

A Review of Asset Class Investing

January 2010



Fiscal Engineers Limited
22a The Ropewalk Nottingham NG1 5DT

Tel. 0115 955 5600 Fax. 0115 955 5663
info@fiscalengineers.com www.fiscalengineers.com

Fiscal Engineers Limited, registered in England and Wales, company registration number 3912724
Fiscal Engineers Limited is authorised and regulated by the Financial Services Authority

A Review of Asset Class Investing



Executive Summary

We have been providing Asset Class Investing to our clients since January 2004. Our approach is based on structuring robust and diversified exposure to investment risks that are expected to be adequately compensated over time.

The degree to which a client needs to take on investment risk is a function of both their emotional tolerance and their financial need to do so – sometimes referred to as a client’s ‘risk/reward’ appetite.

Whilst it is not possible to determine for certain the returns that markets will deliver, we can endeavour to ensure that our clients capture as much return as the markets offer, for any particular risk appetite. These risks and rewards are best captured using low cost, passively managed, asset class funds, usually only accessible to institutional investors such as pension funds. In our opinion, this is a preferable implementation strategy to the unacceptably low odds of success provided by selecting expensive actively managed funds, whose market-beating claims rarely stand up in the empirical evidence.

Finally, we make sure that the level of risk in a client’s portfolio remains at the agreed level, achieved by regularly rebalancing the asset mix in the portfolio back to the target asset allocation.

This disciplined and long-term approach of Asset Class Investing helps clients avoid the most common, and sometimes costly, mistakes at times of market exuberance and dismay.

This paper demonstrates that:

- Asset class investing, using low cost, passively managed funds in our opinion, remains the most compelling investment strategy for long term investors.
- Risk and return are related. In the longer term, investors who take on higher risk portfolios should be rewarded for doing so.

A Review of Asset Class Investing



- The majority of active fund managers consistently fail to beat their own benchmarks.
- Given that it is exceptionally difficult to time when to be in or out of markets, successful investing is founded on structuring and maintaining a portfolio of appropriate market risks.
- Our formal governance process, driven by the Investment & Research Committee, ensures that the process is challenged and refined where necessary and that institutional products used in client portfolios remain 'best-in-class'.

Past performance is not indicative of future performance.
The value of your investments may go down as well as up

Fiscal Engineers Ltd
January 2010

© Copyright 2010. All rights reserved.

A Review of Asset Class Investing



1. Asset Class Investing in Brief

At Fiscal Engineers we have been delivering what we call 'Asset Class Investing' to our clients for six years now; a period over which the structural robustness of all investors' portfolios have been severely tested. We are happy to report that our approach has stood up well to the test, even if the equity markets in general – something we can't control – have been disappointing.

This paper provides a brief refresher and update on our investment process, its continuing efficacy in difficult markets, and how it has been refined since we published our Investment Methodology paper two years ago.

Perhaps the most sensible place to start is with a brief reminder of what Asset Class Investing is and why, in our opinion, it represents the most effective way of investing our clients' wealth.

1.1 Our underlying philosophy

The basic premise that underlies our approach is the belief that capitalism and markets work effectively, most of the time. Despite the turmoil in the global economy, reflected in poor equity market performance in 2008 and the start of 2009, capitalism remains an effective process for generating wealth in the longer term and allocating capital to companies operating within it.

The fall in equity markets during this period did not signal capitalism's demise (despite the sensationalist headlines that appeared several months ago) but simply the latest view on the outlook for global earnings into the future – a brutal check on the optimism for the global economy that prevailed until mid-2008.

