# **Ratio Analysis**

Ratio analysis is only slightly more complicated than trend analysis. And like trend analysis, it is often dismissed as useless because it is too simple and obvious. We will demonstrate how wrong this notion is.

In this report, we first explain what ratio analysis is. We then discuss one of the most popular financial ratios, return-on-assets (ROA). We will demonstrate how even this most obvious and well-known financial ratio has significant predictive power when used properly.

## What is Ratio analysis

A gray owl is almost impossible to see when he is perched next to an old tree. However, he stands out quite dramatically when he is surrounded by a clear blue sky. Many very useful numbers only become apparent when they are studied in relation to some other numbers. This is the rationale behind ratio analysis.

Ratio analysis is the systematic practice of putting numbers in proper context to make them stand out and to make them more meaningful and useful. In ratio analysis we relate one number to some other number. That is to say, we study one number per unit of some other number.

Ratio analysis is arguably the most fascinating form of analysis there is because it is an opportunity for the investor to get creative. There is an endless number of different ratios that an investor can create to reveal the admirable qualities they covet.

Our goal in this report is to demonstrate how even the most obvious ratios have real predictive power as long as you know how to use them. We will demonstrate this by studying perhaps the most well-known financial ratio in existence, return-on-assets (ROA).

# Return-on-Assets (ROA) - Definition

ROA is a basic and straightforward number that relates how much return a business has demonstrated it can generate relative to how much capital it has invested. ROA is usually defined as net income divided by total assets.

$$ROA = \frac{\text{Net Income}}{Total \ Assets}$$

We actually prefer a variation on ROA that most refer to as "operating ROA." Operating ROA uses operating profit in place of net income. The exact formula is as follows:

$$Operating\ ROA = \frac{Operating\ Income}{Total\ Assets}$$

This number is so basic that it must be priced in already, correct? It must only be useful on a small rental property or some other obscure business, but not large, well-known, publicly traded corporations, correct?

Wrong. This no-nonsense ratio will help steer you to outstanding companies no matter their size. We will demonstrate this next.

## Return-on-Assets (ROA) - Demonstration

We studied the ROA ratio of the 2,000 largest American corporations from 2004 – 2019 (the last full year before we issued this report). This was a 16-year period of time.<sup>1</sup>

We ranked these stocks based on the strength of each stock's ROA. We considered those in the top 25 percent to be "High ROA" companies and the bottom 25 percent to be "Low ROA" companies. We then measured how much each group returned over the subsequent 12 months. We then rebalanced and repeated this process every year until the end of 2019. Each group's average annual return is shown below.

16-Year Average Return (2004 – 2019)

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	Return
High ROA	9.9 %
Average (All)	8.7 %
Low ROA	6.5 %

High ROA companies clearly outperformed over this 16-year period. And Low ROA companies clearly underperformed. High ROA companies beat low ROA companies by 3.4 percent (9.9 percent vs. 6.5 percent) per year.

A 3.4 percent outperformance may not seem like much, but when it is earned over a 16-year period it is a significant amount. The cumulative outperformance was almost 200 percent (385 percent vs. 185 percent)!

Furthermore, the picture gets even more striking when you look at how high-ROA companies did when the stock market was weak. In the worst 8 of these 16 years, high-ROA firms did even better (relatively speaking).

	Return
High ROA	-1.9 %
Average (All)	-4.7 %
Low ROA	-8.5 %

<sup>&</sup>lt;sup>1</sup> Furthermore, we multiplied the annual returns with each other instead of adding them. In this way, volatile stocks that really did not achieve a higher return would not appear as if they achieved a higher return.

In the worst 8 years (2005, 2007, 2008, 2011, 2014, 2015, 2018, 2019), high-ROA companies beat low-ROA companies by more than 6 percent (-1.9 percent vs. -8.5 percent). In other words, in weak or stressful times (e.g. bear markets), the outperformance of high-ROA companies almost doubled (6.6 percent vs. 3.4 percent)!

In stressful times, investors rush to quality companies. And high-ROA companies are not just companies that have the financial ability to grow more vigorously in the long run; but they are strong companies that investors rush to in times of uncertainty.

Investors who do not appreciate the countercyclical nature of high-ROA companies are investors who have never experienced the awful feeling of watching their life savings evaporate in a powerful bear market. Knowing that you have companies that can help to protect and cushion you from this danger is a reassuring feeling that is hard to describe.

ROA is an illuminating number whether it's applied to very private businesses or to the largest businesses in existence. Shrewd investors study return-on-assets (ROA) closely, and they covet those companies that grade out on top on this enlightening number.<sup>1</sup>

## **Other Well-Known Numbers**

ROA is a powerful number. Its theoretical basis is clear and logical. Its effectiveness is easy to measure and document.

But we hope its greatest function is to inspire you to study and use other numbers similar to ROA. There are many other ratios like operating margin, asset turnover, and retention rate that are also clear, logical and effective.

We explain what these ratios are and how to calculate them. You will find those explanations if you turn to our report on the most useful fundamental statistics.

## www.StockFundamentalist.com/How-to-Invest-In-Stocks/CheatSheet

We encourage you to use them all and even generate your own. You will also discover that they all work in a similar way. They are all logical and sensible. Their effectiveness is barely perceptible in the short run, but significant in the long run. And often, the more mundane a number, the more definitively it works.

# Summary

Not many investors who discover that high-ROA companies beat the average by just 1 percent a year over a 16-year period of time could still recognize it as the great opportunity that it is. Recognizing opportunity is more difficult than just coming across it. The purpose of this report was to help you recognize opportunity.

<sup>&</sup>lt;sup>1</sup> We encourage you to adjust for the industry that each company is a part of while using the ROA. You will improve your performance and accuracy significantly if you do. ROA is so powerful that it is still evident if you do not adjust for each firm's industry. But it still behooves you to adjust for that industry bias.

You do not need fancy, space-age statistics to beat the market. On the contrary, many of the most useful and powerful statistics are useful precisely because they are so ordinary that they are overlooked or even dismissed.

They may seem pedestrian and obvious, but the logic underpinning them is so undeniable and immemorial that they are effective even when going up against an incredibly efficient and capable stock market.

You now understand the power at your disposal. More specifically, you now understand the wisdom in studying logical, no-nonsense statistics like return on assets, operating margin, asset turnover and many others. You will be thrilled at how you can beat the market and make money with these straightforward, commonsense tools.

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