DuPont Analysis

DuPont Analysis is also known as the DuPont Formula, DuPont Model, DuPont Equation, and DuPont Method.

This analysis was developed by the DuPont Corporation in the 1920s. The DuPont Equation breaks down the return-on-equity (ROE) ratio into three different components. Those components are usually the net profit margin, asset turnover and the leverage ratio.

$$ROE = Net\ Profit\ Margin * Asset\ Turnover * Leverage\ Ratio$$

A more detailed version of this equation looks like this:

$$\frac{Net\ Income}{Equity} = \frac{Net\ Income}{Sales} * \frac{Sales}{Assets} * \frac{Assets}{Equity}$$

By using the DuPont Equation, investors can more easily see what is contributing to ROE. They can see how and why a firm is succeeding or failing; and therefore, they can see what corrective action might need to be taken, or whether the firm is worthy of investment.

Examples of some of the information investors can glean from this equation include the following:

1) Business Strategy - Firms that are following a low-price/high volume strategy will tend to have low net profit margin and high asset turnover.
2) Nature of Business - Firms in capital intensive industries will tend to have low asset turnover and high net profit margin.
3) Degree of Leverage - Firms with a great deal of debt will have a high leverage ratio.

By studying the DuPont Equation, an investor can determine the business strategy of a firm, the nature of its industry, and a firm's policy on debt. All of this is revealed in this succinct and yet comprehensive equation.

There are other more detailed and sophisticated versions of this equation. But the principle behind them remains the same. The DuPont Equation is the decomposition of the ROE into its component parts.