

9. **External Funds Needed** Cheryl Colby, CFO of Charming Florist Ltd., has created the firm's pro forma balance sheet for the next fiscal year. Sales are projected to grow by 10 percent to \$420 million. Current assets, fixed assets, and short-term debt are 20 percent, 75 percent, and 15 percent of sales, respectively. Charming Florist pays out 30 percent of its net income in dividends. The company currently has \$120 million of long-term debt and \$48 million in common stock par value. The profit margin is 9 percent.
- Construct the current balance sheet for the firm using the projected sales figure.
  - Based on Ms. Colby's sales growth forecast, how much does Charming Florist need in external funds for the upcoming fiscal year?
  - Construct the firm's pro forma balance sheet for the next fiscal year and confirm the external funds needed that you calculated in part (b).
10. **Sustainable Growth Rate** The Steiben Company has an ROE of 13.1 percent and a payout ratio of 40 percent.
- What is the company's sustainable growth rate?
  - Can the company's actual growth rate be different from its sustainable growth rate? Why or why not?
  - How can the company increase its sustainable growth rate?

13. **External Funds Needed** The Optical Scam Company has forecast a 15 percent sales growth rate for next year. The current financial statements are shown here:

| Income Statement              |            |  |                     |
|-------------------------------|------------|--|---------------------|
| Sales                         |            |  | \$30,400,000        |
| Costs                         |            |  | <u>26,720,000</u>   |
| Taxable income                |            |  | \$ 3,680,000        |
| Taxes                         |            |  | <u>1,288,000</u>    |
| Net income                    |            |  | <u>\$ 2,392,000</u> |
| Dividends                     | \$ 956,800 |  |                     |
| Addition to retained earnings | 1,435,200  |  |                     |

  

| Balance Sheet  |                     |                               |                     |
|----------------|---------------------|-------------------------------|---------------------|
| Assets         |                     | Liabilities and Equity        |                     |
| Current assets | \$ 7,200,000        | Short-term debt               | \$ 6,400,000        |
|                |                     | Long-term debt                | 4,800,000           |
| Fixed assets   | <u>17,600,000</u>   | Common stock                  | \$ 3,200,000        |
|                |                     | Accumulated retained earnings | <u>10,400,000</u>   |
|                |                     | Total equity                  | <u>\$13,600,000</u> |
| Total assets   | <u>\$24,800,000</u> | Total liabilities and equity  | <u>\$24,800,000</u> |

- a. Using the equation from the chapter, calculate the external funds needed for next year.
  - b. Construct the firm's pro forma balance sheet for next year and confirm the external funds needed that you calculated in part (a).
  - c. Calculate the sustainable growth rate for the company.
  - d. Can Optical Scam eliminate the need for external funds by changing its dividend policy? What other options are available to the company to meet its growth objectives?
14. **Days' Sales in Receivables** A company has net income of \$265,000, a profit margin of 9.3 percent, and an accounts receivable balance of \$145,300. Assuming 80 percent of sales are on credit, what is the company's days' sales in receivables?
  15. **Ratios and Fixed Assets** The Le Bleu Company has a ratio of long-term debt to total assets of .35 and a current ratio of 1.25. Current liabilities are \$950, sales are \$5,780, profit margin is 9.4 percent, and ROE is 18.2 percent. What is the amount of the firm's net fixed assets?
  16. **Calculating the Cash Coverage Ratio** Titan Inc.'s net income for the most recent year was \$8,320. The tax rate was 34 percent. The firm paid \$1,940 in total interest expense and deducted \$2,730 in depreciation expense. What was Titan's cash coverage ratio for the year?
21. **Calculating EFN** The most recent financial statements for Moose Tours, Inc., appear below. Sales for 2012 are projected to grow by 20 percent. Interest expense will remain

constant; the tax rate and the dividend payout rate will also remain constant. Costs, other expenses, current assets, fixed assets, and accounts payable increase spontaneously with sales. If the firm is operating at full capacity and no new debt or equity is issued, what external financing is needed to support the 20 percent growth rate in sales?

| MOOSE TOURS, INC.<br>2011 Income Statement |          |                  |
|--|----------|------------------|
| Sales                                      |          | \$836,100        |
| Costs                                      |          | 650,700          |
| Other expenses                             |          | 17,100           |
| Earnings before interest and taxes         |          | \$168,300        |
| Interest expense                           |          | 12,600           |
| Taxable income                             |          | \$155,700        |
| Taxes                                      |          | 54,495           |
| Net income                                 |          | <u>\$101,205</u> |
| Dividends                                  | \$30,300 |                  |
| Addition to retained earnings              | 70,905   |                  |

**MOOSE TOURS, INC.**  
**Balance Sheet as of December 31, 2011**

| <b>Assets</b>           |                         | <b>Liabilities and Owners' Equity</b> |                         |
|-------------------------|-------------------------|---------------------------------------|-------------------------|
| Current assets          |                         | Current liabilities                   |                         |
| Cash                    | \$ 24,035               | Accounts payable                      | \$ 64,600               |
| Accounts receivable     | 38,665                  | Notes payable                         | 16,150                  |
| Inventory               | 82,555                  | Total                                 | \$ 80,750               |
| Total                   | <u>\$145,255</u>        | Long-term debt                        | <u>\$150,000</u>        |
| Fixed assets            |                         | Owners' equity                        |                         |
| Net plant and equipment | <u>\$392,350</u>        | Common stock and paid-in surplus      | \$130,000               |
|                         |                         | Retained earnings                     | 176,855                 |
|                         |                         | Total                                 | <u>\$306,855</u>        |
| Total assets            | <u><u>\$537,605</u></u> | Total liabilities and owners' equity  | <u><u>\$537,605</u></u> |

22. **Capacity Usage and Growth** In the previous problem, suppose the firm was operating at only 80 percent capacity in 2011. What is EFN now?
23. **Calculating EFN** In Problem 21, suppose the firm wishes to keep its debt–equity ratio constant. What is EFN now?