industries has a beta of 1.25. The market risk premium is 7 percent, and T-bills are currently yielding 5 percent. Country Road’s most recent dividend was $2.10 per share, and dividends are expected to grow at a 5 percent annual rate indefinitely. If the stock sells for $34 per share, what is your best estimate of the company’s cost of equity?
3. Decline, Inc., is trying to determine its cost of debt. The firm has a debt issue outstanding with 12 years to maturity that is quoted at 94 percent of face value. The issue makes semiannual payments and has an embedded cost of 7 percent annually. What is the company’s pretax cost of debt? If the tax rate is 35 percent, what is the after tax cost of debt?
4. Mullineaux Corporation has a target capital structure of 50 percent common stock, 5 percent preferred stock, and 45 percent debt. Its cost of equity is 15 percent, the cost of preferred stock is 6 percent, and the cost of debt is 8 percent. The relevant tax rate is 35 percent.

a. What is Mullineaux’s WACC?

b. The company president has approached you about Mullineaux’s capital

structure. He wants to know why the company doesn’t use more preferred

stock financing because it costs less than debt. What would you tell the president?

1. Stranger, Inc., is considering a project that will result in initial after tax cash savings of $3.5 million at the end of the first year, and these savings will grow at a rate of 5 percent per year indefinitely. The firm has a target debt–equity ratio of .70, a cost of equity of 13 percent, and an aftertax cost of debt of 5.5 percent. The cost-saving proposal is somewhat riskier than the usual project the firm undertakes; management uses the subjective approach and applies an adjustment factor of +2 percent to the cost of capital for such risky projects. Under what circumstances should the company take on the project?
2. Define the following terms:

a) Expected return

b) Variance and standard deviation

c) Covariance and correlation

1. List and briefly explain at least two important functions affecting a company’s beta.
2. What are the advantages of using the DCF model for determining the cost of equity capital? What are the disadvantages? What specific piece of information do you need to find the cost of equity using this model? What are some of the ways in which you could get this estimate?
3. In broad terms, why is some risk diversifiable? Why are some risks nondiversifiable? Does it follow that an investor can control the level of unsystematic risk in a portfolio, but not the level of systematic risk?
4. A project has perpetual cash flows of C per period, a cost of I, and a required return of R. What is the relationship between the project’s payback and its IRR? What implications does your answer have for longlived projects with relatively constant cash flows?
5. What are some of the difficulties that might come up in actual applications of the various criteria we discussed in this chapter? Which one would be the easiest to implement in actual applications? The most difficult?
6. Are the capital budgeting criteria we discussed applicable to not-for-profit corporations? How should such entities make capital budgeting decisions? What about the U.S. government? Should it evaluate spending proposals using these techniques?
7. An investment project provides cash inflows of $840 per year for eight years. What is the project payback period if the initial cost is $3,200? What if the initial cost is $4,800? What if it is $7,300?
8. An investment project has annual cash inflows of $5,000, $5,500, $6,000, and $7,000, and a discount rate of 14 percent. What is the discounted payback period for these cash flows if the initial cost is $8,000? What if the initial cost is $12,000? What if it is $16,000?
9. An investment project costs $15,000 and has annual cash flows of $3,800 for six years. What is the discounted payback period if the discount rate is 0 percent? What if the discount rate is 10 percent? If it is 15 percent?
10. Bill plans to open a self-serve grooming center in a storefront. The grooming equipment will cost $385,000, to be paid immediately. Bill expects after tax cash inflows of $84,000 annually for seven years, after which he plans to scrap the equipment and retire to the beaches of Nevis. The first cash inflow occurs at the end of the first year. Assume the required return is 13 percent. What is the project’s PI? Should it be accepted?
11. You are evaluating a project that costs $75,000 today. The project has an inflow of $155,000 in one year and an outflow of $65,000 in two years. What are the IRRs for the project? What discount rate results in the maximum NPV for this project? How can you determine that this is the maximum NPV?
12. An investment under consideration has a payback of six years and a cost of $434,000. If the required return is 12 percent, what is the worst-case NPV? The best-case NPV? Explain. Assume the cash flows are conventional.
13. The Mango Republic has just liberalized its markets and is now permitting foreign investors. Tesla Manufacturing has analyzed starting a project in the country and has determined that the project has a negative NPV. Why might the company go ahead with the project? What type of option is most likely to add value to this project?
14. Assume a firm is considering a new project that requires an initial investment and has equal sales and costs over its life. Will the project reach the accounting, cash, or financial break-even point first? Which will it reach next? Last? Will this order always apply?
15. L.J.’s Toys Inc. just purchased a $390,000 machine to produce toy cars. The machine will be fully depreciated by the straight-line method over its five-year economic life. Each toy sells for $25. The variable cost per toy is $11, and the firm incurs fixed costs of $280,000 each year. The corporate tax rate for the company is 34 percent. The appropriate discount rate is 12 percent. What is the financial break-even point for the project?
16. Your company is deciding whether to invest in a new machine. The new machine will increase cash flow by $475,000 per year. You believe the technology used in the machine has a 10-year life; in other words, no matter when you purchase the machine, it will be obsolete 10 years from today. The machine is currently priced at $2,900,000. The cost of the machine will decline by $210,000 per year until it reaches $2,270,000, where it will remain. If your required return is 9 percent, should you purchase the machine? If so, when should you purchase it?
17. The manager for a growing firm is considering the launch of a new product. If the product goes directly to market, there is a 50 percent chance of success. For $175,000 the manager can conduct a focus group that will increase the product’s chance of success to 65 percent. Alternatively, the manager has the option to pay a consulting firm $390,000 to research the market and refine the product. The consulting firm successfully launches new products 80 percent of the time. If the firm successfully launches the product, the payoff will be $1.9 million. If the product is a failure, the NPV is zero. Which action will result in the highest expected payoff to the firm?
18. With regard to bid and ask prices on a Treasury bond, is it possible for the bid price to be higher? Why or why not?
19. Treasury bid and ask quotes are sometimes given in terms of yields, so there would be a bid yield and an ask yield. Which do you think would be larger? Explain.
20. How does a bond issuer decide on the appropriate coupon rate to set on its bonds? Explain the difference between the coupon rate and the required return on a bond.
21. Are there any circumstances under which an investor might be more concerned about the nominal return on an investment than the real return?
22. Companies pay rating agencies such as Moody’s and S&P to rate their bonds, and the costs can be substantial. However, companies are not required to have their bonds rated in the first place; doing so is strictly voluntary. Why do you think they do it?
23. What is the price of a 15-year, zero coupon bond paying $1,000 at maturity if the YTM is

