Principles of Finance   Week 1   * - means to do those problems

g. Mutual fund; money market fund
h. Physical location exchanges; computer/telephone networks
i. Open outcry auction; dealer market; electronic communications network (ECN)
j. Production opportunities; time preferences for consumption
k. Foreign trade deficit

* (1-2) What are the three principal forms of business organization? What are the advantages and disadvantages of each?

(1-3) What is a firm's fundamental, or intrinsic, value? What might cause a firm's intrinsic value to be different from its actual market value?

(1-4) Edmund Enterprises recently made a large investment to upgrade its technology. Although these improvements won't have much of an impact on performance in the short run, they are expected to reduce future costs significantly. What impact will this investment have on Edmund Enterprises's earnings per share this year? What impact might this investment have on the company's intrinsic value and stock price?

(1-5) Describe the ways in which capital can be transferred from suppliers of capital to those who are demanding capital.

* (1-6) What are financial intermediaries, and what economic functions do they perform?

* (1-7) Is an initial public offering an example of a primary or a secondary market transaction?

(1-8) Differentiate between dealer markets and stock markets that have a physical location.

* (1-9) Identify and briefly compare the two leading stock exchanges in the United States today.

MINI CASE

Assume that you recently graduated and have just reported to work as an investment advisor at the brokerage firm of Balik and Kiefer Inc. One of the firm's clients is Michelle DellaTorre, a professional tennis player who has just come to the United States from Chile. DellaTorre is a highly ranked tennis player who would like to start a company to produce and market apparel she designs. She also expects to invest substantial amounts of money through Balik and Kiefer. DellaTorre is very bright, and she would like to understand in general terms what will happen to her money. Your boss has developed the following set of questions you must answer to explain the U.S. financial system to DellaTorre.

a. Why is corporate finance important to all managers?
b. Describe the organizational forms a company might have as it evolves from a start-up to a major corporation. List the advantages and disadvantages of each form.
c. How do corporations go public and continue to grow? What are agency problems? What is corporate governance?
d. What should be the primary objective of managers?
   (1) Do firms have any responsibilities to society at large?
   (2) Is stock price maximization good or bad for society?
   (3) Should firms behave ethically?
e. What three aspects of cash flows affect the value of any investment?
f. What are free cash flows?
g. What is the weighted average cost of capital?
h. How do free cash flows and the weighted average cost of capital interact to determine a firm's value?

Principles of Finance Week 1 * - means to do those problems

SELF-TEST PROBLEM Solution Appears in Appendix A

(ST-1) Net Income, Cash Flow, and EVA

Last year Cole Furnaces had $5 million in operating income (EBIT). The company had a net depreciation expense of $1 million and an interest expense of $1 million; its corporate tax rate was 40%. The company has $14 million in operating current assets and $4 million in operating current liabilities; it has $15 million in net plant and equipment. It estimates that it has an after-tax cost of capital of 10%. Assume that Cole's only noncash item was depreciation.

a. What was the company's net income for the year?
b. What was the company's net cash flow?
c. What was the company's net operating profit after taxes (NOPAT)?
d. Calculate net operating working capital and total net operating capital for the current year.
e. If total net operating capital in the previous year was $24 million, what was the company's free cash flow (FCF) for the year?
f. What was the return on invested capital?
g. What was the company's Economic Value Added (EVA)?

PROBLEMS Answers Appear in Appendix B

Note: By the time this book is published, Congress may have changed rates and/or other provisions of current tax law as noted in the chapter, as such changes occur fairly often. Work all problems on the assumption that the information in the chapter is applicable.

Easy Problems 1–6

(2-1) Personal After-Tax Yield

An investor recently purchased a corporate bond that yields 9%. The investor is in the 36% combined federal and state tax bracket. What is the bond's after-tax yield?

(2-2) Personal After-Tax Yield

Corporate bonds issued by Johnson Corporation currently yield 8%. Municipal bonds of equal risk currently yield 6%. At what tax rate would an investor be indifferent between these two bonds?

* **(2-3)** Income Statement

Molteni Motors Inc. recently reported $6 million of net income. Its EBIT was $13 million, and its tax rate was 40%. What was its interest expense? (*Hint:* Write out the headings for an income statement, and then fill in the known values. Then divide $6 million net income by 1 – T = 0.6 to find the pre-tax income. The difference between EBIT and taxable income must be the interest expense. Use this procedure to work some of the other problems.)

(2-4) Income Statement

Talbot Enterprises recently reported an EBITDA of $8 million and net income of $2.4 million. It had $2.0 million of interest expense, and its corporate tax rate was 40%. What was its charge for depreciation and amortization?

