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Schroders
The hidden risks of going passive

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Disaffection with underperforming fund managers can push institutional investors towards 'passive' management of their assets. Indeed, the UK's Department for Communities and Local Government has recently suggested that as much as £85 billion of defined benefit pension fund assets managed for UK local authorities could be moved from active to passive management. The rationale for the suggestion is that the average returns from active management may not justify its higher cost.

While this may be true in a narrow sense, we think it would be a mistake to believe that going passive is a low risk route to success or that it offers a 'set-and-forget' approach. We therefore consider the risks of adopting passive approaches.

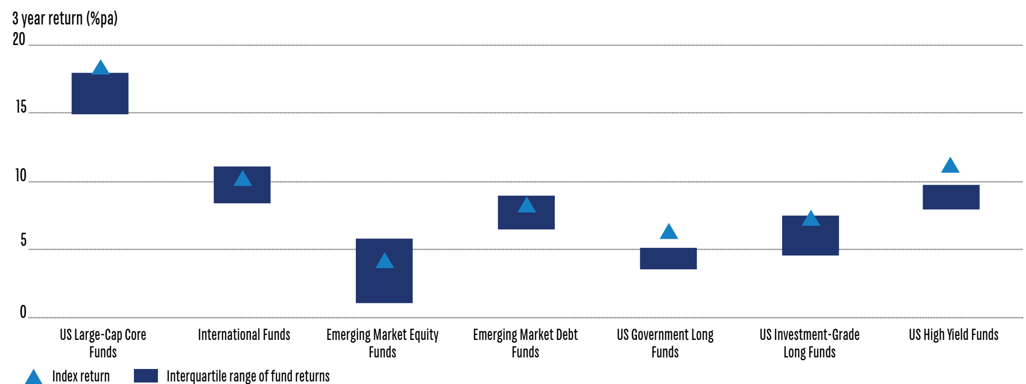
In this paper we argue that:

- Different portfolio returns are the result of both asset allocation and active stock selection decisions.
- Passive indices can contain unwelcome biases and hidden concentration risks, while also increasing investors' exposure to wider systemic risk.
- Active management is required to ensure that capital is allocated efficiently within markets.
- Certain types of active managers can be found that outperform passive indices over the long term, often those with high 'active share'.

The importance of asset allocation

First and foremost, it is important to remember that one of the biggest decisions any investor makes is how they allocate their assets. For instance, even the best active manager in one asset class will often underperform the worst asset manager in another. In the example in Figure 1 below, the impact of the asset allocation decision is demonstrably more significant than the active-passive decision. It is interesting to note that the difference between the index returns of US large cap equity and US government bonds is approximately 12% over the 3-year period – far more than differences in returns within each asset class. A number of academic studies have confirmed that decisions on allocating to different underlying investment markets account for significant performance differentials between portfolios.

Figure 1: Asset allocation matters: three year returns of funds using different asset classes



Source: Schroders. Data from S&P Indices versus Active Funds (SPIVA) Scorecard Mid-Year 2013. Three year look back period. Corresponding indices: S&P 500, S&P 700, S&P/IFCI Composite, Barclays Emerging Markets, Barclays Long Government, Barclays Long Government/Credit, Barclays High Yield, 30 June 2013.

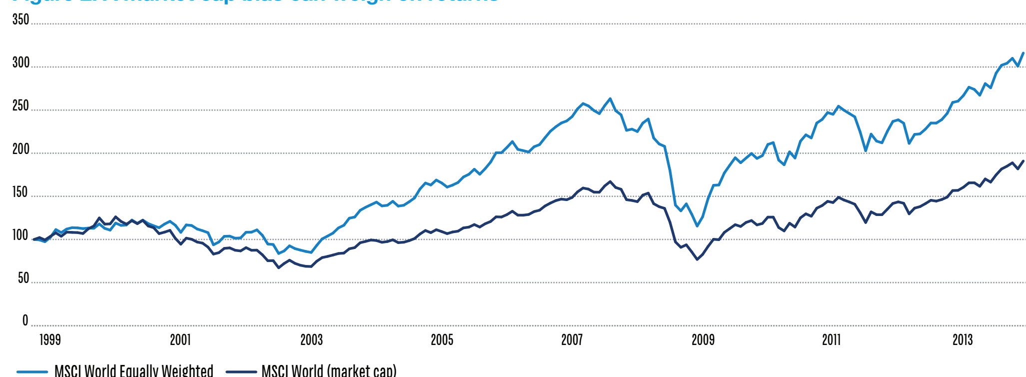
Whether and how much to allocate to different asset classes is therefore a decision of paramount importance. It is also inescapably active – it is impossible to make a 'passive' asset allocation decision. However they manage their portfolios, investors cannot avoid making a decision about which broad categories of assets to use: equities, bonds, property, alternatives, etc. Once that course has been charted, the investor needs to make a decision on what vehicle or vehicles to use: whether to use active or passive management to gain access to the assets they have chosen.

