What's really at the heart of the active vs. passive investment discussion?

Introduction

Ah – vindicated!

On 14 October 2013 the Nobel memorial prize in economics was awarded to three individuals. This by itself was not remarkable. What was remarkable was the fact that each of these theoreticians (also practitioners), represented a completely different school of thought as to whether markets really were efficient and therefore unexploitable by active managers.

On one side of the debate was Eugene Fama, representing the so-called Chicago School, whose efficient market hypothesis has been the cornerstone of any debate against the viability of active manager strategies. How could active managers add value if all the information about a given share was already reflected in the market price?

Quietly building up a strong counter to the notion of markets that are efficient, was Robert Shiller, from Yale University. Shiller's work had been evolving over more than 30 years and its primary focus was on the phenomenon of asset bubbles. If markets were efficient, then how was it that we experienced the famous tech bubble of 2000 or the later bubble in US housing that led to the global financial crisis of 2008? In fact asset bubbles appear to be freely peppered throughout most of financial market history. At the heart of Shiller's work was a growing appreciation of behavioural economics – the newly emerging insight that investors are not the rational economic beings that the neo-classicists would like us to believe. Shiller's well-timed book, Irrational Exuberance, written with the lay investor in mind, was a brilliant accounting of the phenomenon.

The third man to be honoured was Lars Peter Hansen, also from the University of Chicago. Hansen's main contribution to the debate was to build the mathematical models for asset price formation that could be used to frame either debate – with a bit of a tweak here or there. As such, his work sits somewhere in the middle of the continuum of opinion.

So why should we feel vindicated that these three gentlemen were honoured in much the same breath? **At last we have formal recognition of the fact that this may be one debate where we simply have no definitive answers.**

Still, it's hard to get investors to accept this particularly point. Perhaps what we need is a change in the conversation. What we really need is to purge our old cherished rules of thumb about investing and to appreciate the new insights that must replace them.

This article aims to help identify where we need to change our thinking. It should also give investors a much-needed decision-making framework to help them formulate which investment strategies best address their specific needs.

THE ACTIVE VS PASSIVE DISCUSSION

THE EVIDENCE	THE ISSUES	THE REAL ISSUES	CONCLUSIONS
Data issues, manager changes and the lack of statistically significant timeframes mean we can't be definitive as to which strategy will outperform. Don't be fooled by research claims that suggest otherwise. Performance outcomes may often be a function of market structure as opposed to manager skill. Recently we have seen a proliferation of low-cost passive strategies that mimic some of the value-add of active strategies. This complicates the conversation further.	All of these strategies have compelling arguments **and** associated costs. Investors need to measure the trade-offs between: • The all-in cost of each strategy (not just the stated fees) • Potential performance contribution • Probability of success. The power of compounding means that the longer the timeframe, the more cost differentials matter. The greatest source of value destruction is churning managers in the quest for the better performer – this is the biggest drawback of believing in active management outperformance.	**Every** investment decision is an active decision – even passive: • Which indices should be used? • What type of instruments or platform? • What asset allocation and strategy blend? Make sure you're clear about what skills are required at each point in the decision-making process and whether those skills are in evidence. Skill is equally relevant when it comes to designing a passive strategy that mimics some investment strategy. Determining the optimal blend of asset class and strategy indices required to meet an investment target demands modelling skills.	The answer isn't about whether active is better than passive. Assessing manager skill tells you nothing about which manager strategies will be rewarded by the market at any point in time. It's about what strategy or combination of strategies has the highest probability of delivering what an investor requires at the right cost and the right level of risk for the investor. Getting this right over time demands the necessary technology to assess the effectiveness of your blend of strategies. More importantly, it demands a monitoring process that assesses success against that end goal – not just alpha.

Fleshing out the discussion

What we know we don't know – and why the debate is flawed

Active management is based on the premise that exploitable market inefficiencies exist and that skilled managers can identify and construct a portfolio of mispriced investment securities that will outperform a broad based-index that captures the aggregate performance of those securities. Investors typically pay additional fees to access those skill-sets.

Advocates of passive investing argue that, over time, those market inefficiencies simply revert back to the mean of all the available security performances in a given asset class.

