



Trading and Investing for Beginners

What is the return on equity?

By Eric LeRiche

If you give some people a few dollars and limited resources, they can still build a profitable growing business, others can't make a profit with several billions dollars worth of assets.

Return on Equity ROE is viewed as one of the most important financial ratios. It measures a firm's efficiency at generating profits from every dollar of net assets (assets minus liabilities), and shows how well a company uses investment dollars to generate earnings growth. ROE is equal to a fiscal year's net income (after preferred stock dividends but before common stock dividends) divided by total equity (excluding preferred shares), expressed as a percentage.

$$\text{ROE} = \text{NET INCOME} / \text{AVERAGE STOCKHOLDER EQUITY}$$

A healthy company may produce an ROE in the 13% to 15% range. Like all metrics, compare companies in the same industry to get a better picture.

While ROE is a useful measure, it does have some flaws that can give you a false picture, so never rely on it alone.

Not all high-ROE companies make good investments. Some industries have high ROE because they require no assets, such as consulting firms. Other industries require large infrastructure builds before they generate a penny of profit, such as oil refiners. You cannot conclude that consulting firms are better investments than refiners just because of their ROE. Generally, capital-intensive businesses have high barriers to entry, which limit competition. Another example is a company that carries a large debt and raises funds through borrowing rather than issuing stock. It will reduce its book value. A lower book value means you're dividing by a smaller number so the ROE is artificially higher.

There are other situations such as taking write-downs, stock buy backs, or any other accounting slight of hand that reduces book value, which will produce a higher ROE without improving profits.

It may also be more meaningful to look at the ROE over a period of the past five years, rather than one year to average out any abnormal numbers.

Given that you must look at the total picture, ROE is a useful tool in identifying companies with a competitive advantage. All other things roughly equal, the company that can consistently squeeze out more profits with their assets, will be a better investment in the long run.

Another thing about High ROE: It yields no immediate benefit. Since stock prices are most strongly determined by earnings per share (EPS), you will be paying twice as much (in Price/Book terms) for a 20% ROE company as for a 10% ROE company. The benefit comes from the earnings reinvested in the company at a high ROE rate, which in turn gives the company a high growth rate.

ROE is presumably irrelevant if the earnings are not reinvested.

- * The sustainable growth model shows us that when firms pay dividends, earnings growth lowers. If the dividend payout is 20%, the growth expected will be only 80% of the ROE rate.

- * The growth rate will be lower if the earnings are used to buy back shares. If the shares are bought at a multiple of book value (say 3 times book), the incremental earnings returns will be only 'that fraction' of ROE ($ROE/3$).

- * New investments may not be as profitable as the existing business. Ask "what is the company doing with its earnings?"

- * Remember that ROE is calculated from the company's perspective, on the company as a whole. Since much financial manipulation is accomplished with new share issues and buyback, always recalculate on a 'per share' basis, i.e., earnings per share/book value per share.

At this time I would like to introduce the DuPont Formula but I warn you, this gets a bit complicated so don't feel you need to understand it all right now. You can leave it for now and come back to it once you've digested the main portion of the article. In fact you could never hear about this and still use ROE efficiently so don't worry if it's too much

The DuPont formula, also known as the strategic profit model, is a common way to break down ROE into three important components. Essentially, ROE will equal net margin multiplied by asset turnover multiplied by financial leverage. Splitting return on equity into three parts makes it easier to understand changes in ROE over time. For example, if the net margin increases, every sale brings in more money, resulting in a higher overall ROE. Similarly, if the asset turnover increases, the firm generates more sales for every dollar of assets owned, again resulting in a higher overall ROE. Finally, increasing financial leverage means that the firm uses more debt financing relative to equity financing. Interest payments to creditors are tax deductible, but dividend payments to

shareholders are not. Thus, a higher proportion of debt in the firm's capital structure leads to higher ROE. Financial leverage benefits diminish as the risk of defaulting on interest payments increases. So if the firm takes on too much debt, the cost of debt rises as creditors demand a higher risk premium, and ROE decreases. Increased debt will make a positive contribution to a firm's ROE only if the firm's Return on assets (ROA) exceeds the interest rate on the debt. [3]

$$\text{ROE} = (\text{Net Income}/\text{Sales}) \times (\text{Sales}/\text{Total assets}) \times (\text{Total Assets}/\text{Average stockholder equity})$$

Like I already mentioned: as with many financial ratios, ROE is best used to compare companies in the same industry.

On that note, I'd like to thank you for taking the time to read this series on "The most popular tools of fundamental analysis"

I'm now working on the same kind of series but on the Technical analysis side. You don't want to miss it so come back to TIB often.

Yours truly

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