

Active vs. passive
investing – the great
investment debate



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The value of investments and income arising from them may fall as well as rise and you might get back less than you originally invested.

Introduction

The debate over the respective merits and shortcomings of **active** and **passive** investment management may have begun several decades ago, but it remains one of the most divisive issues in the world of investing.

The key questions at the heart of it focus on the ability (or not) of active managers to beat their underlying benchmarks and whether investors should simply abandon active strategies for passive investments. When formulating an investment strategy, this is a debate investors can ill afford to ignore.

In this paper we will cover the following:

- definitions and characteristics of active and passive investing
- a brief history of the debate
- the evidence
- the advantages and disadvantages of each approach
- the outlook for active and passive investing
- which is the right approach?

Definitions and characteristics

In simple terms, active investors attempt to outperform the returns of a specific benchmark, whereas passive investors accept the market return by tracking a specific index. For example, if you believe that market prices have incorporated all the information that could impact the price of an investment, then it is likely you should be a passive index investor.

Active vs. passive investing – the basic characteristics

| | Active management | Passive management |
|----------------|--|--|
| Objectives | Aims to outperform the market | Tracks a specific index |
| Beliefs | Investors are irrational: emotions create inefficiencies that can be exploited | By the time information can be processed and acted upon, it's already 'in the price' |
| Techniques | Stock picking | Replicates the composition of an index |
| Decision maker | The fund manager | The index |

Throughout this paper we use terms such as 'passive management' and 'active managers', which we use interchangeably with passive and active investing. In addition, while we will focus predominantly on passive investing in the traditional sense (i.e. index trackers), we acknowledge that there are other passive products/strategies worthy of mention. These include:

- **exchange traded funds (ETFs)**, which are a form of index fund that is a marketable security that tracks a particular index, commodity, bond or basket of assets. The key difference is that ETFs trade like common stock on a stock exchange and as such experiences price changes throughout the day as they are bought and sold.
- **smart beta**: the rise of ETFs goes hand in hand with the popularity of 'smart beta'. The manager still passively follows an index. It's just that index is not based on conventional market capitalisation weights, but rather on certain factors that seek to outperform the traditional market. In essence, one could argue it's a 'quasi-active' approach.

Active and passive investing: a brief history

While the rise of passive investing is a relatively new phenomenon, the start of the debate can arguably trace its routes back to 1602. It was in this year that the Dutch East India Company, which was granted a 21-year monopoly on the Dutch spice trade, became the first to issue shares on an exchange, rather than in traditional market places. Ever since, investors have tried to find the best approach for managing their assets.

Fast forward 322 years to 1924, and the first mutual fund (actively managed unit trust) was established in the US (the Massachusetts Investors Trust), which allowed investors to pool funds together. The subsequent stock market crash of 1929 and Great Depression then led to regulation that created the mutual fund structure we see today in the US. It was at this time that active management of funds began in earnest.

Then in 1951 came a thesis that changed the investment world forever. It concluded that active fund managers couldn't beat the wider market. Its author was John (Jack) Bogle, born in 1929. Records show that Bogle's family lost their inheritance and had to sell their home in the Great Depression. Showing a particular aptitude for maths, he was accepted into Princeton University in 1947 to study economics and investment. Four years later, Bogle wrote his thesis *The Economic Role of the Investment Company* in which he hinted at the idea of an index fund.

However, it wasn't until the 1970s that investors really started to take notice. In 1975, in the wake of one of the worst bear markets since the Great Depression, Bogle founded Vanguard Group. Having found inspiration from Nobel Laureate economist Paul Samuelson's article, *Challenge to judgment*, in 1974 in which Samuelson pleaded 'that at least, some large foundation set up an in-house portfolio that tracks the S&P 500 Index – if only for the purpose of setting up a naïve model against which their in-house gunslingers can measure their prowess...'¹. Bogle launched the first indexed fund in the US in 1976 to mimic an index's performance. Vanguard Group's First Index Investment Trust (now Vanguard 500 Index Fund) was born with only \$11.3 million in assets. Today that fund is worth c. \$250 billion and Vanguard Group is the second largest fund manager in the world.²