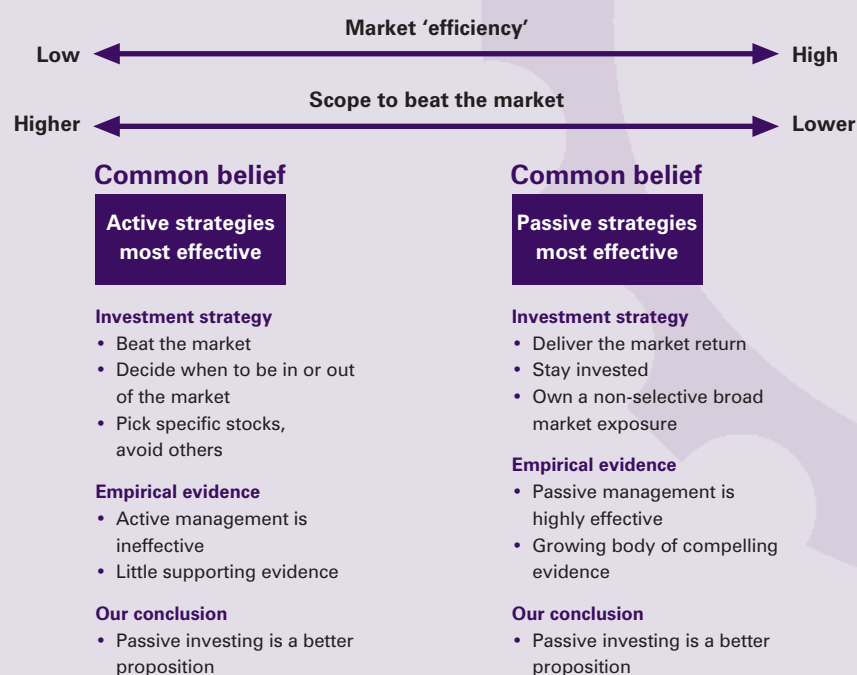
A Review of Asset Class Investing



At any point in time, given all the publicly available information to hand, the market provides the best estimate of the price of a company's shares and therefore, in aggregate, of the market. In industry parlance, markets seem to be 'efficient'. The best evidence that markets work i.e. that they are broadly 'efficient', lies in the abject failure of the vast majority of highly paid 'active' fund managers to fulfil their promise to beat the market, after costs, over longer periods of time, despite the flexibility they have to do so. The hedge fund world too, with its loud claims of delivering 'absolute returns', failed dismally on this promise falling, on average, by almost 20% in 2008².

'Passive' managers on the other hand simply try and deliver as much of the market return to the investor as possible; keeping costs and investment activity low are part of a successful passive strategy. Diagram 1 below helps to illustrate the difference between the two approaches.

Diagram 1: Active vs. Passive approaches to investing



¹ Fama, Eugene (1965), "The Behaviour of Stock Market Prices", Journal of Business 38: 34–105.

² HFRI Fund Weighted Composite Index – 1 year to 31/12/2008

A Review of Asset Class Investing



In fact, recent research demonstrates that only 1% of active managers delivered consistent outperformance over a 35-year period³ – in our view, those are odds that are simply not worth playing.

Other research⁴ reveals that the changes in the value of a portfolio between one period and the next is almost entirely due to the mix of assets that an investor owns, not the stocks picked or the timing decisions made to jump in or out of specific markets. The Sandler Review⁵, commissioned by the UK Government in 2002, clearly stated that:

'For the individual investor, the asset allocation decision is by far the most important factor in determining returns.'

The simple lesson is: focus on getting the asset mix right for your particular circumstances. If one accepts that markets work, it is easy to accept that risk and return go hand-in-hand.

If they did not, then investors would simply choose the lower risk investment opportunity over a higher risk alternative, as both would deliver the same expected return.

If you want higher returns, you simply have to accept that you will have to take more market risk in your portfolio.

The only way in which you can improve this relationship between risk and return is by making use of the fact that not all investment returns are driven by the same economic factors at the same time and that even where they are, the timing and influence varies from one economy to another. Diversifying investments to mitigate the uncertainty of the shorter or even longer-term outcomes of any one asset class (e.g. UK equities) is the only defence against the vagaries of the capital markets⁶.

