

Tutorial 9

#1:

The most recent financial statements for Summer Tyme, Inc., are shown here:

Income Statement		Balance Sheet			
Sales	\$4,200	Current assets	\$3,600	Current liabilities	\$2,100
Costs	<u>3,300</u>	Fixed assets	<u>7,900</u>	Long-term debt	3,650
Taxable income	\$900			Equity	<u>5,750</u>
Taxes (34%)	<u>306</u>	Total	\$11,500	Total	\$11,500
Net income	\$594				

Assets, costs and current liabilities are proportional to sales. Long-term debt and equity are not. The company maintains a constant 40% dividend payout ratio. As with every other firm in its industry, next year's sales are projected to increase by exactly 15%. What is the external financing needed?

#2:

The most recent financial statements for Live Co. are shown here:

Income Statement		Balance Sheet			
Sales	\$13,250	Current Assets	\$10,400	Debt	\$17,500
Costs	<u>9,480</u>	Fixed assets	<u>28,750</u>	Equity	<u>21,650</u>
Taxable income	\$3,770	Total	\$39,150	Total	\$39,150
Taxes (35%)	<u>1,508</u>				
Net income	\$2,262				

Assets and costs are proportional to sales. Debt and equity are not. The company maintains a constant 30 percent dividend payout ratio. No external equity financing is possible. What is the internal growth rate?

#3:

For the company in the previous problem, what is the sustainable growth rate?

#4:

McCormac Co. wishes to maintain a growth rate 12 percent a year, a debt-equity ratio of 1.20, and a dividend payout ratio of 30 percent. The ratio of total assets to sales is constant at 0.75. What profit margin must the firm achieve?

#5:

You've collected the following information about St. Pierre, Inc.:

Sales	= \$195,000
Net income	= \$17,500
Dividends	= \$9,300
Total debt	= \$86,000
Total equity	= \$58,000

What is the sustainable growth rate for St. Pierre, Inc.? If it does grow at this rate, how much new borrowing will take place in the coming year, assuming a constant debt-equity ratio? What growth rate could be supported with no outside financing at all?

#6:

U-Dunno Corporation's Balance Sheet and Income Statement are as shown below. **Note** that the firm maintains a cash balance as required for its operations (none of its cash is 'excess cash'):

**U-Dunno Corporation
2012 and 2013 Balance Sheet**

	2012	2013		2012	2013
Cash	\$260,000	\$290,000	Accounts Payable	\$110,000	\$130,000
Accounts Receivable	180,000	240,000	Notes Payable	120,000	140,000
Inventory	250,000	270,000	Total	\$230,000	\$270,000
Total	\$690,000	\$800,000	Long-Term Debt	290,000	328,000
Net Fixed Assets	410,000	450,000	Common Stock	250,000	250,000
			Retained Earnings	330,000	402,000
Total Assets	\$1,100,000	\$1,250,000	Total Liab & Equity	\$1,100,000	\$1,250,000

**U-Dunno Corporation
2013 Income Statement**

Sales	\$1,600,000
Cost of Goods Sold	1,100,000
Depreciation Expense	200,000
Earnings before Interest and Tax	\$300,000
Interest Expense	60,000
Taxable Income	\$240,000
Less: Taxes (40%)	96,000
Net Income	\$144,000

- a. Assume that all assumptions for application of the AFN Equation hold (as discussed in your course notes, i.e. the firm is operating at full capacity, it maintains the same operating relationships, payout ratios, etc.). What is U-Dunno Corporation's AFN given a desired increase in Sales to \$1,800,000 for 2014?
- b. If Fixed Assets had only been operating at 80% of capacity in 2013, would additional Fixed Assets still be required given desired sales of \$1,800,000 for 2014? If not, what would be the resultant AFN required as per the AFN Equation (as covered in your notes)?
- c. Given that Fixed Assets had only been operating at 80% of capacity in 2013, if desired Sales increased to \$2,200,000 for 2014 instead, what would be the increase in Fixed Asset requirement?