a. 5 percent?

b. 10 percent?

c. 15 percent?

1. Microhard has issued a bond with the following characteristics:

Par: $1,000

Time to maturity: 15 years

Coupon rate: 7 percent

Semiannual payments

Calculate the price of this bond if the YTM is:

a. 7 percent

b. 9 percent

c. 5 percent

1. Watters Umbrella Corp. issued 15-year bonds 2 years ago at a coupon rate of 6.4 percent. The bonds make semiannual payments. If these bonds currently sell for 105 percent of par value, what is the YTM?
2. Rhiannon Corporation has bonds on the market with 11.5 years to maturity, a YTM of 7.6 percent, and a current price of $1,060. The bonds make semiannual payments. What must the coupon rate be on these bonds?
3. White Wedding Corporation will pay a $2.65 per share dividend next year. The company pledges to increase its dividend by 4.75 percent per year, indefinitely. If you require a return of 11 percent on your investment, how much will you pay for the company’s stock today?
4. Siblings, Inc., is expected to maintain a constant 6.4 percent growth rate in its dividends, indefinitely. If the company has a dividend yield of 4.3 percent, what is the required return on the company’s stock?
5. Suppose you know that a company’s stock currently sells for $72 per share and the required return on the stock is 11.5 percent. You also know that the total return on the stock is evenly divided between a capital gains yield and a dividend yield. If it’s the company’s policy to always maintain a constant growth rate in its dividends, what is the current dividend per share?
6. Gruber Corp. pays a constant $9 dividend on its stock. The company will maintain this dividend for the next 12 years and will then cease paying dividends forever. If the required return on this stock is 10 percent, what is the current share price?
7. Ayden, Inc., has an issue of preferred stock outstanding that pays a $5.90 dividend every year, in perpetuity. If this issue currently sells for $87 per share, what is the required return?
8. The price of Tara, Inc., stock will be either $50 or $70 at the end of the year. Call options are available with one year to expiration. T-bills currently yield 5 percent.

a. Suppose the current price of Tara stock is $62. What is the value of the call option if the exercise price is $35 per share?

b. Suppose the exercise price is $60 in part (a). What is the value of the call option now?

1. A stock is currently selling for $38 per share. A call option with an exercise price of $40 sells for $3.80 and expires in three months. If the risk-free rate of interest is 2.6 percent per year, compounded continuously, what is the price of a put option with the same exercise price?
2. A put option that expires in six months with an exercise price of $65 sells for $4.89. The stock is currently priced at $61, and the risk-free rate is 3.6 percent per year, compounded continuously. What is the price of a call option with the same exercise price?
3. A put option and a call option with an exercise price of $85 and three months to expiration sell for $2.40 and $5.09, respectively. If the risk-free rate is 4.8 percent per year, compounded continuously, what is the current stock price?
4. A put option and a call option with an exercise price of $55 expire in two months and sell for $2.65 and $5.32, respectively. If the stock is currently priced at $57.30, what is the annual continuously compounded rate of interest?