THE SHIFTING SANDS OF ASSET MANAGEMENT:

The rise of indexing and evolution of active

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Investors are increasingly shifting to passive investment vehicles. This trend has been motivated by an increasing focus on costs and performance. Rather than being seen as a move from active to passive management, it is more accurately characterised as a shift from high- to low-cost investment. This evolution will have an impact on the industry, investors and active management. Investors will potentially benefit through greater access to more transparent and lower-cost investment vehicles. The paper was presented by Aidan Geysen at the 22nd Melbourne Money and Finance Conference, Monash University and Australian Centre for Financial Studies, 10 to 11 July 2017.

Driven by technology, costs and investor preferences, the structure of the investment industry is changing. Globally, investors are migrating to passive funds, increasingly moving away from traditional actively managed funds. This shift has typically been viewed as a move from active to passive management, however, a more accurate characterisation is a move from high to low cost. This paper explores the potential impact of this trend on the industry, investors and active management itself.[1]

The shifting landscape of the investment industry has important implications for the active management industry. This paper argues that, although in retreat, active management will continue to play an important role in investment management, albeit in a different guise. Active managers that embrace low-cost, transparent factor-based investment vehicles will be among those well placed for future success. Competition for alpha will continue to increase and profitable trading opportunities will become increasingly scarce as market participants become more sophisticated and low-cost factor-based products potentially crowd out traditional high-cost managers. Traditional active managers will not disappear, however, they will increasingly need to adapt to developing technologies and growing competition within the marketplace. In the future, the fees which managers charge to generate active returns will need to reflect the availability of alpha opportunities and, more importantly, a more equitable division of the rewards from outperforming the market.

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The birth of indexing

When it comes to investment alternatives, today's investor is spoilt for choice. Exchange-traded and managed funds, index funds in a variety of forms, and a wide range of actively managed products provide flexibility for investors looking to achieve their investment objectives.
This hasn't always been the case. Fifty years ago, the funds management industry consisted only of actively managed products: investment portfolios relied solely on the discretion and judgment of portfolio managers and analysts. Fledgling computer technology, a limited understanding of investment performance, and a belief in the skills and abilities of portfolio managers conspired to limit the availability of alternative investment options. As late as the 1970s, actively managed funds were the only option for many investors.

But, despite its ubiquity at the time, the effectiveness of active management was contentious to some. Academics were sceptical that investment advisors could consistently outperform the market and started analysing the data for evidence to confirm or refute this thesis. By the mid-1960s, developments in technology and data collection provided the opportunity to determine how well actively managed mutual funds performed. Research conducted around this time failed to find evidence that actively managed funds outperformed simple indexes.[2] For advocates of the managed fund industry, the results were disappointing.

The confirmation that the average mutual fund failed to outperform a simple benchmark motivated research into index funds. It was argued that a fund that simply held the stocks in the index — for example, the S&P500 — that required little human discretion and portfolio turnover, and could be run for a minimal fee, was a potentially superior way to manage assets. However, it was only towards the end of the 1960s that the technology, knowledge and evidence to support such an approach began to emerge.

In 1971, after many years of development, the first index fund, the Samsonite Luggage Fund, was created. This was influenced by the Capital Asset Pricing Model (CAPM), developed and refined by Sharpe (1964), Lintner (1965) and Mossin (1966) and academics from the Chicago School of Business — the cradle of the efficient markets hypothesis. The goal of the fund was to provide a diversified portfolio based on the concept of the *market portfolio* introduced in the CAPM. The fund wasn't managed in the same way traditional funds were — i.e. with analysts and portfolio managers making investment decisions — it was simply based on the 1500 stocks traded on the New York Stock Exchange. For the first time, an investment portfolio was being passively managed.

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Inspired by the Samsonite Luggage Fund and the small handful of institutional index funds that followed it, John Bogle launched the first index mutual fund in the late 1970s. For the first time, individual investors could access a passively managed fund. Although slow to take hold, indexing has now become a common part of the investment landscape and is shaping the way global investors build investment portfolios.

Global cash flows into passive funds have grown strongly over the past decade. US investors, in particular, have led the charge investing approximately US$500 billion into passive funds for calendar year 2016.[3] The strong cash flows have been partially at the expense of active funds which suffered outflows of US$204 billion. The disparity between flows into active and passive in the US continues to grow. Other regions are following suit with flows into indexing gradually increasing in Europe and Asia, although flows into active still dominate those into passive funds. It's taken the better part of 50 years, but index investing appears to be on track to displace active management as the dominant form of investing throughout the world.