Untoward valuation biases

Investing using passive indices can certainly have benefits, including diversification, transparency and low costs, but passive strategies also carry their own risks. For instance, traditional equity indices weight the stocks that they contain by market capitalisation, so that bigger companies dominate. At the end of April 2014, three-quarters of the total value of the MSCI World Index – a benchmark widely followed by passive investors – was accounted for by large cap stocks valued at more than $20 billion.

It may seem intuitive to weight stocks in this way, but there are a number of problems with this approach. One is that investors are buying into yesterday's winners. These are the biggest stocks which performed well historically, but are now more prone to underperform as smaller stocks erode their market dominance. This effect is evident when a traditional market cap weighted index, such as the MSCI World, is compared with an index that removes the market cap bias, such as the MSCI World Equally Weighted Index. The market cap weighted index lags significantly, as seen in Figure 2 below.

Figure 2: A market cap bias can weigh on returns

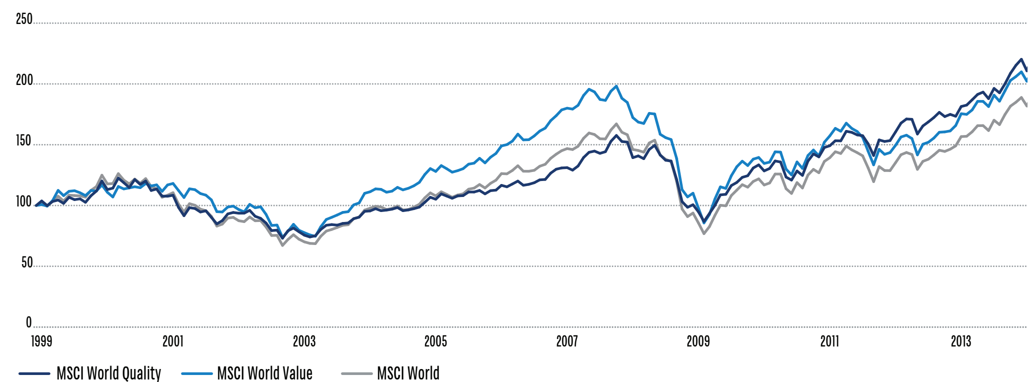


Source: MSCI Barra, Schroders. Both indices are shown in US Dollars and net dividends are reinvested, 28 February 2014.

The problem is that market cap weighted indices can force investors to buy stocks with expensive valuations and sell cheap ones, in other words, buy high and sell low. This is contrary to many well-tried investment strategies, such as those used by the celebrated investors Benjamin Graham and Warren Buffett. Their approach has been to buy low-valued stocks, on measures such as the price earnings ratio, and sell high.

As well as tending to favour highly valued and expensive stocks, indices can be biased towards stocks that are judged low quality on measures such as stability of earnings growth. Both types of stock – whether expensively valued or poor quality – are likely to prove a drag on long-term returns. In contrast, stocks seen as having cheap valuations or high quality characteristics tend to outperform traditional benchmarks (Figure 3). So active managers that have the ability to select from these parts of the market may be expected to outperform over the long term.

Figure 3: Discrimination by value and/or quality can bear fruit in investing



Source: MSCI Barra, Schroders. Both indices are shown in US Dollars and net dividends are reinvested, 28 February 2014.