* **(2-5)** Net Cash Flow

Kendall Corners Inc. recently reported net income of $3.1 million and depreciation of $500,000. What was its net cash flow? Assume it had no amortization expense.

(2-6) Statement of Retained Earnings

In its most recent financial statements, Del-Castillo Inc. reported $70 million of net income and $900 million of retained earnings. The previous retained earnings were $855 million. How much in dividends did the firm pay to shareholders during the year?

Week 2 * - means to do those

c. *Financial leverage ratios:* debt ratio; times-interest-earned (TIE) ratio; coverage ratio
d. *Profitability ratios:* profit margin on sales; basic earning power (BEP) ratio; return on total assets (ROA); return on common equity (ROE)
e. Market value ratios: price/earnings (P/E) ratio; price/cash flow ratio; market/book (M/B) ratio; book value per share
f. Trend analysis; comparative ratio analysis; benchmarking
g. DuPont equation; window dressing; seasonal effects on ratios

* (3-2) Financial ratio analysis is conducted by managers, equity investors, long-term creditors, and short-term creditors. What is the primary emphasis of each of these groups in evaluating ratios?

(3-3) 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?

* (3-4) Profit margins and turnover ratios vary from one industry to another. What differences would you expect to find between a grocery chain such as Safeway and a steel company? Think particularly about the turnover ratios, the profit margin, and the Du Pont equation.

(3-5) How might (a) seasonal factors and (b) different growth rates distort a comparative ratio analysis? Give some examples. How might these problems be alleviated?

(3-6) Why is it sometimes misleading to compare a company's financial ratios with those of other firms that operate in the same industry?

SELF-TEST PROBLEMS Solutions Appear in Appendix A

(ST-1) Debt Ratio

Argent Corporation has $60 million in current liabilities, $150 million in total liabilities, and $210 million in total common equity; Argent has no preferred stock. Argent's total debt is $120 million. What is the debt-to-assets ratio? What is the debt-to-equity ratio?

(ST-2) Ratio Analysis

The following data apply to Jacobus and Associates (millions of dollars):

Cash and marketable securities	$ 100.00
Fixed assets	$ 283.50
Sales	$ 1,000.00
Net income	$ 50.00
Quick ratio	2.0
Current ratio	3.0
DSO	40.55 days
ROE	12%

Jacobus has no preferred stock—only common equity, current liabilities, and long-term debt. Find Jacobus's (1) accounts receivable, (2) current liabilities, (3) current assets, (4) total assets, (5) ROA, (6) common equity, and (7) long-term debt.

Principles of Finance

Week 2 * -- means to do

Total assets turnover: 1.5
Gross profit margin on sales: (Sales – Cost of goods sold)/Sales = 25%
Total liabilities-to-assets ratio: 40%
Quick ratio: 0.80
Days sales outstanding (based on 365-day year): 36.5 days
Inventory turnover ratio: 3.75

Partial Income	Statement Information		
Sales	_______		
Cost of goods sold	_______		
Balance Sheet			
Cash	_______	Accounts payable	_______
Accounts receivable	_______	Long-term debt	50,000
Inventories	_______	Common stock	_______
Fixed assets	_______	Retained earnings	100,000
Total assets	$400,000	Total liabilities and equity	_______

(3-12) Comprehensive Ratio Calculations

The Kretovich Company had a quick ratio of 1.4, a current ratio of 3.0, a days sales outstanding of 36.5 days (based on a 365-day year), total current assets of $810,000, and cash and marketable securities of $120,000. What were Kretovich's annual sales?

*** (3-13) Comprehensive Ratio Analysis**

Data for Lozano Chip Company and its industry averages follow.

a. Calculate the indicated ratios for Lozano.
b. Construct the extended Du Pont equation for both Lozano and the industry.
c. Outline Lozano's strengths and weaknesses as revealed by your analysis.

