**Lease Financing**

1. Reynolds Construction needs a piece of equipment that costs $200. Reynolds can

either lease the equipment or borrow $200 from a local bank and buy the equipment.

If the equipment is leased, the lease would not have to be capitalized. Reynolds’s balance

sheet prior to the acquisition of the equipment is as follows:

Current assets $300 Debt $400

Net fixed assets 500 Equity 400

**Total assets $800** **Total claims $800**

a. (1) What is Reynolds’s current debt ratio?

(2) What would be the company’s debt ratio if it purchased the equipment?

(3) What would be the debt ratio if the equipment were leased?

2. Two companies, Energen and Hastings Corporation, began operations with identicalbalance sheets. A year later, both required additional fixed assets at a cost of $50,000. Energen obtained a 5-year, $50,000 loan at an 8% interest rate from its bank. Hastings, on the other hand, decided to lease the required $50,000 capacity for 5 years, and an 8% return was built into the lease. The balance sheet for each company, before the asset increases, follows

Current assets $ 25,000 Debt $ 50,000

Fixed assets 125,000 Equity 100,000

**Total assets $150,000 Total claims $150,000**

a. Show the balance sheets for both firms after the asset increases, and calculate

each firm’s new debt ratio. (Assume that the lease is not capitalized.)

b. Show how Hastings’s balance sheet would look immediately after the financing if

it capitalized the lease.

3. What is the difference between operating, financing (capital) and sale-and-leaseback transactions?

4. Cite at least 3 conditions that should exist in order a lease classified as a capital lease – and hence must be capitalized and shown directly on the balance sheet.

5. Describe at least two economic factors that might provide an advantage to leasing?

6. What effect would a cancellation clause have on the lessee in capital lease?

**Working Capital Management**

7. What are some actions a firm can take to shorten its cash conversion cycle?

A company has $20 million of inventory, $5 million of receivables, and $4 million of

payables. Its annual sales revenue is $80 million, and its cost of goods sold is $60

million. What is its CCC?

8. A company has $20 million in sales and an inventory turnover ratio of 2.0. If it can

reduce its inventory and improve its inventory turnover ratio to 2.5 with no loss in

sales, by how much will FCF increase?

9. A company has annual sales of $730 million. If its DSO is 35, what is its average

accounts receivables balance?

10. The Christie Corporation is trying to determine the effect of its inventory turnover

ratio and days sales outstanding (DSO) on its cash flow cycle. Christie’s sales last year

(all on credit) were $150,000, and it earned a net profit of 6%, or $9,000. It turned

over its inventory 7.5 times during the year, and its DSO was 36.5 days. Its annual

cost of goods sold was $121,667. The firm had fixed assets totaling $35,000. Christie’s

payables deferral period is 40 days.

a. Calculate Christie’s cash conversion cycle.

11. What are the some costs associated with low inventories?

12. What is the aging schedule and what can be learned from it?

13. What are two principal reasons for holding cash?

14. What are the four elements of firm’s credit policy?

15. What is the cash conversion cycle? What is its equation?

**Initial Public Offering, Investment Banking and Financial Restructuring**

16. Describe three advantages of going public for companies (Initial Public Offering)

17. Describe three disadvantages of going public for companies (Initial Public Offering)

18. What exactly investment banks do for the companies that are willing to go public (IPO)

19. A company is planning an IPO. Its underwriters have said the stock will sell at $50 per share. The underwriters will charge a 7% spread. How many shares must the company sell to net $93 million, ignoring any other expenses?

20. Define and explain 2 investment banking activities? (page 804)

21. What is the difference between roadshow and book-building?

22. Security Brokers Inc. specializes in underwriting new issues by small firms. On a recent offering of Beedles Inc., the terms were as follows:

Price to public $5 per share

Number of shares 3 million

Proceeds to Beedles $14,000,000

The out-of-pocket expenses incurred by Security Brokers in the design and distribution

of the issue were $300,000. What profit or loss would Security Brokers incur if

the issue were sold to the public at the following average price?

a. $5 per share

23. The Beranek Company, whose stock price is now $25, needs to raise $20 million in

common stock. Underwriters have informed the firm’s management that they must

price the new issue to the public at $22 per share because of signaling effects. The underwriters’ compensation will be 5% of the issue price, so Beranek will net $20.90 per share. The firm will also incur expenses in the amount of $150,000. How many shares must the firm sell to net $20 million after underwriting and flotation expenses?

24. Why investment banks have strong incentives to underprice the issue?

25. A company is planning an IPO. Its underwriters have said the stock will sell at $50 per share. The underwriters will charge a 7% spread. How many shares must the company sell to net $93 million, ignoring any other expenses.

*Goals and Corporate Governance of the Firm*

1. What is a firm’s fundamental or intrinsic value? What might cause a firm’s intrinsic value to be different than its actual market value?
2. Agency Problems are mitigated by good systems of Corporate Governance. Do you agree with it? Please explain you answer.
3. Should managers look after only the interests of their shareholders? Please give broader explanation.
4. Corporations increase value by accepting all investment projects that earn more than the opportunity cost of capital. Define opportunity cost of capital in this case. How this statement relate with shareholder’s decision on investment project.
5. In most large corporations, ownership and management are separated. What are the main implications of this separation?