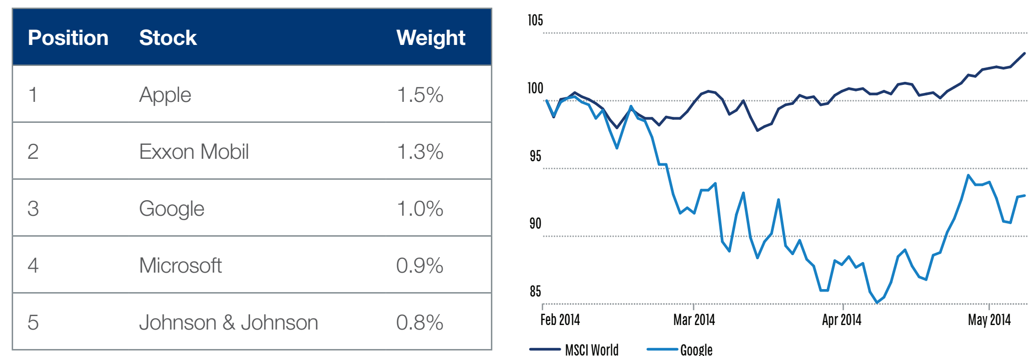
Restricted choice and concentration risks

Another problem that passive investors need to overcome is the lack of breadth that comes from an investment strategy based on indices. An index-bound investor unnecessarily restricts their investment choices. For instance, while the MSCI World Index is currently composed of over 1,600 stocks, we calculate that the universe of global stocks with sufficient investable liquidity comes to more than 15,000. Moreover, as we have suggested, index investors further narrow their choices by their bias towards big companies. There is a huge range of mid, small and micro cap stocks beyond the reach of the index which have all been shown to outperform large cap over the long term.

In certain market environments these inherent biases can be compounded when even larger concentrations develop in traditional market cap indices. For instance, in February 1989, 44% of the MSCI World was composed of Japanese stocks as a bubble formed in Japanese asset prices. Again, in February 2000, technology and telecoms stocks made up over 35% of that same global index. In both cases, these two parts of the market – Japanese stocks and the technology and telecoms sector – underperformed badly as their high valuations unwound in subsequent periods.

This concentration risk has not gone away. At the end of February 2014, just over 9% of the value of the MSCI World Index – tracked by many passive funds – was represented by the top 10 stocks, or less than 1% of the total by number. This means that there is considerable concentration risk for anyone buying an index tracking fund. Moreover, three of the four largest stocks were in the IT sector: Apple, Google and Microsoft. The other was Exxon Mobil, which is in the energy sector. Since February, Google has significantly underperformed, dragging down the performance of the whole market cap weighted index (Figure 4).

Figure 4: The MSCI World Index is vulnerable to under-performance among its top five stocks...

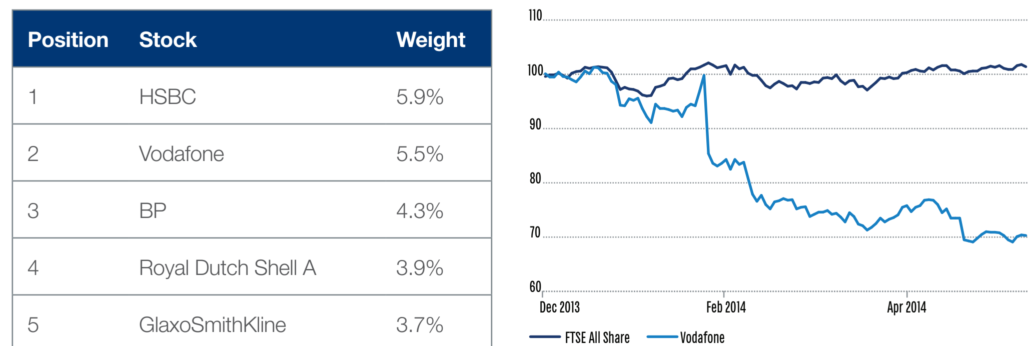


Position	Stock	Weight
1	Apple	1.5%
2	Exxon Mobil	1.3%
3	Google	1.0%
4	Microsoft	0.9%
5	Johnson & Johnson	0.8%

Source: MSCI Barra, Bloomberg, Schroders, 6 June 2014.