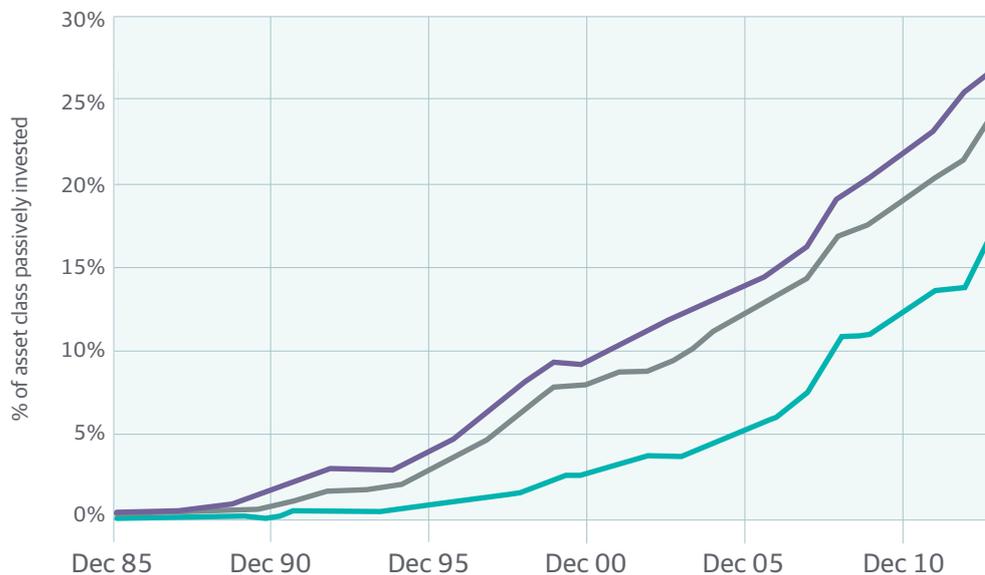
¹ Samuelson, Paul A. *Challenge to judgment*, Vol. 1, No.1, p.18, The Journal of Portfolio Management, 1974

² Top 400 Managers, IPE 2015

Some argue that the biggest story in the finance industry during the past decade is not actually the 2008 crisis (and its repercussions), but rather the shift from active to passive investment management. We'll park that debate for another time. However, while the popularity of index funds remained relatively stagnant for nearly 20 years, it is fair to say the rise of passive investing has been extraordinary since the mid-1990s. This is demonstrated by the fact that passive funds now account for c. 25% of all US fund assets.

The rise... and rise of passive investing

- Passive equity % total equity
- Passive assets % total assets
- Passive bond % total bond



Source: BAML, Morningstar

Weighing up the evidence

A great intellectual debate... and a passionate one as well

Economic studies and literature, such as those by Nobel Laureates Eugene Fama, the father of the Efficient Market Hypothesis; William Sharpe, one of the originators of the Capital Asset Pricing Model and the creator of the ratio that bears his name for risk and Harry Markowitz, the creator of Modern Portfolio Theory (MPT), have historically overwhelmingly supported passive management.

Eugene Fama's Efficient Market Hypothesis, which he developed in the 1960s, has arguably become one of the most influential concepts in financial economics. The theory states that asset prices reflect all available information. In essence, since markets are efficient and current prices reflect all information, attempts to outperform the market are essentially a game of chance rather than skill. However, it's not without its critics. Jeremy Grantham, market strategist with GMO, has more or less blamed the 2008 financial crisis on the Efficient Market Hypothesis. He argued that the economic establishment played down the role of bad behaviour, sitting on its hands when the walls came tumbling down, thinking 'Surely, none of this could be happening in a rational, efficient world'.³

William Sharpe's Capital Asset Pricing Model, which says that the expected return of a security or a portfolio equals the rate on a risk-free security plus the risk premium, in essence states that a fund indexed to 'the market' is the only fund investors need to obtain the highest risk-adjusted return possible.