³ Bogle, John, C., (2008), The Little Book of Common Sense Investing, JC Wiley & Sons

⁴ Brinson, Gary P., Hood, L. Randolph, and Beebower Gilbert L., (1986), 'Determinants of Portfolio Performance', Financial Analysts Journal, vol. 42, No. 4, pp 40-48

⁵ Sandler Review: Medium and Long-Term Retail Savings in the UK (2002)

⁶ Markowitz, Harry, M., (1991), Portfolio Selection: Efficient Diversification of Investments 2nd Edition, Cambridge, Massachusetts: Basil Blackwell

A Review of Asset Class Investing



1.2 How our philosophy translates into client portfolios

If you accept that markets work, risk and return go hand in hand, the mix of assets in your portfolio is the most critical decision that you face and diversification works, then structuring a highly diversified portfolio that comprises of long-term, strategic exposure to risks that have a strong chance of delivering an acceptable return, makes sense.

We cannot determine how markets will perform in the short-term – no-one can – but what we can do is to make sure that the portfolios we structure for our clients deliver the bulk of the market returns on offer. Given the unacceptably low odds of picking, in advance, one of the very few truly talented managers that may exist, the obvious solution is to use funds that deliver a return as close as possible to the market return. That means institutional quality, low cost, passive funds offering exposure to the market risk factors which are compensated for by higher expected returns.

In practice, we create a globally diversified, return-oriented mix of equity and other asset classes (e.g. commercial property) that acts as the driver of returns in client portfolios - our Global Diversified Portfolio. This is then tempered, to the degree necessary for each client, by adding high quality and significantly lower volatility fixed income assets (i.e. lending to stable governments and very high credit quality companies on a predominantly short-term basis) which we call our Defensive Asset Mix. This approach is supported by acclaimed academic work on portfolio structuring⁷.

⁷ Tobin, James (1957), "Liquidity Preference as Behavior Towards Risk", Review of Economic Studies 25.1: pp. 65–86

A Review of Asset Class Investing



The other thing that we need to do is to keep that asset class mix in place over time as it is linked to the level of risk that clients can emotionally tolerate and the level of return that they require to meet their financial (and thus lifestyle) goals. We do this by employing a disciplined rebalancing process that readjusts the current mix back to its original allocations. Whilst the main driver of doing so is to maintain the level of risk at an agreed level⁸, by selling out of assets that have performed well and buying into assets that have performed less-well, a beneficial consequence is that an incremental return enhancement may occur - in industry jargon, this is called a rebalancing bonus⁹.

It is this systematic, non-predictive approach that differentiates us from active managers who pursue the vain hope (as the empirical evidence reveals) of beating, rather than trying to 'be' the market.

That is 'Asset Class Investing' in a nutshell.

1.3 How has our 'Asset Class Investing' approach performed?

We sometimes get asked by our clients whether Asset Class Investing actually works, because whilst the logic and empirical basis on which it is founded makes sense and appears robust, the proof of the pudding is in the eating. That is a fair question and the next few paragraphs help to illustrate that it does. It is important to remember that each portfolio is designed to deliver an expected return that is commensurate with the risk appetite that has been taken on - from low risk to high risk. To make our case, we demonstrate three insights: the first is the longer-term annualised (i.e. compound) return that each portfolio has provided; the second is to look at a typical client portfolio structure and see how it has compared to a competitive UK stockmarket index fund and cash over various periods within the past five years; and the third is to see whether our portfolios have 'done what it says on the tin' over the turbulent years of the 2000s.

