

A wealthy philanthropist has offered to donate \$1 million in 2 years, \$3 million in 5 years, and \$5 million in 7 years. If the appropriate discount rate for this investment is 4 percent, what is the value today of this gift?

Show calculations.

Using a set of assumptions, including a fixed dividend payout ratio, you have calculated an initial estimate of external financing needed (EFN) using pro forma financial statements. If your EFN will be funded with at least some debt, is your initial estimate of EFN understated or overstated *and* why?

You are offered an investment that returns 8% APR, compounded daily. You have another offer that returns 8.1% APR, compounded quarterly. Which opportunity offers you the better deal and why? Use calculations to justify your answer.

As a financial analyst, why should one be cautious about focusing on net income?

Thinking about the equation for external financing needed, give 3 specific ways a firm can decrease its external financing needed for a given level of forecasted growth.

You buy a new car. Specifically, you have your eye on a 2018 BMW 640i priced at \$94,355. If you put 10 percent down, your bank will finance the remainder at 4.8% APR, compounded monthly, over 4 years. What are your monthly payments? Show formulas and how you arrived at them.

In each of the three examples below, state what you know about the value or range of possible values for (i) the internal growth rate and (ii) the sustainable growth rate.

- The firm's payout ratio is 100%.
Internal Growth Rate: _____ Sustainable Growth Rate: _____
- The firm maintains a constant debt ratio of 0.25 and, with forecasted growth of 15 percent, external funds needed is calculated to be positive.
Internal Growth Rate: _____ Sustainable Growth Rate: _____
- The firm maintains a constant debt ratio of 0.25 and, with forecasted growth of 15 percent, external funds needed is calculated to be negative.
Internal Growth Rate: _____ Sustainable Growth Rate: _____

Bob and Jane Smith have lived a happy dual-income life and are now about to retire. Both have been depositing their savings into an account earning 9 percent APR, compounded monthly. Jane has been investing \$1,500 monthly for 35 years. Bob has been investing \$30,000 annually for 20 years. What is their current nest egg on which to retire (e.g., how much do they have now)?

You are given the following information for XYZ, Inc.

	2017	2018
ROA	15.15%	??
Det Ratio	??	50%
Equity Multiplier	1.33	? ?
Profit Margin	6.5%	5.75%
Total Asset Turnover. ??		2.09

Showing calculations to justify your answer, did ROE increase or decrease *and* why?

Butler's Butts, Inc. is a meat processing company based in Los Baños, California. The firm's 2018 balance sheet and income statement, as well as some additional information below the income statement, are attached on the next page. They are only needed for this problem.

Butler's Butts, Inc. is currently operating at full capacity. The firm forecasts a 10 percent increase in revenues next year, but does not intend to increase notes payable, long-term debt, or issue any new shares of stock. The ratios of assets, costs, expenses, and depreciation to sales are expected to remain constant, as is the ratio of accounts payable and accrued expenses to assets. Interest expense is expected to remain the same for the forthcoming year, but the firm intends to increase the dollar amount of its dividend by 8 percent. Using the information contained in and with the financial statements for Butler's Butts, Inc., prepare pro forma financial statements to determine how much external financing is needed, if any. Be sure to show ALL of your work and calculations here and/or on your financial statements (and be sure they are returned with your exam)? See attached jpg.