The situation is even more pronounced for those who have investments in regional equity markets, such as the UK. At the end of 2013, the top 10 stocks made up 36% of the FTSE All Share Index. In this case market cap indices had a significant weighting to Vodafone, at 5.5%, and were again dragged down as this stock subsequently underperformed (Figure 5). Technology and telecoms stocks have the potential to underperform abruptly if they prove to be ill-placed to tackle new developments in their sectors.

Figure 5: … as is the FTSE All Share Index



Position	Stock	Weight
1	HSBC	5.9%
2	Vodafone	5.5%
3	BP	4.3%
4	Royal Dutch Shell A	3.9%
5	GlaxoSmithKline	3.7%

Source: FTSE, Bloomberg, Schroders, 6 June 2014.

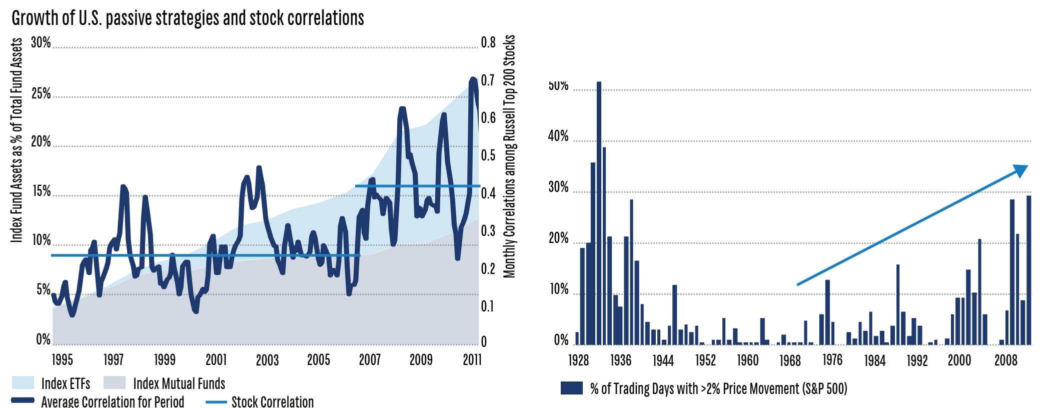
Systemic risks

Arguably more serious for passive investors is the unintended systemic risk to which this approach can expose them. This results from the process of so-called 'price discovery': the way the market arrives at the price for any particular stock. An active manager who receives favourable information about a stock will be more likely to buy it, causing the price to rise. By the same token, a manager who receives adverse information about a stock is likely to cause its price to fall. This discrimination means that active managers can be referred to as 'price makers'. In the process, they direct capital towards healthier companies. By contrast, passive managers are not able to distinguish between good and bad, wheat or chaff. They are forced to invest in all the stocks in an index, irrespective of any views about their value or quality. As a result, they are often known as 'price takers'.

This price taking may lead to unintended consequences. Fidelity Investments, the fund management group, estimates that since 1995 assets in passive equity funds and exchange traded funds (ETFs) have grown significantly. From 4% of US equity index funds in 1995, they had jumped to 27% by 2011. Over the same period, average stock correlations – the propensity for share prices to move together – grew from an average of

24% to 42%, as shown in the first chart in Figure 6 below. At the same time, the volatility of the US equity market also rose significantly, as illustrated by the second chart in Figure 6. The implication is that passive funds may have contributed to these effects by their buying and selling of the same index stocks at similar times.

Figure 6: Growth of passive strategies has coincided with increased correlations and volatility

