**Return on Equity (ROE): The Dupont Formula**

The calculation of the Return on Equity (ROE) is an internal measure of the efficiency of the management of the company’s assets. ROE is basically the dollar return on sales (net income/net sales) times the asset turnover ratio (net sales/total assets). An increasing ROE is an indicator of continuing growth in profitability and the improving efficiency of the management of company assets. This is critical because an improving ROE tends to drive improvement in stock price.

The Dupont formula helps decompose the different drivers of return on equity (ROE). It allows management to go deeper in their analysis of ROI by highlighting both profit and loss performance (which tends to be the focal point of management) and balance sheet management (which tends to be neglected). It helps investors to focus on the key metrics of financial performance individually.

The Dupont Formula analysis of ROI is most valuable when performing comparative analysis of a company’s performance from one period to the next.

**DuPont Analysis = Net Profit Margin × AT × EM**

**where:**

**Net Profit Margin** = Net Income / Revenue​

**AT** = Asset turnover

Asset Turnover = Sales / Average Total Assets​

**EM**=Equity multiplier

Equity Multiplier = Average Total Assets ​​/ Average Shareholders’ Equity

Reference:

Parrino, Kidwell, Bates. (2011). Fundamentals of Corporate Finance, Chapter 4, Wiley Textbooks. ISBN: 118213750

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