

The dividend payout ratio is:

$$\frac{\text{Dividend}}{\text{Profit attributable to shareholders}}$$

Sustainable growth stands for the internally generated growth potential if the company's profitability, dividend payout policy and level of debt financing are kept constant. Equity is, of course, equal to the net worth of a company, so the ROE (return on equity) ratio would tell you by what proportion the company would grow if it retained its profits and reinvested them. This is then reduced by the dividend payout, since clearly the dividend involves returning cash to shareholders, to show the proportion of net worth retained in the company each year out of that year's earnings. This is described as 'sustainable growth'. It ignores the fact that depreciation has been charged in arriving at this figure because that is regarded as a surrogate for the cash outflow required to sustain the company at its present size.

Put another way, a company which is breaking even after depreciation charges (which reflect the economic life of the assets) should be able to replace its assets and stay the same size; a company which makes a profit (i.e. makes a positive return on equity) but pays it all out to shareholders by way of dividend will similarly stay the same size; but to the extent that a company has profits which are greater than the dividend, it will have internal growth potential.

This potential growth rate can be used as one basis of comparison. Clearly companies can also borrow, but ultimately that increases risk and is subject to fairly finite limits which link back to the company's equity base and the growth of that equity base. It is therefore a useful growth indicator to compare companies. If comparing companies within the same industry, one might predict that a company with a higher than average sustainable growth rate would be able to increase its market share.

ROI decomposition

There is a conventional relationship between management performance ratios which links return on investment, profit margin and asset turnover as follows:

$$\text{Profit margin} \times \text{Asset turnover} = \text{ROI}$$

A ROI (return on investment) ratio can be analysed as a combination of two factors: overall profitability of sales and asset utilization.

If we apply this reasoning to the ROA (return on assets) ratio, we arrive at the following algebraic equality:

$$\frac{\text{Profit before interest}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Total assets}} = \frac{\text{Profit before interest}}{\text{Total assets}}$$

Each of the terms on the right-hand side of the equation has its own meaning. Profit before interest divided by sales is a variant of the net profit margin (an overall