In plain language, that suggests that over the long term, active managers are expected to simply deliver the performance of that asset class index – minus the manager's fees for active management. (Passive managers also deliver the index performance minus their management fees – it's just that passive fees tend to be lower!)

Simply put, passive investing refers to a strategy that tries to mirror the performance of a specific asset class index or strategy. This means it is a buy and hold strategy that is occasionally adjusted to reflect the changes in the underlying index. Because turnover in the fund is low, and there is no requirement for research that would inform a view as to how to outperform the index, costs are generally much lower and performance variability to the index is generally minimal.

Why, then, should investors pay the extra fees for active management if it genuinely holds that over time, active managers can't sustainably outperform an index of the securities they invest in?

This is essentially National Treasury's point when it enthusiastically suggests that the industry should focus more on easy-to-understand, low-cost 'vanilla' offerings to deliver long-term performance on retirement savings.

This game-changing argument is flawed in a number of ways, though:

- **It presumes that we have a long enough time period to assess whether these managers' risk-adjusted performance is a function of skill and not just luck.**

  We simply don't have enough data points to produce statistically definitive insights about manager skill. It's not enough to use the history of an asset management house that may have been around for decades. Each portfolio manager makes their own distinctive contribution to the performance outcome. The problem is, portfolio managers rarely manage the same portfolio continuously for a timeframe that produces statistically significant results.

- **It presumes that measuring a manager's performance relative to the passive index provides some insights about manager skill – or the lack thereof. Or that such an assessment is even related to your objective.**

  In fact, out or underperformance may simply be a function of the fact that a specific index may be inappropriate for that manager's investment philosophy. The FTSE/JSE All Share Index (ALSI) and Share Weighted Index (SWIX) indices are good examples of this problem. Value managers will typically out or underperform that index over long-term cycles as a function of their investment style and not as a function of their ability to add value within that style. Eugene Fama's later research explained this phenomenon in depth. His research shows small caps against large caps shares and value against growth shares as cases in point where eventually these short inefficiencies would run their course as investors 'corrected' their views.

  There are also times when the market's performance is solely driven by a handful of mega-cap shares (often the resource shares will represent a good example). They may be holding the market up by their sheer weight in the index, while the broader market is actually in decline. But portfolios that are required by Regulation 28 or CISCA regulations to hold diversified portfolios (most all of the portfolios represented in any of the performance surveys) would find it mathematically impossible to outperform in this concentrated environment. The exact opposite can happen just as easily. As such, out or underperformance of a given benchmark may have nothing to do with manager skill – although the surveys won't reflect that point.

  Against the All Bond Index (ALBI), manager out or underperformances are typically a function of the degree of credit exposures the manager takes on. This is not reflected in the ALBI index, and represents a very different type of risk. What we don't know is whether, within the range of credit opportunities, the manager did well or not. As such, teasing out a clear picture of manager skill from past performance is full of problems and typically very misleading.

- **It ignores an important insight that, from a risk-adjusted perspective, active strategies generally introduce lower volatility relative to the benchmark over the long term and greater downside protection, an outcome that may be better aligned to investor objectives.**

  This may well be a function of the fact that actively managed portfolios in South Africa tend to bias away from mega-cap shares. If this is the only factor at play – then this could be passively replicated. But the point does lead us to our most important issue, described in our final point.

- **It presumes that market-cap-weighted indices of asset classes correctly or efficiently capture the economic or risk-premia opportunities represented by that asset class.**

  Analysis shows that these indices not only don't capture the true economic picture of South Africa, but, from a risk-adjusted perspective, they may also not be the most efficient reflection of how to best capture that economic opportunity set.

