

Problems

Answers Appear in Appendix B

EASY PROBLEMS 1–3

(12–1)
AFN Equation

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.

(12–2)
AFN Equation

Refer to Problem 12-1. What would be the additional funds needed if the company's year-end 2010 assets had been \$4 million? Assume that all other numbers, including sales, are the same as in Problem 12-1 and that the company is operating at full capacity. Why is this AFN different from the one you found in Problem 12-1? Is the company's "capital intensity" ratio the same or different?

(12–3)
AFN Equation

Refer to Problem 12-1. Return to the assumption that the company had \$3 million in assets at the end of 2010, but now assume that the company pays no dividends. Under these assumptions, what would be the additional funds needed for the coming year? Why is this AFN different from the one you found in Problem 12-1?

INTERMEDIATE PROBLEMS 4–6

(12–4)
Sales Increase

Bannister Legal Services generated \$2,000,000 in sales during 2010, and its year-end total assets were \$1,500,000. Also, at year-end 2010, current liabilities were \$500,000, consisting of \$200,000 of notes payable, \$200,000 of accounts payable, and \$100,000 of accruals. Looking ahead to 2011, the company estimates that its assets must increase at the same rate as sales, its spontaneous liabilities will increase at the same rate as sales, its profit margin will be 5%, and its payout ratio will be 60%. How large a sales increase can the company achieve without having to raise funds externally; that is, what is its self-supporting growth rate?

(12–5)
Long-Term Financing
Needed

At year-end 2010, Bertin Inc.'s total assets were \$1.2 million and its accounts payable were \$375,000. Sales, which in 2010 were \$2.5 million, are expected to increase by 25% in 2011. Total assets and accounts payable are proportional to sales, and that relationship will be maintained. Bertin typically uses no current liabilities other than accounts payable. Common stock amounted to \$425,000 in 2010, and retained earnings were \$295,000. Bertin has arranged to sell \$75,000 of new common stock in 2011 to meet some of its financing needs. The remainder of its financing needs will be met by issuing new long-term debt at the end of 2011. (Because the debt is added at the end of the year, there will be no additional interest expense due to the new debt.) Its profit margin on sales is 6%, and 40% of earnings will be paid out as dividends.

- What were Bertin's total long-term debt and total liabilities in 2010?
- How much new long-term debt financing will be needed in 2011?
(Hint: $AFN - \text{New stock} = \text{New long-term debt}$.)