Harry Markowitz's Modern Portfolio Theory (MPT) is at the core of the active vs. passive debate and is seen as the backbone of most passive strategies. Markowitz developed the notion that investors must consider not only return, but the risk associated with their investments. By creating a way to match mathematically an investor's risk tolerance and return expectations to create an ideal portfolio, the idea is to invest in a collection of financial assets that collectively lowers the risk compared to any individual asset. In practice, his theory translates in part to choosing an equity portfolio which should be a broadly diversified index fund. Critics of MPT question such a strategy because its model of financial markets does not reflect the real world. For example, the theory assumes that there are no transaction costs in buying and selling securities; investors are rational and risk averse; investor psychology has no effects on the markets; and tax is a non issue.

³ Grantham, Jeremy, *New York Times*, 5 June 2009

Aside from the wealth of academic research, if the number of quotes in support of passive management is anything to go by, active management would likely be a thing of the past. A particular favourite came from the *Wall Street Journal's* Jonathan Clements...

*"Santa Claus and the Easter Bunny should take a few pointers from the mutual fund industry. All three are trying to pull off elaborate hoaxes. But while Santa and the bunny suffer the derision of 8-year olds, actively managed stock funds still have an ardent following among adults."*⁴

However, active investing does have its supporters as well. **John Maynard Keynes** is widely regarded as the most important economist of the 20th century, but he was also a very successful investor who believed that markets were not efficient and could be beaten. Following his appointment as bursar in 1921, Keynes managed the King's College, Cambridge endowment until his death in 1946 achieving annual performance of +16.0% compared to +10.4% from the UK equity market.⁵

While his approach was perhaps unconventional, Keynes made a major contribution to the development of the asset management industry. When he took over the management of the King's College endowment he controversially sold a substantial portion of its property holdings and reinvested the proceeds into equities, an asset class at the time that was very much deemed to be a new alternative. While at the end of the 20th century investors had the majority of their assets invested in equities, in Keynes' time investment in shares was shunned in favour of fixed income and bricks and mortar.

One report that pulls no punches is by analysts at Sanford Bernstein & Co., the US research and brokerage firm, who believe that if passive investing becomes too big it could threaten capitalism. Entitled, *The Silent Road to Serfdom: Why Passive Investing is Worse than Marxism*, the team led by the investment strategist Inigo Fraser-Jenkins sets out to prove that the rise of passive investment presents a serious problem for the economy. They argue that 'the social function of active management is that it seeks to direct capital to its most productive end, facilitating sustainable job creation and a rise in the aggregate standard of living'.⁶ You can use a real free-market to allocate capital, or try to plan it centrally. Passive investing in contrast implies you cannot be bothered to contribute to the process of active allocation of capital to its most productive end.

⁴ Clements, Jonathan *Only Fools Fall in... Managed Funds?*, the *Wall Street Journal*, September 2002

⁵ Mehta, Nitin *Keynes the Investor: Lessons to Be Learned*, CFA Institute, 20 October 2014

⁶ Sanford Bernstein & Co. *The Silent Road to Serfdom: Why Passive Investing is Worse Than Marxism*, 23 August 2016

Performance analysis

There is no doubt that active managers have been knocked for six over the past few years by a shift to passive strategies. In 2015, ETFs attracted nearly \$200 billion in the US, while actively managed equity funds saw outflows of \$124 billion. There is also a similar story in bonds. Actively managed bond funds haemorrhaged \$16 billion in the first three months of 2016, but flows into bond ETFs amounted to nearly \$41 billion.⁷

Flows are one thing, however – what does the longer-term performance tell us? We point to one study in particular, conducted by Invesco,⁸ who analysed approximately 3,000 equity mutual funds across 17 equity categories over a 20-year period to 31 December 2014. It covered what they regarded as five distinct market cycles.

How do you define an active manager?

To tackle this issue, Invesco focused on 'active share', which measures the difference between a fund's holdings and the holdings of the index that it's trying to outperform. A fund has a higher active share when it:

- holds stocks not in the benchmark
- omits stocks that are in the benchmark
- holds the same companies as the benchmark, but in different weights.