Key take-away points

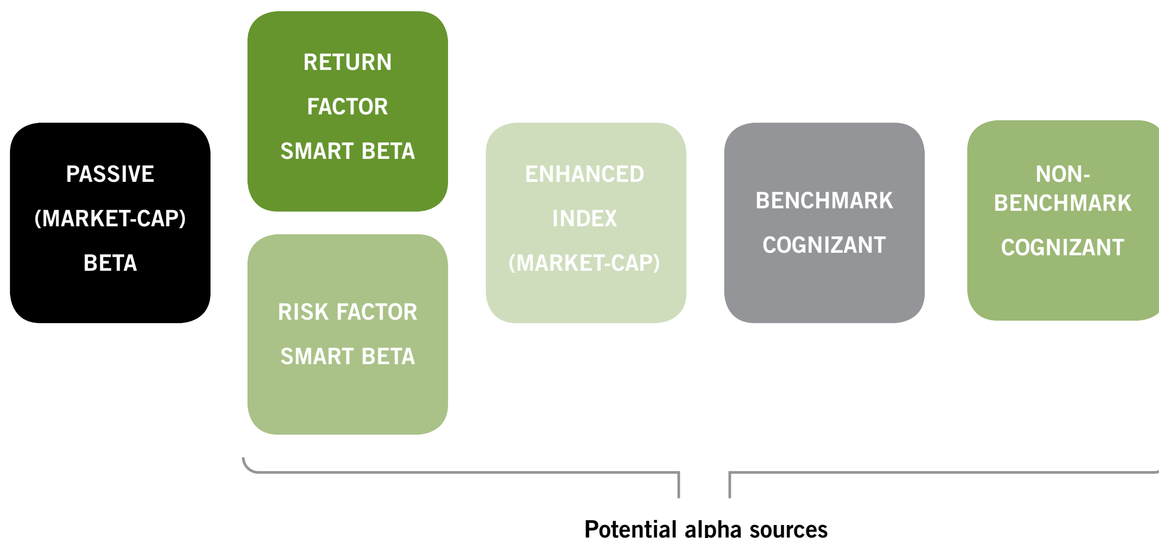
- We can't statistically prove that active outperforms passive or passive outperforms active over the long term.
- It's unclear whether, from an efficiency or risk-adjusted perspective, it would be desirable for long-term investors to passively mirror such broad-based indices as the JSE All Share Index (ALSI), the Share Weighted Index (SWIX) and the All Bond Index (ALBI).

What we do know – the known knowns

Effectively the active or passive debate has moved on. Over the last ten years, the industry has made significant progress in constructing indices (passively managed portfolios of shares) that:

- More effectively capture an active manager's investment philosophy or investment style. Examples of such investment styles would be value investing, momentum investing, small

THE NEW TOOLBOX FOR INVESMENT DESIGN



cap investing and low volatility investing. (As another Nobel prize winner, Bill Sharpe, pointed out, if you can passively capture a manager's investment style, you have probably accounted for 85% to 95% of an active manager's performance).

Or…

- Capture an opportunity set for an asset class that reflects lower risk or volatility. Examples here would be low -volatility smart -beta or even RAFI.

Smart-beta strategies are low cost, passive strategies that copy some of the value-add of active strategies.

This suggests that the toolbox for designing solutions for investing has widened considerably. Now the range expands from passive indexation to enhanced indexation to factor or risk-based smart beta, to benchmark-cognisant active managers to benchmark non-cognisant active managers.

What we know about this continuum of strategies is that as we move from left to right, each strategy demands slightly more complex inputs and research resources. As we move from left to right we are moving progressively away from solutions driven by pure beta (asset class movements) to active beta (smart beta – or passive strategies that imitate active investment styles) to solutions where performance is driven by beta + active beta + alpha in the form of sector and security selection. With each performance enhancement, the cost of the strategy typically increases.

But, as complexity gets introduced into the equation, it, in turn, also impacts the probability of success of a given strategy. More correctly, as we move towards the right of the continuum, the potential variability in performance increases in relation to a specific targeted outcomes. Note that here we are not talking about absolute volatility – but rather, variability in relation to a long-term funding or performance requirement.

Now we see that the question isn't "does active outperform passive?" but rather:
- What price am I prepared to pay for each of these strategies?
- How does the cost of the strategy impact my probability of success of meeting my stated objectives?

The issue is to understand the trade-off between the cost of a given strategy and the potential value of the strategy. The real question then becomes:
- What price reflects fair value for that potential value-add?

As Richard Ennis has highlighted in his paper Are Active Manager Fees Too High?