⁸ Swenson, David F. (2000), *Pioneering Portfolio Management*, New York: The Free Press

⁹ Bernstein, William, J., *The Rebalancing Bonus, Theory and Practice*, www.effisols.com

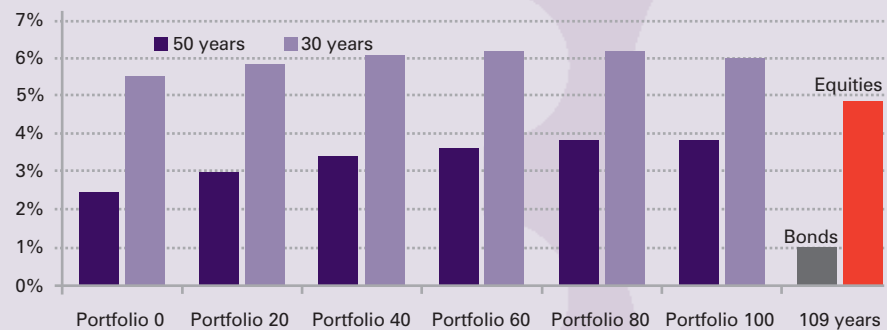
A Review of Asset Class Investing



a) Long-term returns – in line with risk

Over the longer term, asset class investing should deliver higher returns for those portfolios which have higher allocations to riskier assets. If we look at longer term periods, using a simulation of market returns, we can illustrate how portfolios structured at 20% increments of higher risk assets would have performed. A more detailed explanation of the simulation process can be found at the end of this document. Note that the allocation to growth-oriented assets is reflected in the portfolio name, e.g. Portfolio 60 has 60% allocated to growth-oriented assets (e.g. equities) and 40% allocated to defensive assets (e.g. bonds).

Figure 1: Simulated real (after inflation) return history to 30th September 2009



Note: Refer to Section 4 for an explanation of the simulation process

A Review of Asset Class Investing



Three key points should be noted:

- The first is that over these periods, all portfolios have helped investors to build the purchasing power of their wealth.
- The second is that risk and return are broadly aligned; this is more evident in the 50-year data, as during the past 30-year period, bonds have experienced a sustained bull market as the global economy moved from a highly inflationary environment to a low inflationary environment – a situation highly favourable to bond prices. Over this period, the after-inflation return on bonds of around 5.5% per annum sits well above the 1% after-inflation return evidenced over the past 109 years and those estimated over the long-term going forward – our in-house assumptions are for real returns in the region of only 2% a year from bonds.
- Finally, going forwards, and in light of a far lower return expectation from bonds, many investors will need to rebalance towards higher risk assets in order to provide themselves with the opportunity to meet their long-term lifestyle and wealth preservation goals.

While thirty years may seem a long time horizon, most 60 year olds could expect to live that long and in a growing number of cases one of the partners may live to be 100. About 1 in 10 people aged 40 today are expected to get their telegram from the Queen¹⁰.

¹⁰ Office for National Statistics (UK) 2007. 40 year old men 8%/women 12%

A Review of Asset Class Investing



b) Compared to the UK stockmarket our approach stacks up well

Let's now look at how just one of these portfolios has performed over different periods over the past five years. Remember that we have no control over the return that the market delivers and rely on sensible diversification, rebalancing and time to provide a strong likelihood that the portfolio will deliver the returns that are required. We have chosen our Portfolio 60, which has 60% allocated to higher risk assets (e.g. equities) and 40% to defensive assets (e.g. bonds) as it is perhaps one of our most popular strategies and will be one with which many of our clients will be familiar.

It is important to note that such comparisons provide only limited insight and suffer from a number of weaknesses: first, it is highly unlikely that one would ever invest 100% of a portfolio into the UK stockmarket. Second, the rationale for harnessing specific risks in our portfolios is structured, and strategic; short term performance comparisons may not illustrate the long-term beneficial nature of our Asset Class Investing structure, a cornerstone of successful investing.

You can see from Figure 2 below that our Asset Class Investing approach, after adviser fees, custodial and fund costs have been deducted, and despite the relatively short time period, has performed very well. In addition, the stockmarket data has not been adjusted downward for any additional costs including adviser fees, custody charges and dealing costs, which would make the performance of our Asset Class portfolios even more compelling.