Performance

As alluded to above, a key driver of the interest in passive investing has been the uninspiring performance of active management. Since the late 1960s, researchers have challenged the effectiveness of active management, with the vast majority of research demonstrating that active managers typically underperform simple indexes. Today, the barometer for active management performance is the so-called SPIVA report, published by Standard and Poor's.[4] The report compares the performance of active managers to the relevant index and calculates the percentage of managers that underperform over particular timeframes, for example five years. Its most recent data for Australia show that over the 10 years to 31 December 2016, more than 80 per cent of international equity and Australian bond funds and more than 70 per cent of Australian equity funds underperformed their benchmarks.[5] And the message is consistent across the globe with similar results in Japan, Europe, the US and other countries. After fees, the majority of active managers underperform the relevant index — across time periods, countries and asset classes. It seems that this poor performance has driven investors to use passively managed funds.

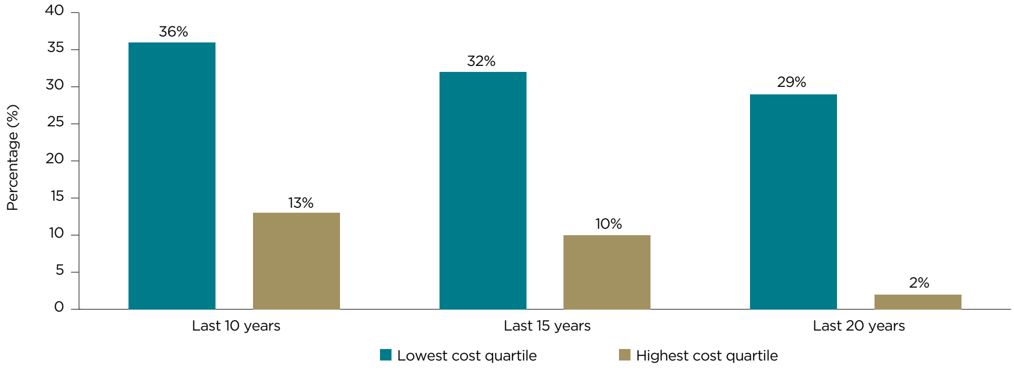
To some extent this outcome is not surprising. As Sharpe (1991) point out, in aggregate, active management is a zero-sum game — one manager's outperformance is another's underperformance. So-called alpha, outperformance above a benchmark return, is a finite quantity. For it to exist, someone must be underperforming the benchmark. Despite improving professional standards and technological advances, the supply of alpha is not increasing. Because active investors are essentially competing against each other for returns, increasing levels of skills in the industry simply make the competition more challenging for those participating. Mauboussin and Callahan (2013) call this the paradox of skill. The implication for active managers is that increasing standards don't provide an edge, they are simply the minimum requirement necessary to keep up with the ever-more skilful competition. Put another way, rather than improving the chances of outperformance, increasing standards are making the competition for alpha fiercer.

Investor preferences

Comparisons between active and passive management have typically focused on performance. But there are other important differences between funds; for example, the fees they charge. Typically, active managers charge higher fees than passive managers, however, not all active managers are high cost. The shift from active to passive may be as much to do with investors seeking lower fees as it is to do with performance.

There is a strong rationale for investors seeking lower-costs — a dollar saved in fees is an extra dollar kept. Research also demonstrates that cost is one of the few statistically significant variables related to performance. Testing this relationship, Figure 1 shows that low-cost funds typically outperform high-cost funds.[6] This is not limited to a particular style of investing. Low-cost passive funds typically outperform their high-cost equivalents and low-cost active funds have a higher probability of outperforming their benchmarks. The lower the fees an investor pays, the greater their chance of investment success.