*2. Analysis of Financial Statement*

1. Over the past year, M.D.Ryngaert & Co. has realized an increase in its current ratio and a drop in its total assets turnover ratio. However, the company’s sales, quick ratio, and fixed assets turnover ratio have remained constant. What explains these changes?
2. Complete the balance sheet and sales information in the table that follows for Hoffmeister Industries using the following financial data:

Debt ratio: 50%

Quick ratio: 0.80

Total assets turnover: 1.5

Days sales outstanding: 36.5 days

Gross profit margin on sales: (Sales – Cost of goods sold)/Sales = 25%

Inventory turnover ratio: 5.0

\*Calculations is based on a 365 day ratio.

Balance Sheet

Cash: \_\_\_\_\_\_\_\_\_\_ Accounts payable: \_\_\_\_\_\_\_\_\_\_

Account Receivable: \_\_\_\_\_ Long-term debt: 60,000

Inventories: \_\_\_\_\_\_\_\_\_\_\_\_ Common Stock: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Fixed assets: \_\_\_\_\_\_\_\_\_\_\_ Retained earnings: 97, 500

Total assets: $ 300,000 Total liabilities and equity: \_\_\_\_\_

Sales: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Cost of goods sold: \_\_\_\_\_\_\_\_\_\_\_

1. The Kretovich Company has a quick ratio of 1.4, a current ratio 3.0, an inventory turnover of 6 times, total current assets of $810, 000, and cash and marketable securities of $ 120,000. What were Kretovich’s annual sales and its DSO? Assume 365-day year.
2. Assume you are given the following relationships for the Clayton Corporation:

Sales/total assetss 1.5

Return on assets (ROA) 3%

Return on equity (ROE) 5%

Calculate Clayton’s profit margin and debt ratio.

1. A company has $ 200 billion of sales and $ 10 billion of net income. Its total assets are $100 billion, financed half by debt and half by equity. What is its profit margin, ROA and ROE?
2. A company has $6 billion of net income, $2 billion of depreciation and amortization, $80 billion of common equity, and 1 billion shares of stock. It its stock price is $96 per share, what is its price/earnings ratio, price/cash flow ratio?
3. Please define 6 limitation of using ratio analysis.
4. A company has an EPS of $ 1.50, a cash flow per share of $ 3.00, and a price/cash flow ratio of 8.0. What is the P/E ratio?

*3. Time Value of Money*

1. What is the future value of a 7%, 5-year ordinary annuity that pays $ 300 each year? If this were annuity due, what would its future value be?
2. Assume that 1 year from now you plan to deposit $ 1,000 in a savings account that pays a nominal rate of 8%.

a. If the bank compounds interest annually, how much will you have in your account 3 years from now?

b. What would your balance be 4 years from now if the bank used semi-annual compounding rather than annual compounding?

1. Universal Bank pays 7% interest, compounded annually, on time deposits. Regional Bank pays 6% interst, compounded quarterly.

a. Based on effective interest rates, in which bank would you prefer to deposit your money?

b. Coud your choice of banks be influenced by the fact that you might want to withdraw your funds during the year as opposed to at the end of the year? In answering this question, assume that funds must be left on deposit during an entire compounding period in order for you to receive any interest.

1. An investment will pay $100 at the end of each of the next 3 years, $200 at the end of

Year 4, $300 at the end of Year 5, and $500 at the end of Year 6. If other investments of

equal risk earn 8% annually, what is this investment’s present value? Its future value?

*4. Bond and Valuation*

1. A bond that matures in 5 years has a par value of $1,000, an annual coupon payment of $80, and a market interest rate of 9%. What is its price?
2. A bond has a 5-year maturity, an 8% annual coupon paid semiannually, and a face value of $1,000. The going nominal annual interest rate (r) is 6%. What is the bond’s price?
3. “Short-term interest rates are more volatile than long-term interest rates, so short term

bond prices are more sensitive to interest rate changes than are long-term bond

prices.” Is this statement true or false? Explain.

1. The real risk-free rate of interest is 4%. Inflation is expected to be 2% this year and

4% during the next 2 years. Assume that the maturity risk premium is zero. What is

the yield on 2-year Treasury securities? What is the yield on 3-year Treasury

securities?

1. Differentiate between interest rate risk and reinvestment rate risk?
2. How do bond ratings affect default risk premium?
3. Assume that the real risk-free rate is r\* = 3% and that the average expected inflation

rate is 2.5% for the foreseeable future. The DRP and LP for a bond are each 1%, and

the applicable MRP is 2%. What is the bond’s yield?

1. a. How does a bond’s current yield differ from its total return?

b. Could the current yield exceed the total return?

**Cash Flow Estimation and Risk Analysis**

51. What are the some differences in the analysis for a replacement project versus that for a new expansion project?

52. Explain the following terms: incremental cash flow, sunk cost, opportunity cost, externality, cannibalization, and complementary project.

53. Differentiate between sensitivity analysis and scenario analysis. What advantage does scenario analysis have over sensitivity analysis?

