

Why Indices Lead Investors Astray

by Andrew Clifford, CIO

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Index obsession is unhealthy and leads investors astray.

While you would expect me – an active manager – to make such a claim, the purpose of this paper is not to impart the usual objections that one hears in relation to passive investing and index-hugging.

The purpose of this paper is to take the reader back to the absolute basics of investing and highlight the importance of understanding the underlying reality of what one is investing in, rather than focusing on the abstractions, which often lead to poor decisions. Indices, whose purpose is to measure the performance of a market (or what some may term an “opportunity set”), are one of those abstractions.

What is Investing?

Let us first set up a framework for this discussion. Investing is on its face value a simple process. We save, that is, we defer consumption so that we will have future income to fund our retirement, a deposit on a house or some other purpose. We invest, with the objective of generating a return on our savings, to compensate for not consuming now and to accumulate funds to provide the desired future income.

There are fundamentally only two types of investments: debt (where we lend money to another for a fixed return) and equity (where we acquire ownership over assets and accept the variable return). Everything else is a repackaging, combination or derivative of either or both debt and equity.

The source of the return is the underlying business and/or assets. Every asset in the economy, whether it is an iron ore mine or the computer hardware and software that I'm using to write this article, is explicitly or implicitly funded by either debt or equity or a combination of both. Therefore, when we invest, we are funding the assets used in economic activity.

As an investor, we want to know the return that we can expect to receive and the risk we face. We want to know whether the return can be higher or lower, and whether we could lose our initial capital.

This is in essence **what investing means: we save money and use it to fund assets that provide a return.**

What are Returns on Investment?

Now we need a framework for making an assessment of the potential returns from an equity investment. I will illustrate my framework using a real life example, a company that we own in several of Platinum's portfolios. (Note that the sales and profits figures in the following tables have been indexed in order to disguise the identity of the company for the sake of this exercise. They do, however, reflect the company's actual results, and the share prices have been adjusted accordingly to reflect the actual ratios.)

TABLE 1	2010
Sales*	\$979
Profits*	\$100
Share price*	\$899
Price-to-earnings (P/E)	9x
Earnings yield (vs. cost)	11%
Dividend yield (vs. cost)	1.4%

* Indexed to 2010, profits = \$100. Source: FactSet, Bloomberg, Platinum.

Table 1 shows the company's 2010 results. It had a profit of \$100 and we were able to buy its shares at just under \$900. It had a price-to-earnings multiple of 9x. Or, inversely, as I would prefer to consider, the company had an earnings yield (earnings-to-price ratio) of 11%, which means that my share earned 11 cents in that year for every \$1 invested. If this company were to continue to earn the same profits year in year out, 11% would be my rate of return. I note that the company provided a dividend yield of 1.4%, which implies that most of its earnings were reinvested in the business, rather than handed to shareholders.

Looking back several years, we can see that the company had been growing. Sales have grown steadily at 14% a year and profits grew somewhat faster. This is good news, as the balance of earnings reinvested in the business was generating growth. An average return on equity of 16% is certainly far better than what the banks are offering on my cash deposits.

TABLE 2	2005	2006	2007	2008	2009	2010
Sales*	\$510	\$541	\$624	\$768	\$880	\$979
Profits*	\$48	\$50	\$47	\$35	\$61	\$100
Return on Equity (RoE)	Average 16%					

* Indexed to 2010, profits = \$100. Source: FactSet, Platinum.

Let's look a little deeper into this company and consider whether it is a good investment. We can see that sales have grown steadily, including through the Global Financial Crisis (GFC), but profits have been volatile – this is a cyclical business, which means that the 11% yield may not be reliably maintained from year to year. Nevertheless, based on the company's track record over five prior years, earnings are growing. We know from information beyond this table of numbers that this is a large company, a global leader in its key business segments and has strong technological leads over its competition. Our analysis at the time led us to believe that the company has very good prospects of maintaining – and increasing – these earnings over time.

At the time, the US 10-Year Treasury Note yielded 3% p.a. Comparing a guaranteed 3% return against an uncertain, though, probably growing return starting at 11% p.a., we thought this company a very good investment.

Now let's fast-forward five years to 2015 and see how the investment turned out. Sales continued to grow for the next three years before falling back and then flattening out. Profits took a dip in the first year after our purchase, but otherwise followed a similar pattern as did sales.