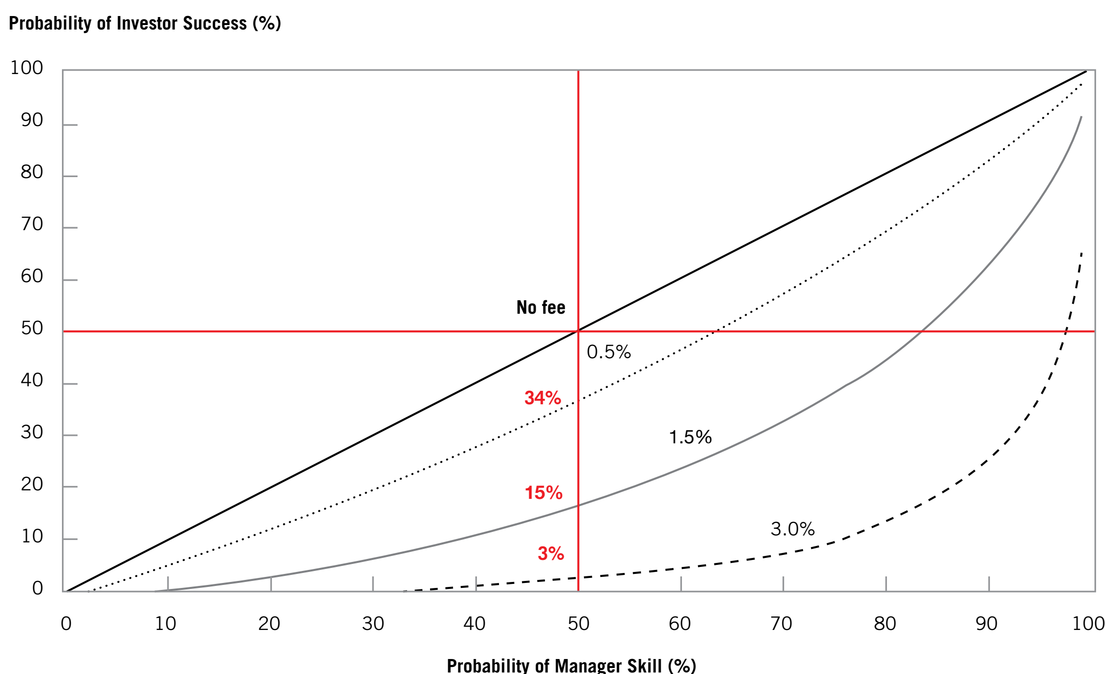
"A good fund manager cannot be good irrespective of cost. A management fee is too high when, despite the manager's ability to earn a positive alpha, the fee level drives the likelihood of investor success to be unacceptably low."

A cost/benefit decision-making framework

If we are going to get a meaningful handle on the cost issue we need a framework that allows us to make that critical trade-off assessment between the cost of a given strategy, the required skill to add value and the potential value of the strategy.

Once again we turn to Richard Ennis. While his paper was specifically targeted at active managers, we can apply similar rules to passive strategies and enhanced passive, or smart-beta strategies. Success (as in delivering a positive net outperformance) in each case depends on some measure of skill, whether it's in managing the tracking error, the intellectual property in constructing the smart-beta index or selecting the right underlying asset classes, investment strategies or securities.

PROBABILITY OF INVESTOR SUCCESS (%)



Source: Richard Ennis

In the chart above, it's presumed that the asset manager has a 50% skill level, in other words, the managers has a purely random chance of success. By randomising the issue of skill, we can then make an assessment of the impact of fees alone on the probability of investor success.

The red numbers show the probability of the strategy adding value at the various fee levels. For example, at a 50 basis point fee level (fairly reasonable for active institutional fees), a manager with a 50% skill level has only a 34% chance of success. At a 150 basis point fee level (closer to retail fees) a manager with a 50% skill level has a 15% probability of success. Any fee above 100 basis points significantly stacks the odds against a positive outcome for investors.

Now let's ask the question slightly differently: how much skill would the manager need to have to add value at the different fee levels?

These numbers may be a bit difficult to interpret because we have little insight as to what level of skill is reasonable to expect. But we do know that manager skill of 0.80 is almost unheard of.