The negative performance impact of investing in the UK stockmarket using active funds is estimated to be in the region of around 2.5% per annum based on average fund costs and average portfolio turnover that results from manager decisions¹¹, and that is before any additional adviser fee and custodial charges have been deducted.

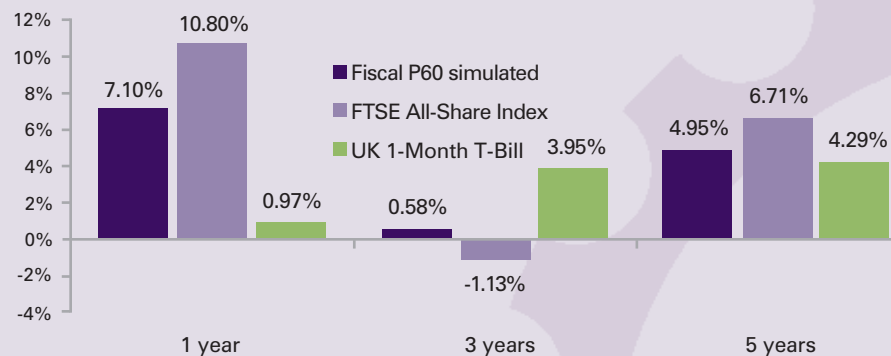
¹¹ Hale, T.G., (2009), Smarter Investing: Simpler Decisions for Better Results 2 ed., London: FT Prentice Hall

A Review of Asset Class Investing



It is worth noting that seemingly small differences in costs and performance will represent very considerable monetary differences over extended periods of time due to the effects of compounding.

Figure 2: Portfolio 60 - annualised nominal returns to end of September 2009



Note: Refer to Section 4 for an explanation of the simulation process

The main observations resulting from Figure 2 are as follows:

- Despite Portfolio 60 only having a 60% exposure to higher risk assets, the annualised Portfolio 60 return delivered around 70% of the FTSE All-Share over one year and five years, after fees and charges.
- The three-year annualised return of Portfolio 60 remains positive, despite a negative return from UK equities over this period.

A Review of Asset Class Investing



One key reason that our approach has held up well in such difficult conditions is down to the fact that we rebalance our portfolios when they diverge from the model asset allocation. This typically saw us selling off excess exposure to higher risk assets in the market peaks in 2007 and 2008 and buying higher risk assets when markets crashed in late 2008 and March 2009.

This was done without allowing human emotion (either ours or that of our clients) to throw us off track or trying to predict the short-term direction of asset classes in general. If the data supports the long term benefits of this approach then the reality of actually living through it and seeing the results confirm that it also works in the shorter term.

As you can see Asset Class Investing has stood up well over the very extreme investment conditions experienced in the past few years.

c) Performance in turbulent times

The past 10 years have been described by some commentators as the 'lost years' for equities, with markets more or less flat in terms of the change in value between the start and end dates. From our perspective we acknowledge that, while this is disappointing for investors, this is not the first time, and will not be the last time, that equity returns have been below the long term expected return over a ten-year period.