Lozano Chip Company: Balance Sheet as of December 31, 2013 (Thousands of Dollars)

Cash	$ 225,000	Accounts payable	$ 601,866
Receivables	1,575,000	Notes payable	326,634
Inventories	1,125,000	Other current liabilities	525,000
Total current assets	$2,950,000	Total current liabilities	$1,453,500
Net fixed assets	1,350,000	Long-term debt	1,068,750
		Common equity	1,752,750
Total assets	$4,275,000	Total liabilities and equity	$4,275,000

Lozano Chip Company: Income Statement for Year Ended December 31, 2013 (Thousands of Dollars)

Sales	$ 7,500,000
Cost of goods sold	6,375,000
Selling, general, and administrative expenses	825,000
Earnings before interest and taxes (EBIT)	$ 300,000
Interest expense	111,631
Earnings before taxes (EBT)	$ 188,369
Federal and state income taxes (40%)	75,348
Net income	$ 113,022

Principles of Finance

Week 2

Continuation Of 3-13

*3-13

Ratio	Lozano	Industry Average
Current assets/Current liabilities	______	2.0
Days sales outstanding (365-day year)	______	35.0 days
COGS/Inventory	______	6.7
Sales/Fixed assets	______	12.1
Sales/Total assets	______	3.0
Net income/Sales	______	1.2%
Net income/Total assets	______	3.6%
Net income/Common equity	______	9.0%
Total debt/Total assets	______	30.0%
Total liabilities/Total assets	______	60.0%

(3-14) Comprehensive Ratio Analysis

The Jimenez Corporation's forecasted 2014 financial statements follow, along with some industry average ratios. Calculate Jimenez's 2014 forecasted ratios, compare them with the industry average data, and comment briefly on Jimenez's projected strengths and weaknesses.

Jimenez Corporation: Forecasted Balance Sheet as of December 31, 2014

Assets	
Cash	$ 72,000
Accounts receivable	439,000
Inventories	894,000
Total current assets	$ 1,405,000
Fixed assets	431,000
Total assets	$ 1,836,000
Liabilities and Equity	
Accounts payable	$ 332,000
Notes payable	100,000
Accruals	170,000
Total current liabilities	$ 602,000
Long-term debt	404,290
Common stock	575,000
Retained earnings	254,710
Total liabilities and equity	$ 1,836,000

Jimenez Corporation: Forecasted Income Statement for 2014

Sales	$4,290,000
Cost of goods sold	3,580,000
Selling, general, and administrative expenses	370,320
Depreciation and amortization	159,000
Earnings before taxes (EBT)	$ 180,680
Taxes (40%)	72,272
Net income	$ 108,408

Developing Human Resources

Week 2 - CASE STUDY

3. Explain how you would conduct a job analysis in a company that has never had job descriptions. Utilize the O*Net as a resource for your information.
4. You have recently assumed the role of HR Manager in your company. In reviewing the company records, you note that the job descriptions were last updated five years ago. The Company President has taken the position that there is no need to update the job descriptions. However, you also note that the company has grown by 50% during the last five years, resulting in many changes, including some in job functions. You want to build a business case to convince the Company President of the need to update the job descriptions. To help you build your case, use the information on the purpose of job descriptions at www.hrtools.com.

A. How can job descriptions be used as a management tool?

B. What role do job descriptions have in helping companies comply with various legal issues?

CASE

Bon Secours Health Care

Health care has used flexible work arrangements for years as managers try to provide round the clock care for patients. Recently it has become even more difficult as shortages in the health care workforce have required creativity to attract and keep people.

Bon Secours Richmond Health Systems uses a variety of flexible scheduling innovations for hard-to-fill evening and weekend shifts at its hospitals. Employees can choose from compressed work weeks (four 10 hour shifts or three 12 hour shifts), weekends only with extra pay, four- or eight-hour shifts, and seven days on followed by seven days off.

Women make up 85% of the workforce, and flexible schedules work well for them. Depending on life stage, employees may make different choices. A new employee just out of college may prefer working full time with a rotating schedule, but workers with children may need a fixed schedule that doesn't rotate. Some employees with several children may want to work part time. Part time is made attractive by providing full benefits and employer-assisted housing for those scheduled for as little as 16 hours per week.

Bon Secours' flexible work arrangements are credited with lowering first year employee turnover rates from 50% to 10% in four years. The national benchmark average is 28%. Employee engagement scores have risen from 3.6 to 4.55 on a 5-point scale, and employees can read success stories in the employee newsletter that may provide solutions to any dilemmas they may have with regard to scheduling. In small lunches with the CEO, employees have confirmed that they value having more control over their time.

Eight-five percent of Bon Secours employees use a flexible schedule either formally or informally. Forty-five percent use a compressed work week and 10% job share. Twenty-five percent work a temporary or part-time work schedule, and 3% do telework.[67]

QUESTIONS

1. How well could this level of flexible scheduling work in another industry? For example, consider scheduling in a steel mill.
2. Identify other potential flexible work ideas that Bon Secours might use.
3. Flexible scheduling is common in health care. What would be the likely result without flexible scheduling?