TABLE 3	2010	2011	2012	2013	2014	2015
Sales*	\$979	\$1044	\$1273	\$1448	\$1305	\$1270
Profits*	\$100	\$85	\$147	\$189	\$146	\$118
Share price*	\$899	\$1002	\$1442	\$1300	\$1257	\$1194
P/E	9x	12x	10x	7x	9x	10x
P/E vs. cost	9x	11x	6x	5x	6x	8x
Earnings yield (vs. cost)	11%	9%	16%	21%	16%	13%
Dividend yield (vs. cost)	1.4%	0.6%	0.9%	0.9%	1.6%	2.2%
RoE	Average 16%					
S&P 500 Index	1258	1258	1426	1848	2059	2044

* Indexed to 2010, profits = \$100. Source: FactSet, Bloomberg, Platinum.

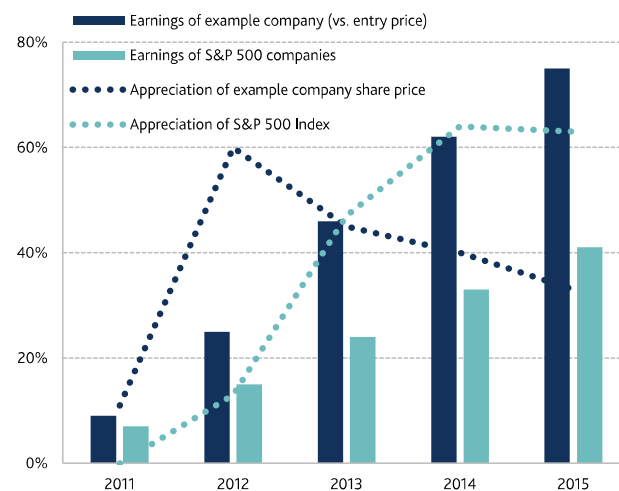
Based on the cost of our investment, the company generated a return of 9% in the first year, followed by 16%, 21%, 16% and 13%, giving us an average return of 16% per year over the five year period. Compared to the 3% p.a. yield from the risk-free US government bonds or the 7.5% p.a. earnings yield provided by the average S&P 500 company over the same period, this company has been a far superior investment.

Reality vs. Abstraction

If this had been a private company and you were the sole owner or a majority owner, this is exactly how you would have evaluated its returns. Ironically, few stock market participants look at their investments this way. Instead, most investors focus on the share price.

Judging by share price, how did our investment perform? Two years in, things looked great as the stock price was up 60%. But then it fell back, and after five years it only achieved an appreciation of less than 33% cumulatively. It does not seem particularly impressive considering that the US Treasury bond would have given a return of almost 21%. Meanwhile the S&P 500 Index had risen more than 62%, outperforming our company by a substantial margin. Given the choice, most investors would opt for the S&P 500 Index, or even the bond, over our company. Even though as the owner of a private business one would have much preferred to own this company, given its earnings, over the aggregate of the S&P 500 companies, one thinks differently when the focus is all about the share price.

Example Company vs. S&P 500 Cumulative earnings & cumulative price appreciation



Source: FactSet, Bloomberg, Platinum.

This is a mirage.

The share price is merely an abstraction of the underlying business that we own, not the business itself. So why should investors be more concerned with the fluctuations in the share price than the underlying returns that the business is really producing for us?

The share prices of the S&P 500 companies, as represented by the S&P 500 Index, have far outperformed the underlying earnings of these companies. This is fortunate for their shareholders – you have benefited from a simple re-rating. As a shareholder in our company, I would have hoped for the same, but it did not happen, even though the underlying value of my company has increased significantly.

This brings us to one of the hardest parts of investing. At this point in 2015, how would you feel if you were a shareholder in this company? Probably rather despondent. It must have felt quite tempting to just sell and swap horses.

Let's now finish the story.

In 2016, the company's profits started to pick up again and, in 2017, it entered a boom period – profitability hit record levels.

And the stock price is finally taking off. The share is now up nearly 150%, compared to about 100% for the S&P 500 Index and about 27% for US Treasury bonds. Our company has handily outperformed the market.