For example, if a fund held completely different stocks than its benchmark, its active share would be 100%. For the purposes of this study, Invesco used the common threshold first used by Cremers and Petajisto, classifying a 'high active share' as being 60% or greater.⁹

⁷ Wigglesworth, Robin and Foley, Stephen
Active asset managers knocked by shift to passive strategies, Financial Times, August 2016

⁸ Invesco *Think Active Can't Outperform? Think Again*, 2015

⁹ Cremers, K. J. Martijn and Petajisto, Antti *How Active is Your Fund Manager? A New Measure That Predicts Performance*, 31 March 2009

Market cycles

The different market cycles used in Invesco's analysis are based specifically on the S&P 500 Index, made up of the top 500 companies listed in the US (see diagram below). Using full market cycles captured the ups, downs and inflection points (where there was a major change in market direction).

Results were examined over five distinct market cycles over 20 years

Cumulative return of the S&P Index, December 1994–December 2014



Source: S&P 500 Index

Based on this data, Invesco measured the outperformance of active management in terms of outperformance over the benchmark (excess return), how the manager performed in relation to a falling benchmark (downside capture), and the amount of risk involved in generating a return (the risk-adjusted return).

Key findings

Excess return: Over the study's time period, active management outperformed passive benchmarks over multiple market cycles. The analysis showed that 61% of those funds deemed to have high active share beat their benchmarks (after fees) across all market cycles.

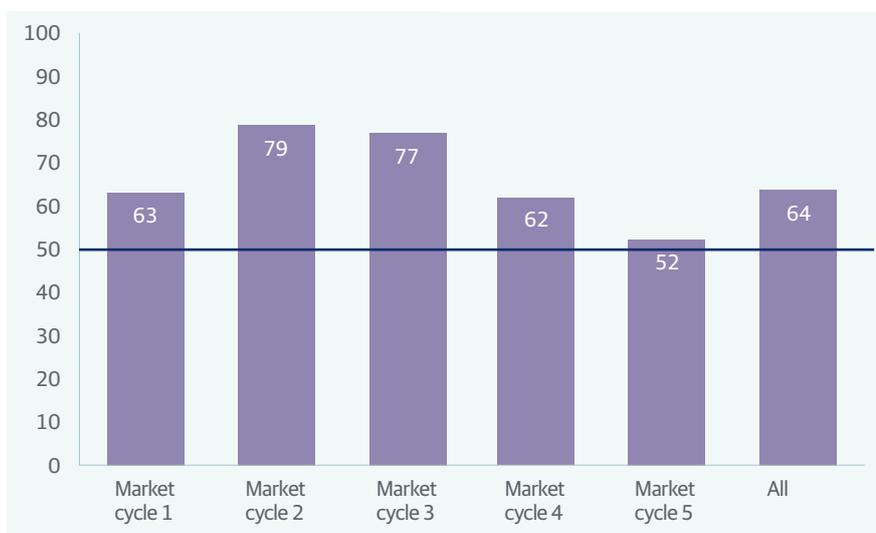
- Market cycle 1: peak to peak (7/98–3/00)
- Market cycle 2: trough to trough (10/98–9/02)
- Market cycle 3: peak to peak (4/00–10/07)
- Market cycle 4: trough to trough (10/02–2/09)
- Market cycle 5: peak to Dec 14 (11/07–12/14)
- All: Aggregate of all five market cycles (7/98–12/14)



Source: FactSet Research Systems, Inc

Downside capture: Active management also displayed significant outperformance in this area. 64% of high active share fund assets had a better downside capture than their benchmarks across all market cycles. This evidence therefore supports the view that active managers are better able to weather negative return environments than their passive counterparts.