FIGURE 1: Lower costs can support higher returns

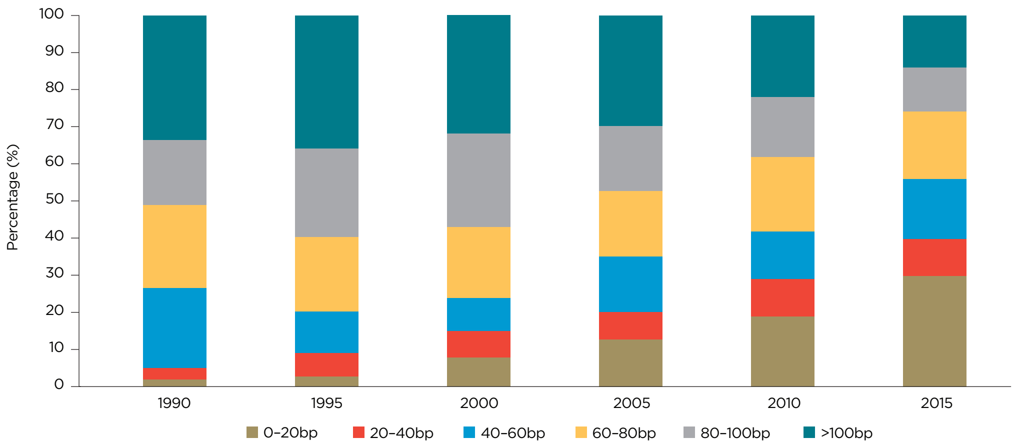


Notes: Period ended 30 June 2014. Our analysis utilises expenses and fund returns for all Australian domiciled active equity funds in the following categories that were operating at the start of each analysis period: Asia Pacific ex-Japan, Australia Derivative Income, Australia Large Blend, Australia Large Geared, Australia Large Growth, Australia Large Value, Australia Mid/Small Blend, Australia Mid/Small Growth, Australia Mid/Small Value, Australia Other, Australia Real Estate, Emerging Markets, Europe, Global Real Estate, Japan, North America, World — Currency Hedged, World/Australia, World Large Blend, World Large Growth, World Large Value, World Mid/Small, and World Other. Fund populations sizes were 1,155, 534, and 253 for the past 10, 15, and 20 years, respectively. Their performance was compared with their prospectus benchmark. Funds which were merged or liquidated are considered underperformers for the purposes of this analysis.

Source: Vanguard calculations using data from Morningstar Inc.

This relationship is increasingly being reflected in industry assets under management (AUM) data. Sorting industry AUM based on expenses, Figure 2 shows a persistent and strong trend towards low-cost funds. While the dominant narrative highlights the switch from active to passive, the reality is not as straightforward. At least part of the shifting landscape is due to investors seeking more cost-effective investment solutions with most of the growth in the lowest cost funds.

FIGURE 2: Percentage of industry assets under management by expense ratio



Notes: Figure includes all US domiciled funds and Exchange Traded Funds (ETFs) excluding funds of funds. Data include all asset classes. Weights are calculated using year-end assets under management and annually reported expense ratios for the given calendar years.

Sources: Morningstar data, Vanguard calculations.

Exploring the relationship between costs and asset flows further highlights an interesting nuance in investor preferences. Based on aggregate data, the flows indicate a clear preference for passive over active investing. But, focusing on the flows into active alone, there is also a clear preference for low-cost over high-cost active funds: flows into high-cost active are negative while those into low-cost active are positive. Categorising active funds by cost, Morningstar (2017) reports that asset flows into the lowest-fee quartile of funds have been positive since 2000 for all but the calendar year 2008 when the global financial crisis struck. However, the asset flow data is analysed, a clear message is an increasing preference for low-cost management, both active and passive.

On the surface, it appears that the outlook for active management is grim considering its poor historical performance, increasingly fierce competition for alpha and growing flows into passive funds. However, investor flows suggest that the future success of active management may rely on the industry's ability to provide low-cost solutions. This, perhaps, hints at what active management will look like in the future. Below is an exploration of three factors that will potentially shape how active management is delivered in the future: transparency, factors and costs.

Transparency

The attribution of investment performance has advanced significantly since the first punch card-driven studies into securities were conducted in the 1960s. Prior to these early studies, it was thought that investment managers were the main influence on portfolio performance. The Capital Asset Pricing Model (CAPM), however, suggested that the return on an investment was mostly due to its exposure to the market, that is, its sensitivity to the return of a portfolio of all investable assets. According to the CAPM, discretionary decisions by active managers still impacted on performance — for better or worse — but they were not the dominant influence on investment performance. For investors, this implied that by simply replicating the market, they could achieve much of the return that had previously been attributed to the skill and talent of professional fund managers. As index funds became available, investors were able to achieve their investment objectives in a more cost-effective manner.