Armed with these insights, investors can begin to assess the trade-offs. Is the extra cost of an active or smart-beta strategy warranted when we consider its probability of success? Or, more importantly, are the costs of the passive or smart-beta strategy low enough in relation to the active manager's fees to warrant relinquishing any potential to cover the investment management costs with value-add from security selection and to earn a higher level of alpha?

This last point is key for South Africa – at least in the institutional side of investing. At this point in time the difference between average active manager fees in equities (say 50 bps for larger funds) and passive fees (say 15 to 20 bps) is often not large enough to warrant abandoning all hope that active managers can deliver.

John Bogle, in his 2014 Financial Analysts Journal paper, The Arithmetic of "All-In" Investment Expenses, makes the point that total expense ratios (TERs) may not be inclusive enough to capture the true impact of portfolio charges or manager changes **over time**. More importantly, though, he notes that investors shouldn't just look at the conventional **annual** impact of fee

Fee %	Manager skill required for investor to have at least a 50/50 chance of earning a Positive	Alpha Investor's probability of earning a Positive Alpha when manager skills is 0.80
0.5	0.62	0.70
1.5	0.83	0.46
3.0	0.97	0.15

differentials between active and passive. Over the short term, these differences may appear to be small. But, over the long term, the additional contribution of compounding can mean that these costs become **immensely damaging.** As he cautions: **"Do not allow the tyranny of compounding costs to overwhelm the magic of compounding returns."**

This also suggests that in addition to a fee impact assessment, investors also need to formulate a view on whether there are some investment strategies that have a higher probability of success than others of achieving what they are mandated to obtain. If so, under what conditions? But that is a subject for another paper altogether.

Investor philosophy and comfort zone play an integral role in decision-making

In addition to academic cost/benefit/probability issues there are other human behavioural trade-offs that feature in the decision-making process.

Let's consider some key questions:

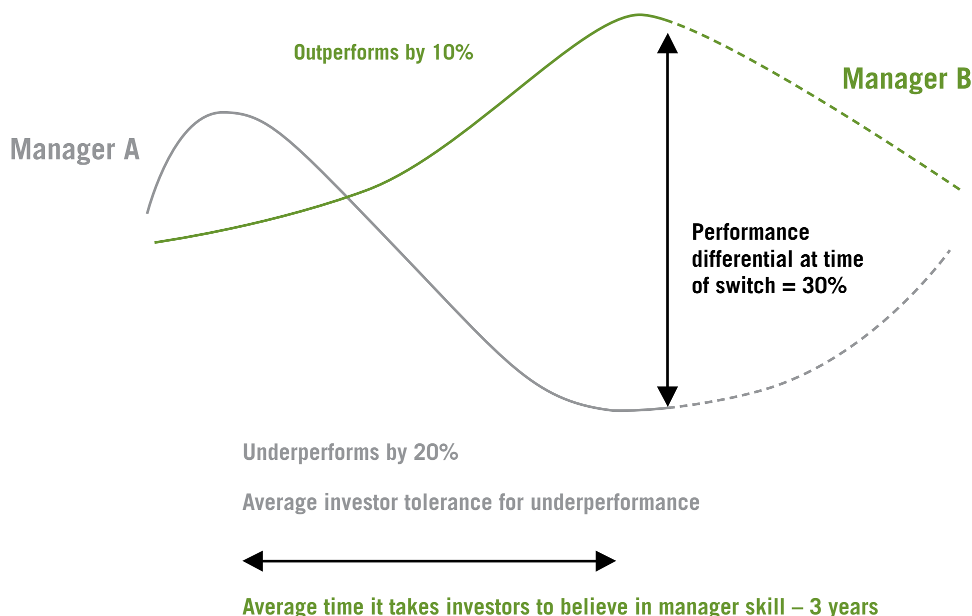
- Should investors pay for random outperformance? Clearly the answer is no. The question though, is how much clarity do you need in terms of performance attribution before you are comfortable with a given investment strategy? How much confidence do you need that performance was a function of manager skill before you're comfortable with a particular active manager?
- What if the additional outperformance comes from a higher risk strategy, is the cost of that higher risk worth it? Should you just be paying for higher risk? How important is it to you to know exactly how much and what kind of risk you are exposed to, to achieve that additional performance?
- If the performance came primarily from an investment strategy that can be replicated passively, would that not be a more dependable way to access it if it's at a lower cost? How comfortable are we with these relatively new passive concepts?