Market cycle 1: peak to peak (7/98–3/00)
 Market cycle 2: trough to trough (10/98–9/02)
 Market cycle 3: peak to peak (4/00–10/07)
 Market cycle 4: trough to trough (10/02–2/09)
 Market cycle 5: peak to Dec 14 (11/07–12/14)
 All: Aggregate of all five market cycles (7/98–12/14)



Source: FactSet Research Systems, Inc

Risk-adjusted returns: When historical returns were adjusted for risk, active management continued to outperform passive benchmarks. Once again, 61% of high active share fund assets generated more return per unit of risk (also known as the Sharpe ratio) than their benchmarks.

Market cycle 1: peak to peak (7/98–3/00)
 Market cycle 2: trough to trough (10/98–9/02)
 Market cycle 3: peak to peak (4/00–10/07)
 Market cycle 4: trough to trough (10/02–2/09)
 Market cycle 5: peak to Dec 14 (11/07–12/14)
 All: Aggregate of all five market cycles (7/98–12/14)



Source: FactSet Research Systems, Inc

In summary, the study conducted by Invesco found that across multiple market cycles, truly active management has posted a history of benchmark-beating results based on excess returns, downside capture and risk-adjusted returns. Furthermore, the benefits of active management were not limited to those areas of the market deemed to be inefficient, such as smaller companies or emerging markets. There have been distinct periods of historic outperformance even in very large US companies.

So who's right?

Invesco is not alone in reaching these conclusions. David Gallagher, Graham Harman, Camille Schmidt and Geoffrey Warren¹⁰ examined the performance of 143 global equity funds over 2002-2012, and found that the average global equity manager outperformed his or her benchmark by 1.2%-1.4% per annum, comfortably exceeding institutional client fees. The funds in their sample collectively held stocks in 61 countries, but were dominated by developed markets, particularly the US (43.6% weighting on average).

One could therefore conclude that the years of arguments between index trackers and more active investors are over. Active wins, passive loses. Unfortunately, it's not that simple and comes down to time frames. For example, the S&P 500 Index outperformed 95% of all managers investing in larger companies from 1992 to 1998. From 1984 to 2008, there is evidence to suggest that 70% of large cap mutual funds fell short of their benchmarks.¹¹

Intuitively we understand that the longer one's time horizon, the greater the possibility of outperforming. This is because it can take time for decisions made by active managers to be borne out.

Before we discuss the right approach for our clients, it is worth outlining the advantages and drawbacks of both types of investing.

¹⁰ Gallagher, D.R., Harman, G., Schmidt, C.H. and Warren, G.J *Global Equity Fund Performance: An Attribution Approach*, Financial Analysts Journal Volume 73, Number 1, 2017 CFA Institute

¹¹ Abbot Downing *Active Versus Passive Investing*, 2012, p.1



Pros and cons of active management

Pros

- **the opportunity to outperform the market:** after all, that's an active manager's remit!
- **flexibility:** active funds generally have the ability to invest more freely than their passive counterparts as they're not tied to an index – this means that a particular client's ethical or other requirements can be accommodated.
- **risk management:** active managers can minimise potential losses by avoiding certain sectors, regions, etc.

Cons

- **performance depends on the skill of the manager:** there is a risk of investing in an actively-managed fund that underperforms.
- **higher costs:** higher management fees are required to pay for the expertise and resources required for active management. There has been an enormous amount of pressure on active managers to deliver results that justify their higher fees and other expenses. Many managers have simply become 'closet trackers' to try to avoid major performance errors. Other managers choose a rather different strategy by straying significantly from their underlying benchmark in order to generate outperformance, thereby potentially increasing their risk profile.

One of the key findings of the Financial Conduct Authority's (FCA) report on the asset management industry was the weak price competition in a number of areas and the impact this has had on investment returns. Analysis conducted showed that actively-managed fund charges have stayed pretty constant over the last 10 years, whereas passive fund charges have fallen over the last five years.¹²

- **key man risk:** to put it bluntly, investors in index funds know that if their fund manager gets hit by a bus, the fund will continue to get the return of its targeted asset class. In contrast, the replacement on a successful actively-managed fund may not be as talented as the last.

