

Tips, Tricks, & Techniques

Sustainable Growth Rate

Situation: You are at that point in Part 1 [Visual Analysis] of the Stock Selection Guide (SSG) where you may forecast an earnings growth rate for the future. There are a number of guidelines for this forecast. One is called the **Sustainable Growth Rate**. Alternatively, you may choose to defer this study until you have completed your SSG with Investor's Toolkit; we will soon see why.

Sustainable growth rate is that rate at which the company can continue to grow, without having to borrow money or without having to issue new common stock.

This rate is a function of both Return on Equity [ROE] and the dividend payout ratio.

ROE is a measure of how well management is using stockholders money to build the company. It compares the gains in EPS to gains in book value per share. See SSG, Part 2B.

Dividend payout ratio is that percentage of profits paid out to stockholders. *Keep in mind that every dollar paid out in dividends is one dollar less to grow the company with.*

Formula: Sustainable Growth Rate = ROE * [1 - dividend payout ratio]

Example: Company's ROE is 20%. Dividend payout ratio is 10%. What is the Sustainable Growth Rate?

$$0.20 * [1.0 - 0.10] = 0.20 * 0.90 = 0.18 = 18\%$$

Good guideline to determine forecast EPS: Keep forecast EPS estimate lower than Sustainable Growth Rate.

Now let us look at how the Investor's Toolkit software calculates the Sustainable Growth Rate. Notes:

- The ROE value used is the average for the last 5 years where ROE is calculated as the EPS for the given year divided by the prior year's Book Value per Share.
 - To see ROE calculated in this manner, use keystrokes ALT - R.
 - The rationale for calculating ROE in this manner is that this year's EPS is the result of last year's Book Value.

- The Payout Ratio is taken from section 5B. Section 5B is filled in from the Average Payout in section 3G7 and only after you make your first choice for the Selected Estimated Low Price in section 4B1.
- Keystrokes ALT - S shows Sustainable Growth Rate by Investor's Toolkit.

2 EVALUATING MANAGEMENT Company Roper Industries, Inc. (ROP) 07-08-08

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	LAST 5 YEAR A/VG	TREND	
												UP	DOWN
A %Pre-tax Profit/Sales (Net/Sales Taxes - Sales)	15.3	17.7	15.1	14.7	15.9	13.9	14.6	15.5	17.2	18.2	15.9	UP	
B %Earned on Equity (E/E - Book Value)	24.0	20.6	20.1	20.6	17.3	14.5	13.5	14.6	15.8	15.8	15.1	UP	

3 PRICE-EARNINGS HISTORY as an indicator of the future
This shows how stock prices have fluctuated with earnings and dividends. It is a building block for translating earnings into future stock prices.

Year	A PRICE HIGH	B PRICE LOW	C Earnings Per Share	D Price Earnings Ratio		F Dividend Per Share	G % Payout F = C X 100	H % High Yield F + B X 100
				LOW A + C	HIGH B + C			
				Earnings Per Share				
1 2003	25.8	13.4	1.04	24.9	12.9	0.220	21.3	1.6
2 2004	31.7	22.6	1.32	24.1	17.2	0.140	10.6	0.6
3 2005	40.7	28.4	1.77	22.9	16.0	0.210	11.8	0.7
4 2006	51.3	38.5	2.13	24.1	18.1	0.240	11.3	0.6
5 2007	70.8	48.6	2.68	26.4	18.1	0.260	9.7	0.5
6 TOTAL		151.5		122.4	82.3		43.4	
7 AVERAGE		30.3		24.5	16.5		10.9	
8 AVERAGE PRICE EARNINGS RATIO	20.5		CURRENT PRICE EARNINGS RATIO		21.7			

Proj. P/E [19.30] Based on Next 4 qtr. EPS [3.16] Current P/E Based on Last 4 qtr. EPS [2.81] PEGR=154

4 EVALUATING RISK and REWARD over the next 5 years
Assuming one recession and one business boom every 5 years, calculations are made of how high or low the stock might sell. The upside-downside ratio is the key to evaluating risk and reward.

Sustainable Growth Rate = ROE * (1 - Payout Ratio)
 $= 15.1 * (1 - .10)$
 $= 13.59$

(a) Price Dividend Yield Support High Yield (RV) 0.016 Selected Estimate Low Price = \$ 44.3

5 5-YEAR POTENTIAL This combines price appreciation with dividend yield to get an estimate of total return. It provides a standard for comparing income and growth stocks.

Note: Results are expressed as a simple rate; use the table below to convert to a compounded rate.

A Present Full Year's Dividend \$ 0.290 Present Price of Stock \$ 61.000 - 0.005 X 100 = 0.5 Present Yield or % Returned on Purchase Price

B AVERAGE YIELD OVER NEXT 5 YEARS
Avg. Earnings Per Share Next 5 Years 4.00 X Avg. % Payout 10.0 = 40.0 = 0.7 %

C ESTIMATED AVERAGE ANNUAL RETURN OVER NEXT FIVE YEARS
5 Year Appreciation Potential (AR) 82.5 Present Price \$ 61.000 P.A.R. Tot. Ret.
Average Yield (AR) 16.5 % Average Yield 0.5% 0.5%
Average Total Annual Return Over the Next 5 Years (AC) 17.2 % Annual Appreciation 9.8% 12.8%
% Compd Ann Rate of Ret 10.3% 13.2%

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Addendum to Sustainable Growth Rate

comments by
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As happens so often, we can get carried away with the formulae and the numbers and lose sight of the concepts.

A company begins the year with \$100 million in equity. And, during the course of that year, it earns \$15 million for a return on that equity of 15 percent. If it retains all of what it earned, the equity will have grown 15 percent.

And, since the company was able to make 15 percent on its equity, those retained earnings should also be able to earn 15 percent in the next year. Similar to compounding, this shows that the sustainable growth, just the growth produced by those retained earnings, be 15 percent.

Companies aren't restricted from growth above that rate. They use a variety of resources to increase or perpetuate a higher rate. They include leverage (using other people's money) to acquire the assets that generate more revenue, or they sell more shares. While those shares might dilute the EPS, they were sold not given away, so they do add to the equity of the company. Acquiring productive assets, acquiring operating companies, etc. are only a few of the things that managements, or directors, commonly do to exceed the sustainable growth rate. So, of what interest is it to us? It's just a simple metric that tells us that, without doing these other things, the company can still grow at that rate.

The only thing that might keep the ROE, sustainable growth, and earnings growth from being the same is the prospect of not using all of those earnings to produce more but, instead, to pay out some of those earnings in dividends. This, of course, would reduce the amount of money that is available to earn more; and it will, therefore, cut down the sustainable or implied growth rate. Otherwise, if dividends are not paid, the ROE and earnings growth rate will be the same, as will Implied growth. If earnings growth falls, so will the ROE.

This formula (Implied growth = ROE * RR) [RR=Retention ratio, the percent of earnings NOT distributed to shareholders] will not work if you use ending or average equity.