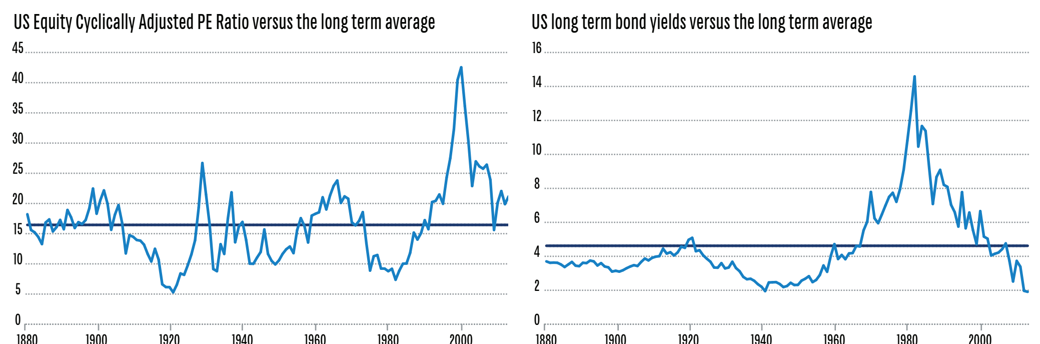


Left chart: Source - Investment Company Institute, Simfund, Haver Analytics, Fidelity Investments as of Dec. 31, 2011. Right chart: S&P 500 Index representative of U.S. large-cap stocks; Source: Standard & Poor's, Bloomberg, Fidelity Investments as of Dec. 31, 2011. Source: Fidelity Investments 'Active and Passive Investing: Both Are Essential to Long-Term Financial Markets Health' by Ren Cheng, June 2012.

It should also be noted that global markets have become more synchronised recently. Companies based in different parts of the world have become more global, making their share price performances more alike. An index that has become more volatile in one region is more likely to fall at the same time as an index based on another region. So investors who have chosen to invest in passive funds containing large cap stocks to, say, avoid the idiosyncratic risks of small companies may have simply replaced one risk with an even greater, systemic, risk. Arguably, the index stocks to which they are exposed are more likely to fall in value at the same time, and in greater magnitude, than those held by active managers who do not hold index positions.

This problem has been compounded as certain equity and bond markets do not look cheap compared to their long-term average valuation levels. For instance, cyclically adjusted price earnings (CAPE) ratios – a measure of long-term value – are currently higher than average for US equities, while US government bonds yields are lower (Figure 7). These high valuations may unwind over the medium term, hitting returns for passive investors who buy now. As at the time of writing US equities, which make up approximately 50% the global equity market, have one of the more expensive valuations of all regions.

Figure 7: Both equities and bonds look expensive on long-term measures

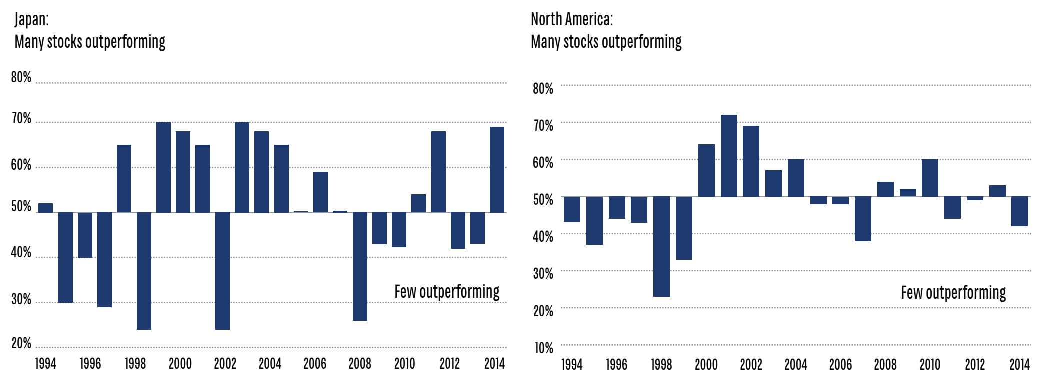


Source: Robert Shiller's Online Data http://www.econ.yale.edu/~shiller/data.htm, Schroders, December 2013.

Of course, an active manager with the latitude to pick and choose across the market may still be able to find pockets of value, while avoiding expensive regions and individual stocks. For instance, they would be in a position to under-weight the US and over-weight cheaper regions, giving them the potential to outperform global indices over the long term.

Their ability to do so should be helped by their freedom to pick and choose among those markets from around the world which display above-average proportions of outperforming stocks. For instance, the left-hand chart in Figure 8 shows that at the end of April 2014 a net 69% of stocks in the Japanese market had outperformed in the year to date, compared with only a net 43% in the previous year. By contrast, the US market (right-hand chart) has swung in the opposite direction over the two years. So, while a passive global manager would have been forced to buy both markets indiscriminately, there has been a significant opportunity for an active manager to add value through stock selection in Japan, while – if they had had the authority – underweighting certain North American stocks. One type of active manager who we believe is particularly well placed to exploit these environments is one who has a high 'active share' in his or her portfolio.