Even with the widespread acceptance of the CAPM, it was understood that skill (or luck) still played a role in explaining portfolio returns — just not to the extent that was previously thought. Put another way, there was still a place for skilled managers in the investment process. However, as academics tested the validity of the CAPM, they discovered other factors influenced returns.[7] Synthesising the evidence that preceded them, Fama and French (1992) demonstrated that non-market factors — value and size — also influence investment returns. This research set the foundations for the investment innovations being developed today.

One of the key findings from the research on non-market factors was the evidence that traditional active managers played even less of a role in portfolio performance than was previously thought. It wasn't just market exposure and manager skill that influenced risk and return, but so-called factor exposures as well. Bender et al. (2014), demonstrate empirically that factor exposures, or risk premia, can explain a significant proportion of the actual outperformance of active funds. Put another way, the influence of the typical traditional active manager on performance is even less than that implied under the CAPM.

Academic developments such as the CAPM, the work of Fama and French, and others, have provided investors with valuable insights into what determines portfolio performance. Armed with these insights, investors are better placed to make informed decisions on portfolio construction. For example, index funds allow investors to replicate the market exposure discussed in the CAPM. In more recent times, the tools to replicate other factor exposures have become available and it is these funds that may provide important insights into the future of active management.

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Factor investing

Studying Norway's sovereign wealth fund, one of the largest in the world, Ang et al. (2009) find that the fund's underlying factor exposures have an impact on performance. This study subsequently drew industry attention to factors — the underlying exposures that influence and determine the risks in an investment portfolio —and the role they play in explaining performance. Importantly, it motivated investors to consider the most efficient way to construct portfolios based on factor exposures, so-called factor investing. This study ignited a body of research that challenged the way investors thought about active management and what influenced its performance.

Similar to index funds, factor investing typically employs rules to determine a portfolio's holdings. In contrast to index funds, however, factor investing does not determine security allocations according to the market capitalisation of stocks alone. Allocations are based on other metrics, for example, the ratio of a company's book value to market value, a commonly used measure of the so-called value factor. Simply put, factor investing is a framework for constructing actively managed portfolios: it is a transparent, rules-based and potentially low-cost approach to active management. Rather than teams of analysts and portfolio managers deciding what securities should be held in a portfolio, factor-based investing uses algorithms to select securities. In the context of the migration towards passive investing, factor-based investing may provide a beacon of hope for active management. Not only is factor-based investing an alternative means of active management, but it can also be implemented at a low cost, a potential advantage it holds over other forms of active management.

Costs

Our research suggests that historically, investors have paid too much for too little active return. Using data for the period from 1990 to 2015, for every $1 of active return generated by US domiciled active equity funds, investors have paid $1.50. As previously noted, flows into low-cost active and passive funds suggest investors are demanding a more equitable division of the investment spoils. Locally, those investors with the means — for example, superannuation funds of sufficient scale — are developing in-house investment capabilities or using passive funds to express active views. Active managers are also beginning to embrace techniques that can cut the cost of investment management services. For example, managers are beginning to use academic insights to provide passively managed funds with the potential to outperform the market, while keeping fees low. Relying on fewer analysts, and highly scalable, these techniques provide the potential to manufacture low-cost active funds. As mentioned previously, cost is one of the few variables that is associated with higher returns.

Conclusion

Continued inflows into passive management suggest a seemingly bleak outlook for active managers. Investors have been encouraged to revaluate their perspectives on active management by: a history of underwhelming performance in comparison to index returns; generally high costs, which erode performance; and an increasingly challenging environment for generating alpha. Despite this rather dim view, there is scope for active management to recast itself. Increasing the focus on costs and transparency, and leveraging developments in factor investing, may be critical success factors for active management in the future.

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Notes

1. The changing landscape of the investment industry has many important impacts. One particularly contentious area that is receiving increasing focus is the market impact of increased indexing.
2. For example, Jensen (1968), Fama (1970), and others.
3. Morningstar (2017).
4. SPIVA stands for S&P Dow Jones Indices Versus Active.
5. S&P Dow Jones (2017).
6. Figure 1 is presented in Vanguard (2016).
7. For example, Stattman (1980), Banz (1981), Reinganum (1981) and Brown et al. (1983).

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