¹² FCA, Asset Management Market Study Interim Report, November 2016





Pros and cons of passive management

Pros

- **you know what you're getting:** it's unlikely that a passive fund will underperform the market index by a material margin.
- **low cost:** management fees are usually lower than for an actively-managed fund. The outperformance that academics point to is in no small part a result of low fees and expenses.
- passive funds can also **offer a quick and easy way** to gain access to a market.
- **no key man risk.**

Cons

- **hidden costs:** we believe that many commentators underestimate the costs of running passive strategies. This is because of the potential high cost of rebalancing. In many cases, the 'headline' fee rate can be rather misleading.
- **asset allocation decisions can't be passive:** a critical component of portfolio management is for your investment manager to take advantage of short-term market opportunities, which has to involve active decisions.
- **no chance of outperformance:** after all, as a passive investor you choose the market return rather than the objective of outperforming it.
- **lack of choice:** the investor is required to accept an index, however constructed, and regardless of the quality of the underlying holdings of that index. Given that most indices are based on market capitalisation, it can lead to an emphasis on larger companies or sectors or those that are in vogue. Examples include:
 - prior to the bear market of 2000-2002, the largest industry sector in the S&P 500 Index was technology, and then the bubble burst.
 - in the run up to the financial crisis of 2008, the largest industry sector was financials – financials sector shares fell precipitously in the crisis and some banks and insurance companies went bust.
 - in 1989 the largest country weighting in the MSCI EAFE Index (covering 21 developed countries) was Japan. With a weighting of c. 60%, investors who wanted to invest passively in overseas stocks by purchasing this index were investing in Japanese stocks at the height of one of the largest market bubbles in history. Over the subsequent 25 years, the Japanese stock market generated a compound return of – 2.7% per annum.¹³

¹³ Pekin Singer Strauss Asset Management, 20 April 2016

The same principles apply when passively investing in fixed income markets. The greater the issuer's debt, the larger its allocation in the index – investors will therefore have a larger exposure to more heavily-indebted (and, arguably, riskier) companies.

- **liquidity:** in recent years, investors in bonds issued by companies have been confronted with falling market liquidity. In such an environment, passive funds looking to mirror their underlying index run the risk of either being forced buyers or sellers regardless of market conditions.



Looking forward – is active investing about to make a comeback?

In 2014, for example, it was easy for many academics to simply write off active management. While the S&P 500 Index returned 13.7% for the year (in local currency terms), US active managers struggled – only 19.9% of them outperformed their benchmarks, according to Morningstar.

However, before dismissing active management for good, one has to take a closer look at the economic environment. When interest rates fall, equity markets typically do well. However, when rates rise, there is a generally higher dispersion between the best and worst performing stocks. In this environment, active managers have a history of outperforming their benchmarks. Analysis conducted by Nomura Securities found that when the 10-year treasury yield more than quadrupled from 1962 to 1968, from 3.85% to 15.8%, the median cumulative return for larger company mutual funds was more than 62% better than the S&P 500 Index. Investors were reminded of what rising rates meant for active managers in 2013. When Ben Bernanke, the Federal Reserve chairman at the time, talked about the need for quantitative easing to come to an end, leading to what has become known as the 'taper tantrum', active managers performed well (on a relative basis).

We are also drawn to the idea that the rise of passive funds may actually lead to less efficient markets, thereby creating opportunities for active investors. As passive management increases, there are fewer managers trying to analyse the fundamentals of a company. This means more opportunities for those left who are attempting to work this out.

Having seen many years of very low interest rates, the investment climate is starting to change. Interest rates have started to rise in the US, for example, albeit at a measured pace. As rates rise and the market cycle enters maturity, history tells us it will be harder to make money simply through investing in passive funds. Combine this with rising political uncertainty, whether in Europe or following Donald Trump's presidential election victory, we would argue that analysis and judgement will be of even greater importance going forward.

Which approach is right for you?

As this paper highlights, the decision on which approach is 'best' is not as simple as one might expect, especially given the historical evidence for and against, and in turn the pros and cons, of each approach.