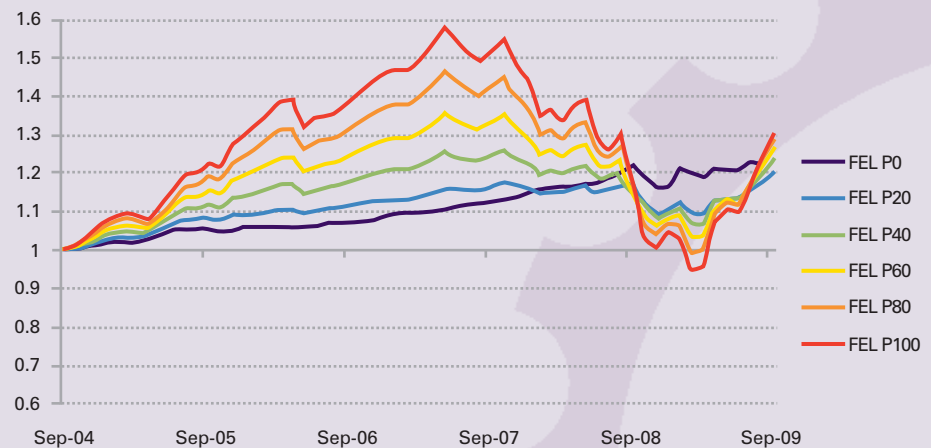
The ride however, has been anything but flat for the equity investor. The technology-driven bull markets of the late 1990s gave way to a bear market over the next three years, when markets fell by around 40%, only to rescale their previous highs in the ensuing three years, until they fell back to their level of ten years ago as the global economy went into recession and the credit crunch bit. These are events outside the control and foresight of any portfolio manager.

A Review of Asset Class Investing



The important question to ask in these circumstances is whether an investor's portfolio behaved as it was expected to do over the part of this period when we were following our approach. The chart below reveals that our Asset Class Portfolios did.

Figure 3: Portfolio outcomes from 01/10/2004 to 30/09/2009¹²



Note: Refer to Section 4 for an explanation of the simulation process

The lower risk portfolios did an excellent job of protecting investors' wealth from equity market trauma during the rise, fall and subsequent rise of the markets over the five years to the end of September 2009. Higher risk portfolios rose and fell in proportion to their mix between higher risk and defensive assets. Remember that in the long-run, it is this lower certainty of outcomes that provides the opportunity for higher returns.

¹² Source: Fiscal Engineers/DFA returns program. Refer to section 4 - 2.

A Review of Asset Class Investing



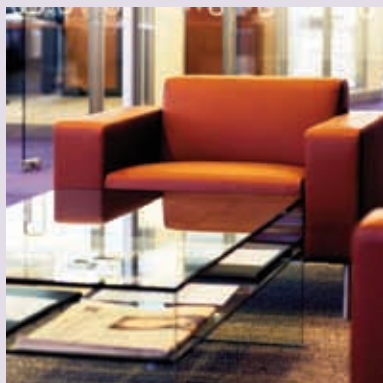
2. Governance of our Investment Process

One of the areas that we have not discussed in detail before is how the investment process is monitored, controlled and how it evolves over time. We have an established Investment & Research Committee (IRC) that meets formally on a six-monthly basis and in the interim if circumstances warrant it. It comprises the executives of our firm as well as other industry experts and academics from time-to-time, who adopt a very similar philosophy to investing. The ability to leverage their skills, insight and independent thought contributes considerably to the discussion and decision-making process. It is worth noting that no individual client circumstances are ever discussed in this forum, in accordance with the responsibility for confidentiality and data protection we owe our clients.

The primary function of the IRC is to ensure that the governance of the process remains robust and valid including:

- Looking at new evidence that challenges or supports the Asset Class Investing approach.
- Reviewing any new asset classes and those that remain excluded but under consideration.
- Ensuring that the funds and investment structures continue to represent good value and remain financially robust.
- Continuing due diligence on the products used to implement the asset allocation strategy to make sure that each is doing its job effectively and that nothing new has usurped its best-in-class position. New alternatives are constantly considered and will, where warranted, be introduced into client portfolios.

A Review of Asset Class Investing



Below are some examples of recent issues that the IRC has discussed and the conclusions reached.

a) New evidence on the passive vs. active debate

Recently, the IRC considered a new piece of evidence reviewing the ability of active managers to beat the market. The outcome was not surprising to us, although it is always gratifying to see further evidence that continues to support our stance. Asset Class Investing is the victory of reason over hope; in our opinion, active management is the tyranny of hope over reason!