54. Allen Air Lines is now in the terminal year of a project. The equipment originally cost $20 million, of which 80% has been depreciated. Carter can sell the used equipment today to another airline for $5 million, and its tax rate is 40%. What is the equipment’s after-tax net salvage value?

55. Would a project’s NPV for a typical firm be higher or lower if the firm used accelerated

rather than straight-line depreciation? Explain.

**The Basics of Capital Budgeting**

56. A project has the following expected cash flows: CF0 = −$500, CF1 = $200, CF2 = $200, and CF3 = $400. If the project’s cost of capital is 9%, what is the PI?

57. What two characteristics can lead to conflicts between the NPV and the IRR when evaluating mutually exclusive projects?

58. Project P has a cost of $1,000 and cash flows of $300 per year for 3 years plus another $1,000 in Year 4. The project’s cost of capital is 15%. What are P’s regular and discounted paybacks? If the company requires a payback of 3 years or less, would the project be accepted? Would this be a good accept/reject decision, considering the NPV?

59. Project S has a cost of $10,000 and is expected to produce benefits (cash flows) of

$3,000 per year for 5 years. Project L costs $25,000 and is expected to produce cash

flows of $7,400 per year for 5 years. Calculate the two projects’ NPV

and PIs, assuming a cost of capital of 10%. Which project would be selected, assuming

they are mutually exclusive?

60. What three flaws does the regular payback method have? Does the discounted

payback method correct all of those flaws? Explain.

**The Cost of Capital**

61. A company’s preferred stock currently trades for $50 per share and pays a $3 annual

dividend. Flotation costs are equal to 3% of the gross proceeds. If the company issues

preferred stock, what is the cost of that stock?

62. A firm has common stock with D1 = $3.00; P0 = $30; g = 5%; and F = 4%. If the firm

must issue new stock, what is its cost of external equity, R(e)?

63. Name some factors the firms can control its effect on cost of capital?

64. Spencer Supplies’ stock is currently selling for $60 a share. The firm is expected to

earn $5.40 per share this year and to pay a year-end dividend of $3.60.

a. If investors require a 9% return, what rate of growth must be expected for Spencer?

b. If Spencer reinvests earnings in projects with average returns equal to the stock’s expected rate of return, then what will be next year’s EPS?

65. David Ortiz Motors has a target capital structure of 40% debt and 60% equity. The

yield to maturity on the company’s outstanding bonds is 9%, and the company’s tax

rate is 40%. Ortiz’s CFO has calculated the company’s WACC as 9.96%. What is

the company’s cost of equity capital?

**Stock and Stock Valuation**

66. What’s the difference between a stock’s price and its intrinsic value?

67. If D1 = $3.00, P0 = $50, and ^P1 = $52, what are the stock’s expected dividend yield,

expected capital gains yield, and expected total return for the coming year?

68. If D0 = $4.00, rs = 9%, and g = 5% for a constant growth stock, what are the stock’s

expected dividend yield and capital gains yield for the coming year?

69. You buy a share of The Ludwig Corporation stock for $21.40. You expect it to pay

dividends of $1.07, $1.1449, and $1.2250 in Years 1, 2, and 3, respectively, and you

expect to sell it at a price of $26.22 at the end of 3 years.

a. Calculate the growth rate in dividends.

b. Calculate the expected dividend yield.

c. Assuming that the calculated growth rate is expected to continue, you can add

the dividend yield to the expected growth rate to obtain the expected total rate of

return. What is this stock’s expected total rate of return?

70. Suppose D0 = $1.15 and rs = 10%. The expected growth rate from Year 0 to Year 3

(g0 to3) = 30%, and the constant rate beyond Year 3 is gL = 8%. What are the expected dividends for Year 1and Year 3? What is the expected horizon value price at Year 3

(^P3)? What is P0?

**Financial Planning**

71. Describe how do the following factors affect external capital requirements:

(a) payout ratio (b) capital intensity (c) profit margin

72. The Barnsdale Corporation has the following ratios: A0\*/S0 = 1.6; L0\*/S0 = 0.4; profit

margin = 0.10; and dividend payout ratio = 0.45, or 45%. Sales last year were $100

million. Assuming that these ratios will remain constant, use the AFN equation to

determine the firm’s self-supporting growth rate—in other words, the maximum

growth rate Barnsdale can achieve without having to employ nonspontaneous external

funds.

73. Baxter Video Products’s sales are expected to increase by 20% from $5 million in

2010 to $6 million in 2011. Its assets totaled $3 million at the end of 2010. Baxter

is already at full capacity, so its assets must grow at the same rate as projected sales.

At the end of 2010, current liabilities were $1 million, consisting of $250,000 of

accounts payable, $500,000 of notes payable, and $250,000 of accruals. The after-tax

profit margin is forecasted to be 5%, and the forecasted payout ratio is 70%.

Use the AFN equation to forecast Baxter’s additional funds needed for the

coming year.

74. Name five key factors that effect a firms external financing requirements?

75. What is meant by the term ‘’self-supporting growth rate’’? How is this rate related to the AFN equation, and how can that equation be used to calculate the self-supporting growth rate?