Effectively, as we move along the continuum from pure beta towards strategies that incorporate a variety of alpha-generating elements, there are more questions relating to comfort level that inform the active or passive debate. For the most part, these questions relate more to investor preferences than to issues relating to performance outcomes. But the questions aren't trivial. Strategy and consultant turnover are often the by-product of investors not clearly understanding or believing in what they have selected. Address these questions first and typically comfort levels improve significantly.

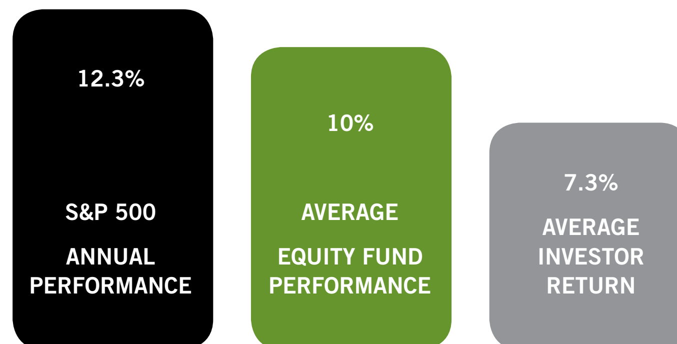
What else do we know about performance outcomes that must be part of the debate? The unknown unknowns that are just becoming known.

Point 1: doing the wrong thing for the wrong reason

The real potential 'cost' of active management is that investors who believe in active often end up chasing performance.
But – sell an underperforming manager who is holding deeply discounted assets and you lock in that loss. Replace them with a top performing manager and you typically end up holding assets that have already performed. In fact, what you are most likely selling is an investment style which is currently underperforming, and buying an investment style that has recently performed well. It is this style component that typically is cyclical.



MARKET VS MUTUAL FUNDS VS INDIVIDUAL INVESTOR RETURNS



Source: John Bogle, Enough 2009

What any number of research papers highlight is that both investors and their advisers are notoriously bad at timing manager changes and the cost to funds is invariably higher than most funds can ever recoup with their new managers.

So, if we are honest about the cost differential between active and passive strategies, it would be careless of us to think that it's just about the fees. **Passionate advocates of active management also tend to be performance chasers – and there-in lays the source of the value destruction.** In the institutional market the cost of chopping and changing asset managers, consultants or service providers, when combined with performance short-termism, has been estimated to create as much as 3% of value erosion per year, according to Ron Bird and Jack Gray. In the retail market, the results are even more dramatic. John Bogle compares the returns the US market generated over the 25 years ended 2005, to the returns earned by the average equity unit trust, to the returns generated by the average investor moving in and out of those unit trusts in the race for performance:

Point 2: doing the right thing for the right reasons
The harsh reality is: every investment choice – whether active or passive – depends on some level of skill. An investor can't simply say they don't believe managers have skill and duck the issue. Consider just how complex your **active** decisions around passive strategies are:

- Which indices or strategies are most appropriate to meeting your objectives?
- What types of instruments or platforms are prudent for your strategy? Do you understand the risks implicit or embedded in certain instruments, for example credit risk?
- Will you allow value enhancements such as scrip lending to help pay the cost of a passive strategy?

Even a totally passive solution demands that someone determines the optimal allocation between asset classes or the optimal choice of indices to capture what the investor needs. **There is a critical skill set required to get this right.**

Designing a smart-beta strategy or index requires a skill set as well. Some have done well, others are not adequately stress-tested for persistence.

This means that, in theory, investors should be just as prudent in determining the skill set and qualifications of their liability manager (the team or individual that determines the asset allocation or blend of strategies) as they are their asset managers. Very few investors recognise the seriousness of this requirement.

Summing it all up

In the long term, if a given solution is being designed to meet a specific outcome – such as an income replacement for an employee about to retire, or a funding requirement to meet some future expenditure – then the liability manager will have the biggest impact on the outcome rather than the asset manager.

