

# SSG Calculation Reference – Page 1

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**This reference sheet explains the basic calculations used in the BetterInvesting Online Stock Selection Guide Tools.** Use CTRL-F (Windows) or ⌘-F (Mac) to search the document.

Sales growth rate / Sales Trend Line	The average growth rate is calculated by determining the ‘least squares’ regression line of best fit using the natural log (LN) of the company data. <a href="https://faq.betterinvesting.org/index.php?solution_id=1015">https://faq.betterinvesting.org/index.php?solution_id=1015</a>
Earnings growth rate / Earnings Trend Line	The average growth rate is calculated by determining the ‘least squares’ regression line of best fit using the natural log (LN) of the company data. <a href="https://faq.betterinvesting.org/index.php?solution_id=1015">https://faq.betterinvesting.org/index.php?solution_id=1015</a>
Total assets growth rate (for Banks only, SSGPlus only)	The average growth rate is calculated by determining the ‘least squares’ regression line of best fit using the natural log (LN) of the company data. <a href="https://faq.betterinvesting.org/index.php?solution_id=1015">https://faq.betterinvesting.org/index.php?solution_id=1015</a>
% Return on Equity	Earnings Per Share / Book Value Per Share (end of period)
% Pre-tax Profit on Sales	Pre-Tax Income / Sales
% Debt to capital	Total Debt / (Total Debt + Shareholders Equity) (used in CoreSSG/SSGPlus) –or- LT Debt/ (LT Debt + Shareholders Equity) (used for data imported from TK6 to CoreSSG/SSGPlus)
% Debt to equity (not used in SSGPlus)	Total Debt / Shareholders Equity (not used in Core/Plus or Toolkit) –or- Long Term Debt / Shareholders Equity (used in Toolkit 5 & 6)
% Return on Avg Assets	Net Income / Total Assets (average of beginning and ending of period)
Est EPS Next 12 Months	TTM EPS * (1+ Forecast EPS Growth Rate)
Free Cash Flow/Share	(Operating Cash Flow-Capital Expenditures)/ Diluted Shares Outstanding
Potential Annualized Price Appreciation (using Forecast High P/E) a.k.a. Total Return	$((\text{High Stock Price Forecast} / \text{Current Stock Price})^{1/5} - 1) * 100$
Potential Annualized Price Appreciation (using Forecast Average P/E) a.k.a. Projected Average Return (PAR)	$((\text{Projected Average P/E} * 5 \text{ Yr EPS Forecast Value}) / \text{Current Stock Price})^{1/5} - 1) * 100$
Present Yield	Indicated Dividend / Current Stock Price
Projected Yield	Projected Payout / Forecast High PE
Projected Relative Value (used in PERT report)	Projected PE / Average PE (Projected)
PEG (used in PERT report, SSGPlus and SCGPlus)	Projected PE / Forecast EPS Growth Rate
Projected PE	Current Stock Price/ Est EPS Next 12 Months
Projected Average P/E	The average of the user’s High and Low PE projections (forecasts).

All calculations exclude relevant data that may have been removed as an ‘outlier’ in the applications.

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5 Yr EPS Forecast Value	Forecasted \$ amount of earnings projected 5 years out from the projection starting point. $EPS * (1 + \text{Forecast EPS Growth Rate})^5$
Relative Value (used in SCGPlus, SSGPlus)	$(\text{Current PE} / \text{Average5YearPE}) * 100$
Current P/E	$\text{CurrentStockPrice} / \text{last4QEPS}$
Average5YearPE	$(\text{5YearAvgHighPE} + \text{5YearAvgLowPE}) / 2$
Tax Rate (Online Tools)	$\text{TaxProvision} / \text{PreTaxIncome}$
Tax Rate (Stock Data Service)	$1 - ((\text{DilutedEarnings} * \text{DilutedSharesOutstanding}) / (\text{PreTaxIncome} - \text{SpecialItems}))$
Pre Tax Income (Online Tools)	Pre Tax Income from GAAP Income Statement
Pre Tax Income (Stock Data Service)	$\text{PreTaxIncome} - \text{SpecialItems}$
Payout Ratio	$\text{Dividends Per Share} / \text{Earnings Per Share}$
PE / Historical EPS Growth (SSGPlus screener)	$\text{Current P/E} / 9 \text{ Year Earnings Growth Rate}$
Pre-Tax Profit Trend	Compares last FY %Pre-Tax Profit value to last 5-year average %Pre-Tax Profit. if last FY value $\geq$ 2% of last 5-year average then trend = 'UP' if last FY value $\leq$ 2% of last 5-year average then trend = 'DOWN' If last FY value between +/- 2% of last 5-year average then trend = 'EVEN'
%Earned on Equity Trend Return on Equity Trend	Compares last FY %Return on Equity value to last 5-year average %Return on Equity. if last FY value $\geq$ 2% of last 5-year average then trend = 'UP' if last FY value $\leq$ 2% of last 5-year average then trend = 'DOWN' If last FY value between +/- 2% of last 5-year average then trend = 'EVEN'
%Debt to Capital Trend	Compares last FY %Debt to Capital value to last 5-year average %Debt to Capital. if last FY value $\geq$ 2% of last 5-year average then trend = 'DOWN' if last FY value $\leq$ 2% of last 5-year average then trend = 'UP' If last FY value between +/- 2% of last 5-year average then trend = 'EVEN'
Analyst Consensus Estimate – Sales 2 Year Estimate	This value is a 2 year compounded estimated annual growth rate. It is calculated from the last fiscal year revenue and is the mean of all available analyst revenue estimates for the company for the fiscal year ending 2 years after the last completed fiscal year. Morningstar collects and supplies this revenue consensus estimate data in dollar values as part of their institutional quality data feed.
Analyst Consensus Estimate – EPS Long Term Estimate	This value is a compound annual growth rate. It is the mean of all available analyst long-term earnings estimates for a term that is 3-5 years in the future. Morningstar collects and supplies this consensus estimate data in percentage form as part of their institutional quality data feed. BetterInvesting applies this growth rate to the last fiscal year EPS to show on the graph and to display as a value in the Preferred Procedure tool.

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Long Term Debt	From the Morningstar definition for this field: All borrowings lasting over one year including long-term debt and long-term portion of capital lease obligations.
Current/Short Term Debt	From the Morningstar definition for this field: All borrowings due within one year including current portions of long-term debt and capital leases as well as short-term debt such as bank loans and commercial paper.
Total Debt	Long Term Debt + Current Debt
R-squared or R <sup>2</sup>	In the SSG, R-Squared is a statistical measure of fit that is used to indicate how much variation the sales or earnings data has from the trend line. Expressed as a decimal from 0 to 1 with 1 representing perfect correlation where the historical data perfectly matches the trend line. In general, a value of .7 and greater indicates the data is highly correlated to the trend line. Conduct a web search on 'r-squared' for examples of how to calculate this statistic.
Price Dividend Will Support	Indicated Dividend / Maximum High Yield for Last 5 Years
Indicated Dividend	The full year future dividend if the stock were purchased on the data date.
High Yield	Full fiscal year historical dividend / low stock price in the fiscal year

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