Financial Management Practice Problems:

(Please show step-by-step calculations with formula. These example problems will be used to study for similar equations to work out on my own… Thank you).

Problems: (1-3, 7)

(14-1) Baxter Video Products’ sales are expected to increase from $5 million in 2007 to $6 million in 2008 or by 20%. Its assets totaled $3 million at the end of 2007. Baxter is at full capacity, so its assets must grow at the same rate as projected sales. At the end of 2007, 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%.

1. Use the AFN formula to forecast Baxter’s additional funds needed for the coming year.

(14-2)

1. What would be the additional funds needed if the company’s year-end 2007 assets had been $4 million?
2. Assume that all other numbers are the same. Why is this AFN different from the one you found in problem (14-1)?
3. Is the company’s “capital intensity” the same or different?

(14-3)

1. Return to the assumption that the company had $3 million in assets at the end of 2007, but now assume that the company pays no dividends. Under these assumptions, what would be the additional funds needed for the coming year?
2. Why is this AFN different from the one you found in problem (14-1)?

(14-7)

Upton Computers makes bulk purchases of small computers, stocks them in conveniently located warehouses, and ships them to its chain of retail stores. Upton’s balance sheet as of December 31, 2007, is shown here (millions of dollars).

Cash $ 3.5 Accounts payable $ 9.0

Receivables 26.0 Notes payable 18.0

Inventories 58.0 Accruals 8.5

Total current assets $ 87.5 Total current liabilities $ 35.5

Net fixed assets 35.0 Mortgage loan 6.0

Common stock 15.0

\_\_\_\_ Retained earnings 66.0

Total assets $122.5 Total liabilities and equity $122.5

===== =====

Sales for 2007 were $350 million, while net income for the year was $10.5, million. Upton paid dividends of $4.2 million to common stockholders. The firm is operation at full capacity. Assume that all ratios remain constant.

1. If sales are projected to increase by $70 million, or 20%, during 2008, use the AFN equation to determine Upton’s projected external capital requirements.

Problems: (1,4,13,& 14)

(4-1) Green Sisters has a DSO of 20 days. The company’s average daily sales are $20,000. What is the level of its accounts receivable? Assume there are 365 days in a year.

(4-4) 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 times. What is its P/E ratio?

(4-13) Data for Morton Chip Company and its industry average follow.

1. Calculate the indicated ratios for Morton.
2. Outline Morton’s strengths and weaknesses as revealed by your analysis.

Morton Chip Company: Balance Sheet as of December 31, 2007 (In Thousands)

Cash $77,500 Accounts payable $129,000

Receivables 336,000 Notes payable 84,000

Inventories 241,500 Other current liabilities 117,000

Total current assets $655,000 Total current liabilities $330,000

Net fixed assets 292,500 Long-term debt 256,500

\_\_\_\_\_\_\_ Common equity 361,000

Total assets $947,500 Total liabilities and equity $947,500

======= =======

Morton Chip Company: Income Statement for Year Ended December 31, 2007 (In Thousands)

Sales $1,607,500

Cost of goods sold 1,392,500

Selling, general, and administrative expenses 145,000

Earnings before interest and taxes (EBIT) $ 70,000

Interest expense 24,500

Earnings before taxes (EBIT) $ 45.500

Federal and state income taxes (40%) \_\_\_18,200

Net income $ 27,300

========

Ratio Morton Industry Average

Current assets/current liabilities \_\_\_\_\_\_ 2.0X

Days sales outstanding \* \_\_\_\_\_\_ 35.0 days

Sales/inventory \_\_\_\_\_\_ 6.7X

Sales/fixed assets \_\_\_\_\_\_ 12.1X

Sales/total assets \_\_\_\_\_\_ 3.0X

Net income/sales \_\_\_\_\_\_ 1.2%

Net income/total assets \_\_\_\_\_\_ 3.6%

Net income/ common equity \_\_\_\_\_\_ 9.0%

Total debt/ total assets \_\_\_\_\_\_ 60.0%

\*Calculation is based on a 365-day year.

(4-14) The Jimenez Corporation’s forecasted 2008 financial statements follow, along with some industry average ratios.

1. Calculate Jimenez’s 2008 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, 2008

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

========

Accounts and notes payable $ 432,000

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 2008

Sales $4,290,000

Cost of goods sold 3,580,000

Selling, general, and administrative expenses 370,320

Depreciation 159,000

Earnings before taxes (EBIT) $ 180,680

Taxes (40%) 72,272

Net income $ 108,408

========

**Per-Share Data**

EPS $4.71

Cash dividends per share $0.95

P/E ratio 5X

Market price (average) $23.57

Number of shares outstanding 23,000

**Industry Financial Ratios (2007)\***

Quick ratio 1.0X

Current ratio 2.7X

Inventory turnover \*\* 7.0X

Days sales outstanding\*\*\* 32 days

Fixed assets turnover \*\* 13.0X

Total assets turnover \*\* 2.6X

Return on assets 9.1%

Return on equity 18.2%

Debt ratio 50.0%

Profit margin on sales 3.5%

P/E ratio 6.0X

P/ cash flow ratio 3.5X

\*Industry average ratios have been constant for the past 4 years.

\*\*Based on year-end balance sheet figures.

\*\*\*Calculation is based on a 365-day year.