Figure 8: The performance opportunities are constantly changing in global markets: net percentage of shares outperforming or underperforming the MSCI regional indices



Source: Schroders, 30 April 2014. The proportion of global stocks outperforming the MSCI Regional Indexes using the QEP Mega to Small universe.

The importance of active share

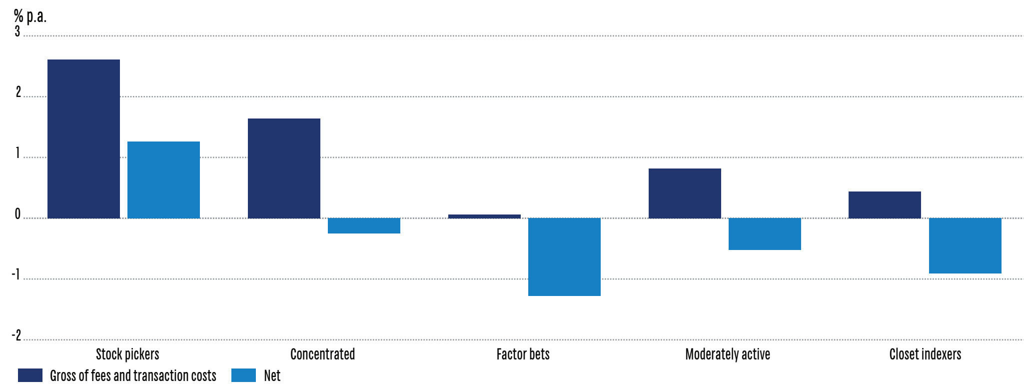
Despite its manifest drawbacks, investors may feel that they should consider passive management if they do not have the resources to find an active manager that can outperform over the long term. Certainly, over the years, research has contested whether active managers can demonstrate such an ability. One recent study[1] by Antti Petajisto, whilst a finance professor at the NYU Stern School of Business, has found that, on average, US active equity managers do have the ability to outperform the index. However this outperformance is often eroded by fees and transaction costs.

Interestingly, though, one type of manager was found to be more likely to outperform net of these costs: 'stock pickers' whose portfolios diverged markedly from the index. In other words, those who had a high active share.

This outperformance was particularly notable given that the US equity market is commonly considered to be the most efficient of world markets and the hardest to outperform. The gross and net outperformance by different types of active managers over 20 years is shown in Figure 9 below. Those managers who had the ability to take significantly different views to the benchmark tended to outperform, with the 'stock pickers' group outperforming markedly both in terms of gross and net performance.

1 Active Share and Mutual Fund Performance, Antti Petajisto, Financial Analysts Journal 2013, volume 69, number 4.

Figure 9: Not all active managers are alike: the outperformance of different types of active US equity managers relative to the index from 1990 to 2009



Source: 'Active Share and Mutual Fund Performance', Antti Petajisto, July 2013 (http://www.petajisto.net). The chart shows the annualised equal-weighted benchmark adjusted performance of US all-equity mutual funds, excluding index funds, sector funds, and funds with less than $10 million in assets.

This group took positions that were significantly different to the benchmark, yet their risk relative to the benchmark was lower than the concentrated managers group. The study therefore reaffirmed the long term case for active management.

Conclusion

In this paper we have found that it is hard to escape making active decisions when setting investment strategy. There is no such thing as a passive asset allocation policy, yet it can make an important difference to returns. Asset owners must decide whether their specific asset allocation is right for their purposes.

Once that decision has been made, there may be reasons for adopting passive investment approaches, but investors should realise that they may face unforeseen risks. These include undesirable concentrations of stocks, systemic risk and buying at too high valuations. Investing passively should not be seen as a low governance 'set-and-forget' option.

While it is not a panacea, active management can overcome some of these issues. It can also have a significant impact on returns: indeed, there is evidence that certain active fund managers often outperform over the long term. These are managers with a high active share.

We believe that, whatever decisions they finally take, investors need to understand the issues raised in this paper and to have considered them thoroughly. Only then can they be satisfied that they have chosen the best options for their needs and circumstances.

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