TABLE 4	2010	2011 – 2014	2015	2016	2017
Sales*	\$979	...	\$1270	\$1278	\$1513
Profits*	\$100	...	\$118	\$142	\$255
Share price*	\$899	...	\$1194	\$1707	\$2179 [^]
P/E	9x	...	10x	12x	9x
P/E vs. cost	9x	...	8x	6x	4x
Earnings yield (vs. cost)	11%	...	13%	16%	28%
Dividend yield (vs. cost)	1.4%	...	2.2%	2.2%	3.1%
RoE	Average 16%				
S&P 500 Index	1258	...	2044	2239	2470 [^]

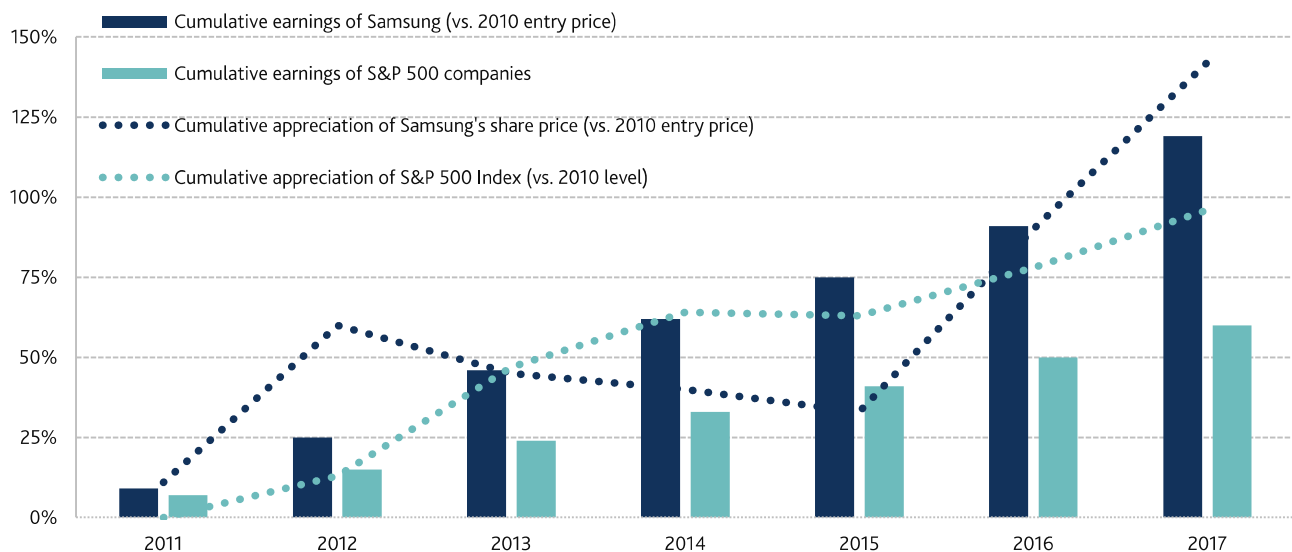
* Indexed to 2010, profits = \$100. [^] As at 31 July 2017

Source: FactSet, Bloomberg, Platinum.

Moreover, for the record, on today's earnings our company still has a starting earnings yield of 12% while that of the S&P 500 Index is down at around 5% and the 10-Year US Treasury Note is yielding 2.3% (as at the end of July 2017).

For those who haven't guessed it, the company is **Samsung Electronics**.¹

Samsung Electronics vs. S&P 500



Source: FactSet, Bloomberg, Platinum.

¹ In reality, Platinum has owned this company for the most part of the last 20 years, not only since 2010.

True Value Investing

Looking at the implied returns of the securities we buy is at the core of true value investing, and this is what I have set out to illustrate with the example of Samsung.

As an investor, one seeks to first build a portfolio of assets by identifying equity and debt securities that provide good implied returns, and secondly, achieve appropriate diversification across industry and geography. The challenge lies in the assessment of a company's earnings potential. It requires a true understanding of what the future holds for a company, not just observing a set of numbers. But if we have the requisite level of skill to assemble a portfolio of assets with good implied returns, we will through time achieve a good result.

Observe that in assessing our company's implied returns and assembling a portfolio, at no time did we use a market index as a reference point. For adequacy of returns, we can look at the risk-free rates of return on government bonds or bank deposits, and, of course, the implied rates of return from all the individual companies that we examine. In the case of Samsung, for example, we know how good an investment its implied returns represent, compared to other opportunities, because our team has studied hundreds of companies.

Observe, also, that at no time did we attempt to predict the company's future share price. We know that the efficiency of markets will eventually bring the company's share price to reflect its intrinsic value.

Why Do Indices Lead Us Astray?

It should be patent by now why indices can lead us astray.