The data is shared below. It is US-based, as much investment research is; however there is no evidence to suggest that the results from any other country would be much different, as no nationality has a monopoly on successful managers.

Table 1: Percentage of active managers beaten by the market

Equity Fund Category	Comparison Index	2008	3 Years	5 Years
All US Domestic Funds	S&P SuperComposite 1500	64%	70%	66%
All US Large Cap Funds	S&P 500	54%	65%	72%
All US Mid Cap Funds	S&P Mid Cap 400	75%	71%	79%
All US Small Cap Funds	S&P Small Cap 600	84%	78%	85%
International Funds	S&P 700	64%	77%	84%
Emerging Markets Funds	S&P/IFCI Composite	65%	84%	90%

Bond Fund Category	Comparison Index	2008	3 Years	5 Years
US Government Intermediate Funds	Barclays Intermediate Government	91%	91%	94%
Global Income Funds	Barclays Global Aggregate	78%	86%	79%

Source: Standard & Poor's Ondices Versus Activ Fields Scorecard. Year End 2008

A Review of Asset Class Investing



Four points are worthy of note:

- The first is that in 2008, when equity markets fell precipitously, the claims that active managers could hold cash and defensive assets to protect a client's downside exposure rang hollow.
- The second is that passive investing, simply by the mathematics in its favour, should be expected to be even more effective over longer timeframes as lucky managers' luck runs out and their outperformance fails to persist.
- The third is that active managers sometimes claim that they can add more value in markets that are 'inefficient' such as smaller companies and emerging markets – the evidence above reveals otherwise. Smaller company and emerging market active managers are the worst of the bunch, largely due to the significantly higher costs of trading in these markets, with 85% and 90% respectively of managers failing to meet their promise.
- Finally, fixed income (bond) managers play in highly efficient markets and simply don't earn their fees in the majority of cases. Passive replication of bond markets makes considerable sense.

A Review of Asset Class Investing



b) Considering the use of Dimensional Fund Advisors' 'core' funds

These 'core' funds for UK and international equities contain exposure to smaller and value (less healthy) company risks, as well as broad market risk. Currently, to gain similar exposure to these risks, and thus their potential rewards, we need to use nine funds.

By greater use of 'core' funds, we can hold five fewer funds, resulting in fewer rebalancing trades between funds, thus reducing both transactional and potential tax costs in the form of capital gains.

The Committee has concluded that, on balance, the advantages of using Dimensional Fund Advisors' (DFA's) 'core' funds outweigh any perceived or actual disadvantages. We are undertaking additional research to establish how best to implement the exposures to both UK and international value and smaller companies that we target. Once this has been completed the decision to transition clients to the new funds will be discussed at each individual client review.

c) Behind the scenes

Successful investing is often as much about what you don't do as much as it is about the decisions that have visible consequences like those above. The IRC frequently researches opportunities to improve the service it delivers to its clients. Many of these are worthy concepts that ultimately do not make the grade for one reason or another.

A recent example includes the arrival of The Vanguard Group's passive funds into the UK in 2009. Vanguard is a new name here, but it is one of the leading providers of passive investment products globally and manages around \$1 trillion of client assets. The IRC's decision is that at present, Vanguard's funds will not be used due to the adoption of the new 'core' funds offered by Dimensional that will make the implementation of our portfolio strategies more efficient.

A Review of Asset Class Investing



A further example was the decision not to pursue the establishment of our own OEIC (a type of fund structure) to hold our clients' growth assets. Whilst this had some capital gains tax advantages for clients and operational efficiencies for the firm, the extra layer of costs involved negated these benefits in practice. We will keep this issue under review.

We regularly review the performance of the funds we use in constructing our portfolios, especially those funds offered by Dimensional Fund Advisors. We are in the process of preparing a separate paper covering the performance of their funds in relation to various benchmarks and indices; suffice to say that we still believe their approach of delivering asset class returns without attempting to exactly replicate any given index remains an appropriate and successful strategy.