However, before establishing which approach is most appropriate when selecting underlying investments, investors first have to tackle the issue of asset allocation. Historical evidence tells us that one of the biggest decisions an investor has to make is how to allocate assets. While 'strategic' asset allocation aligns the portfolio to longer-term goals (and normally will only be altered if those goals change), 'tactical' asset allocation exploits shorter-term opportunities, which can only be taken on an active basis.

With the asset allocation of a portfolio now established (although not set in stone – after all there are active tactical decisions to make), the next decision is investment selection. The basic rule for long-term investing is to ensure the portfolio meets your requirements, both from a return and risk perspective. An essential part of this process is to ensure that the underlying investments fit with these objectives. But which questions should charities ask before deciding on a particular approach? These may include the following:

- **sufficient choice:** given the charity's requirements, which approach offers the most choice?
- **income requirement:** will a particular choice threaten our income target?
- **ethical policy:** can a passive approach accommodate our ethical policy and restrictions?
- **costs:** yes we're cost-sensitive, but what about value for money?
- **investment manager support:** it's not just simply investment advice we're after, it's establishing a partnership. We also want accountability from our investment manager: safe custody of assets; first rate administration; and investment training, for example.

We agree that passive investing is, on the surface anyway, a cheaper option than its active counterpart. However, at what cost? The dilemma investors face is price over service. We would argue that due to the lower fees earned by passive managers in relation to their active counterparts, value-added services such as those detailed above are typically not provided. In addition, while there are indexed funds with a form of ethical overlay, they are few and far between. Income generation is another contested point. While a portfolio's overall asset allocation is key to achieving an income target, it still needs to be populated by investments that perhaps need to generate a higher level of income than the average for an index.



So what's our suggested investment strategy?

It's very clear that the debate between active and passive investing is unlikely to go away any time soon.

While we've outlined the constraints of passive investing, it would, in our opinion, be wrong to dismiss the approach outright. As such, perhaps we shouldn't talk about active vs. passive investing, but rather how they can potentially be blended together.

The merits of each strategy are very different depending on the market in question. In certain regions it is much harder to find active managers who consistently outperform their passive counterparts, a good example being US equities. As such, we have historically incorporated passive-oriented strategies when investing in the US. However, this doesn't tell the whole story. While it's true that US equity active managers have struggled to outperform the S&P 500 Index in certain time periods, there are (as found in Invesco's study) funds that have added value over a variety of market cycles. The challenge is hunting down these 'best of breed' managers – high-quality research resources are essential in this process.

As long as you are selective in your fund choice, evidence in less efficient markets still points towards active management. In Europe, Asia and the Emerging Markets, for example, with economic and political factors potentially changing quickly, this allows flexible active managers to exploit any resultant volatility. Passive funds, on the other hand, do not have the luxury of such freedom.

The smaller companies' universe is another corner of the market we believe offers opportunities for active managers to exploit market inefficiencies through fundamental analysis and stock picking.

In summary, as a firm, we believe in whole of market and in open architecture when selecting investments, and as such we must remain open-minded. In a world of high competition and arguably lower returns for longer, it would be foolish to dismiss passive funds altogether, although we believe that skilful truly active managers have the edge over their passive counterparts.

Our key takeaways

- this is a debate investors cannot afford to ignore when formulating an investment strategy
- while passive investing has seen exponential growth over the last decade...
- ...evidence suggests that truly active managers can outperform their passive counterparts over multiple market cycles
- in this environment, one could argue that active investing is primed for a comeback
- a charity's requirements are key to which approach is most suitable
- in our view, while passive investing is suited to certain, 'efficient' markets (such as the US), active investing gives key advantages in many other markets or assets classes (such as fixed income) - for this reason, a hybrid approach where active investing is supported by targeted passive investing can offer the best of both worlds.

Speak to one of our charity investment specialists today to know more about the issues raised in this white paper or Rathbones' services for charities.

Please contact: [James Pettit](#), investment director, on [020 7399 0296](tel:02073990296) or james.pettit@rathbones.com.

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Look forward

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