We make this point simply to stress that irrespective of whether investors choose active, passive or semi-passive strategies, the question really becomes irrelevant if minds aren't applied to determining how the whole package should be designed to maximise the probability of delivering a specific outcome.

What we hope we have demonstrated here is that the debate around active or passive is far more complex than it is generally presented. Simplistic approaches that use past performance histories to prove either side miss the core of the debate – or what should properly be thought of as the unknown unknowns – that we are only just now beginning to understand. A simple comparison of active management and passive management annual fees is also naive when applied in isolation.

The cult of active manager excellence is a hard one for investors to ignore. While costs do matter, it's often volatility that provides the greater short-term concern for investors. Couple that with a long-term bull market through the 2000 to 2012 period (with the periodic glitch), and from a risk-adjusted performance comparison perspective, South African active equity managers appear, at face value, to be able to beat the SWIX. It's hard to resist the active manager siren call.

The key to the future will recognise the following elements if investors are going to get the maximum value and the optimal structure in their investment strategies:

- The cost/benefit/probability test is critical. Unless the fee differentials between passive beta strategies, active beta strategies and active managers are significant, investors should question why they should give up all sector and security selection alpha that might well cover the explicit costs of investing. In the institutional space, the fee race is a tight one.

What's really at the heart of the active vs. passive investment discussion?

In the retail space, there is no debate. Fees are far above what an investor could hope to achieve over a long-term timeframe. Something will have to give but many retail investors are oblivious to this fact.

- There are also philosophical and behavioural issues that investors have to address that will inform their views about active and passive strategies. These are their views on risk, on how important it is for them to understand the performance drivers of their solutions and manager skill, and their overall priority on whether meeting a specific long-term target is important or attempting to extract the highest return for a given level of risk.

- Manager turnover is one of those costs that investors tend to pay little heed to – but its impact is significant. Keeping any manager turnover to an absolute minimum should be an important consideration. This means that significantly more time and effort must be given to getting the investment structure and strategy right from the outset. More importantly, it means that far more focus needs to be placed on determining and documenting the principles that would trigger a manager change. Poor short-term performance, unless clearly understood as being a function of some serious structural change with the manager, should not be the criteria for change in a long-term strategy.

- If low cost passive building blocks can be integrated to keep costs under control, then consider them. But integrating passive and active strategies demands careful consideration as well. Adding pure market index passive strategies to active strategies that are being measured against the same index has the impact of simply diluting the overall alpha contribution from the active managers in the total solution while increasing the overall volatility of the solution (although tracking error to the index will be reduced).

- Consider using passive strategies that can systematically copy some element of the value-adding strategies of active managers, (such as value, or momentum, or low volatility) but at significantly lower fees. This way, the total structure gets alpha-generating potential from both active and passive building blocks

- How you monitor performance will affect decision-making going forward. Shift the focus to meeting your long-term funding targets (effectively the liabilities your members or investors face). That way you move away from the negative impacts of short termism and performance chasing that comes from following rankings in the surveys. This will be one of your greatest value generators.

SUMMING IT UP

THE EVIDENCE	THE ISSUES	THE REAL ISSUES	CONCLUSIONS
It's impossible to determine with statistical certainty which strategy will outperform over a given period. Performance outcomes may often be a function of market structure as opposed to manager skill. The addition of smart-beta strategies means the conversation has evolved considerably.	Costs **do** matter and every strategy has a cost. Investors need to measure the trade-offs between: • The 'all-in' cost of strategy (not just the stated fees). • Potential performance contribution. • Probability of success. The longer the time-frame, the more cost differentials matter. Chasing performance is the greatest source of value destruction. This is where the siren call of active can be harmful.	**Every** investment decision is an active decision – even passive. Make sure you are clear on what skills are required at each point in the decision-making process and whether those skills are in evidence.	Assessing manager skill tells you nothing about which manager strategies will be rewarded by the market at any point in time. It's about what strategy or combination of strategies has the highest probability of delivering what an investor requires over the right time frame, at the right cost and at the right level of risk for the investor. Success is about meeting that end goal – full stop.

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