Finally, we reviewed the proportion of equity assets that are allocated to the UK (known in the profession as "home bias"), the structure of our Defensive Assets mix and the allocation made to global commercial property. Focusing on the home bias question, we determined that a 50% allocation to non-UK equities provides for a well diversified exposure to global capitalism.

It is worth noting that many UK companies are global in nature and around 50% of earnings delivered by UK quoted companies come from overseas¹³ through companies such as BP, HSBC, GlaxoSmithKline and Unilever. It is also worth noting that non-UK assets expose the portfolio to currency risk. Over the long-term we consider that currency movements are likely to even out; in the short-term though they can impact portfolios both on the up and downsides. No perfect split between UK and non-UK assets exists; but we believe our approach to be both robust and practical. Our Defensive Assets mix and global property allocations will remain unchanged.

As you can see, the Committee works hard on our clients' behalf, with only those decisions that it believes are likely to deliver true practical benefits to clients actually being implemented.

¹³ Edinburgh UK Tracker Plc 2005 Report

A Review of Asset Class Investing



3. Conclusion

Our conclusion is that Asset Class Investing remains an eminently sensible and effective way to invest. It is based on the available evidence that guides us in making better decisions for our clients when structuring and implementing their portfolios. There are no absolute right or wrong ways to invest but there are some approaches that are considerably better for our clients than others. We believe that Asset Class Investing is such an approach.

This paper is not intended to provide investment advice and no action should be taken without obtaining professional advice.

This document is for information and education purposes only. Any information contained within it is the opinion of the authors and nothing in this document should, under any circumstances, be considered as investment advice. All information provided in this document comes from sources that Fiscal Engineers believe to be reliable although we do not guarantee its accuracy or completeness.

A Review of Asset Class Investing



4. Notes

Simulation process for Figure 1

The simulation uses historical, after inflation (real), asset class index data. This data is combined into portfolios using the underlying asset allocations for our Portfolios 0 to 100. Where a specific asset class data series is not available, an alternative proxy is used, with an appropriate deduction made for fund total expense ratios (i.e. the fund manager's annual management charge and other fixed costs charged against fund performance) where the measure is an index. At the point that the live data series (i.e. for an actual fund) becomes available it is incorporated into the calculation.

Each portfolio is rebalanced back to its original asset allocation on a quarterly basis, although in reality, portfolios are rebalanced when they need to be, rather than at a specific time interval. Finally, the current costs of investing at the portfolio level are then applied to the simulated portfolio return. The costs deducted relate to a portfolio size of £1 million.

Simulation process for Figures 2 & 3

The simulation uses actual fund data. This data is combined into portfolios using the underlying asset allocations for our Portfolios 0 to 100. Where fund data series is not available for the entire five year period, an alternative fund data series is used in an attempt to mirror the experience of our clients i.e. for both UK and Global Property we have used the M&G Offshore Property fund data to the end of 2008 followed by iShares REIT data, as the majority of clients held the M&G Offshore Property fund before moving to REITs. We have also used index data for the International Large Cap data series, less the deduction of 30 bps to reflect fund total expense ratios.

A Review of Asset Class Investing



Each portfolio is rebalanced back to its original asset allocation on an annual basis, although in reality portfolios are rebalanced following review meetings. Finally, the current costs of investing at the portfolio level, namely our annual fee in accordance with our published fee scale and the custodian's annual fees, are then applied to the simulated portfolio return. The costs deducted relate to a portfolio size of £5 million.

In practice, the performance actually achieved by a client's portfolio will vary from the simulated return to some extent, depending on a number of factors including: cash flows into and out of the portfolio; the timing of the initial investment and subsequent rebalancing; the exact asset allocation; tax structures used; overall charges and any legacy positions held in the portfolio.

If you are interested in finding out more about the simulation process and the data series used, we would be more than happy to discuss it with you.