AP17_SW_Brigham_778312 1/21/03 8:17 PM Page 17-1

ADDITIONAL PROBLEMS FOR CHAPTER 17

17-20
Pro forma statements and ratios

Adel Sporting Goods recently reported the following income statement and balance sheet.

INCOME STATEMENT	
Sales	$4,200
Operating costs	3,780
EBIT	$ 420
Interest	120
EBT	$ 300
Taxes (40%)	120
Net income	$ 180
Dividends paid	$ 0
Addition to retained earnings	$ 180

BALANCE SHEET	
Cash and marketable securities	$ 42
Accounts receivable	336
Inventories	441
Current assets	$ 819
Net fixed assets	2,562
Total assets	$3,381
Accounts payable and accrued liabilities	$ 168
Notes payable	250
Current liabilities	$ 418
Long-term debt	700
Common stock	400
Retained earnings	1,863
Total liabilities and equity	$3,381

In developing its forecast for the upcoming year, the company has assembled the following information:

- Sales are expected to increase 8 percent this upcoming year.
- Operating costs are expected to remain at 90 percent of sales.
- Cash and marketable securities are expected to remain at 1 percent of sales.
- Accounts receivable are expected to remain at 8 percent of sales.
- Due to excess capacity, the company expects that its year-end inventories will remain at current levels.
- Fixed assets are expected to remain at 61 percent of sales.
- Spontaneous liabilities (accounts payable and accrued liabilities) are expected to increase at the same rate as sales.
- The company will continue to pay a zero dividend, and its tax rate will remain at 40 percent.
- The company anticipates that any additional funds needed will be raised in the following manner: 25 percent notes payable, 25 percent long-term debt, and 50 percent common stock.

a. On the basis of the assumptions listed above, construct Adel's pro forma income statement and balance sheet. Assume that there are no financial feedback effects. (That is, assume interest will remain unchanged even though the company may increase its debt.)

b. On the basis of this forecast, describe changes from the prior year that Adel should expect in its return on equity, inventory turnover ratio, and profit margin.

17-21 Additional funds needed

The Flint Company's sales are forecasted to increase from $1,000 in 2002 to $2,000 in 2003. Here is the December 31, 2002, balance sheet:

Cash	$ 100	Accounts payable	$ 50
Accounts receivable	200	Notes payable	150
Inventories	200	Accrued liabilities	50
Total current assets	$ 500	Total current liabilities	$ 250
Net fixed assets	500	Long-term debt	400
		Common stock	100
		Retained earnings	250
Total assets	$1,000	Total liabilities and equity	$1,000

Flint's fixed assets were used to only 50 percent of capacity during 2002, but its current assets were at their proper levels. All assets except fixed assets increase in proportion to sales, and fixed assets would also increase proportionally with sales if the current excess capacity did not exist. Flint's after-tax profit margin is forecasted to be 5 percent, and its payout ratio will be 60 percent. What is Flint's additional funds needed (AFN) for the coming year?

17-22 Additional funds needed

Cooley Textile's 2002 financial statements are shown below.

Cooley Textile: Balance Sheet as of December 31, 2002 (Thousands of Dollars)

Cash	$ 1,080	Accounts payable	$ 4,320
Receivables	6,480	Accrued liabilities	2,880
Inventories	9,000	Notes payable	2,100
Total current assets	$16,560	Total current liabilities	$ 9,300
Net fixed assets	12,600	Mortgage bonds	3,500
		Common stock	3,500
		Retained earnings	12,860
Total assets	$29,160	Total liabilities and equity	$29,160

Cooley Textile: Income Statement for December 31, 2002 (Thousands of Dollars)

Sales	$36,000
Operating costs	32,440
Earnings before interest and taxes	$ 3,560
Interest	560
Earnings before taxes	$ 3,000
Taxes (40%)	1,200
Net income	$ 1,800
Dividends (45%)	$810
Addition to retained earnings	$990

Suppose 2003 sales are projected to increase by 15 percent over 2002 sales. Determine the additional funds needed. Assume that the company was operating at full capacity in 2002, that it cannot sell off any of its fixed assets, and that any required financing will be borrowed as notes payable. Also, assume that assets, spontaneous liabilities, and operating costs are expected to increase in proportion to sales. Use the projected financial statement method to develop a pro forma balance sheet and income statement for December 31, 2003. Use the pro forma income statement to determine the addition to retained earnings.