As at the end of 2015, our investments in Samsung did not make us feel very good even though its share price had appreciated 33% and its underlying business had done demonstrably better, because the S&P 500 Index had risen 62% over the same period. The chance of a Samsung shareholder throwing up his hands and selling out at that point was exceedingly high. But if the investor ignored the noise from the abstraction of the index and simply focused on Samsung's business as if he were a private owner, he would be far more likely to have held onto the investment and end up flush with cash and extremely happy in 2017.

It has become the widely accepted norm in corporate governance to link executive compensation with total shareholder return (TSR). This has created all kinds of wrong incentives and led to management behaviour that focuses on boosting the company's share price from quarter to quarter rather than growing the value of the company's underlying business.

An obsession with indices also exacerbates the "fear of missing out". Rather than feeling satisfied with the solid returns from one's investment, one feels disgruntled by the fact that something else is doing even better. At the heart of the problem is that we are distracted by an abstraction, the share price, rather than focusing on the reality of the assets and businesses that we own.

Indeed, today we are faced with the same dilemma with regards to Samsung. The stock has given us great returns and it still looks cheap. But profits have reached record levels and, since this is a cyclical business, they are likely to fall at some point in the next two to three years. But even so, based on our expectation of a worst case scenario, Samsung's earnings yield is probably going to be no worse than 8-9%, compared with its current level of 12%. Should we sell because of the worry that Samsung's share price will fall when earnings fall? Should we allow ourselves be distracted by the prospect of the share price falling even though we expect the company's implied returns to remain strong?

Being fixated on the index leads to much irrational investor behaviour, some of which is obvious in passive strategies, such as having the maximum invested in a stock at the peak of its share price cycle. Index-hugging can also lead investors to have a disproportionate size of the portfolio concentrated in a single region or sector or even particular stocks. For example, Financials has a weighting of 39% in the S&P/ASX 200 Index while Information Technology has just 1%.² Tracking the ASX 200 would lead investors to be exposed to all of Australia's "big 4" banks as well as Macquarie, totalling nearly 30% of the portfolio.

Ultimately, the reason that an index obsession leads investors astray is that it leads one to ignore the underlying fundamentals of investing, of the importance of assessing the implied returns of the security that one is holding.

Researchers have produced much evidence that active managers on average underperform the market benchmarks. No doubt that is true. But there is also strong academic research showing that value investing can lead to superior returns. At its core, value investing is about making an assessment of the underlying performance of the securities in a portfolio, in the fashion that I have applied to Samsung in this paper. The concept is also what underpins our quantitative analysis system, which we use to pinpoint new opportunities and cross-check analysts' assessments based on fundamental research.

² As at 30 April 2017.

Other Distractions

In this paper I have chosen to focus on the role of indices as an abstraction that distracts investors from the truly important aspect of investing. There are also others. The desire for income in a portfolio is another example. While having an income stream is a real need for certain classes of investors, a focus on dividend yield can lead the investor to either overlook or misinterpret the underlying realities of the business.

Australian banks again provide a case in point. If we apply the above framework to Commonwealth Bank (ASX: CBA), we find that it has a P/E multiple of 14.4x and an earnings yield of 7%.³ It pays out a dividend of 5.5%, which makes investors really happy as they receive three-quarters of the return as cash in hand. But this means that CBA is not able to reinvest as much of its earnings back into its business, leaving it with a long-term growth rate of only 4%. Simple mathematics tells me that CBA cannot provide me with an underlying return of more than 7.5% over the next five years. With the dividends and franking credits, CBA might be providing a decent return, but what matters is that its returns cannot get better from here, though they can certainly deteriorate. Compared with other available opportunities, CBA does not appear an attractive investment to us.

Key Lessons

To sum up the key messages of this paper:

- Investing at its core is to fund assets that provide a return. That underlying return is what matters.
- Focusing on abstractions, such as indices, can distract and misguide investors away from the underlying reality of the business and its implied returns.
- Earnings yield allows an equity investment to be compared with any debt or other equity investments.
- The most challenging part of investing is to accurately assess a company's earnings prospects.
- Investing is simple, but not easy. It requires skill and expertise.
- Thinking like an owner and focusing on the earnings of the business against the cost of the investment is more helpful than thinking like a trader and speculating on future share price.
- Assess investments against a risk-free alternative.
- Diversify sufficiently to spread risk – errors are inevitable.
- A portfolio is the sum of many continuous decisions.

³ As at the end of July 2017 when CBA was trading at close to \$85. The stock has since fallen to \$75 by the time this article went to press (4 Oct 2017).