

Alpha, Beta and Strategic Asset Allocation – the Paradigm Shift in Portfolio Construction.

Surely with Oil (Black Gold) recently hitting USD\$135.00 per barrel, asset allocation and investment decision-making has never been so easy: All one needs to do is just go 'long' Black Gold and Yellow Cake (Uranium), food producers, water companies and go 'short' USA car manufacturers and luxury goods companies, and the right mix of alpha and beta returns should appear as if by magic.

Sounds simple enough, but then I'm not managing a superannuation fund of USD\$20 - \$50bn with a diverse age range of beneficiaries. However over the last 60 years, the interpretation of a prudent portfolio has changed dramatically. Originally, only mortgages on real estates and government bonds were considered acceptable. But returns were low and costs were high, so funds moved progressively into equities, commercial property, overseas markets and derivatives.

In Australia we still face a number of hurdles in the way in which superannuation funds are managed. These were highlighted as far back as 1998 by Keith Ambachtsheer, the global guru on pension fund management, when he said 'Australian superannuation funds are governed by elected trustees, many of whom are not well versed in governing pension funds as financial businesses'. He went on to say that 'a number of public policy, education, and industry structure issues still have to be addressed'.

These issues hold true today, however, we are confident that the new leadership and better educated investment professional entering the industry will address many of these concerns. We also see ASFA (Australian Superannuation Funds Association) taking a more relevant and proactive role in many of these critical areas thus accelerating the maturity of the Australian superannuation industry.

Our view is that asset allocation and investment fund management leading to fund performance and improving beneficiary outcomes is the main game, the corner stone of superannuation and pension fund management with everything else at best, secondary.

The investment world is also changing rapidly, where the traditional view of asset allocation managed by a selection of brand name managers actively hugging an array of questionable benchmarks (made up of approximately equities 65%, bonds 35% and cash 5%), no longer holds true.

As *The Pension Trustee's Investment Guide 2008* states '...the days when trustees could spend a few hours a year making a simplistic split between blue-chip equities, government bonds and commercial property have long gone'.ⁱ

But the industry focus has not been on this awakening which was recently made apparent to me as I thumbed through some 892 pages of the superb book, *The Oxford Handbook of Pensions and Retirement Income*, published in 2006; I was surprised to find only 37 pages dedicated to the topics of strategic asset allocation and investment fund management.

Today by using derivatives, portfolio managers and therefore portfolios are now able to move from basically equal weighted or symmetric risk/reward portfolio profiles like the one described above, to asymmetric risk/reward outcomes that may look like the total return allocation shown below;

	Current Allocation	Total Return Allocation
Equity	65%	40%
Fixed income	30%	30%
Other - Cash	5%	30%
Real estate	-	10%
Private equity	-	10%
Hedge funds	-	10%
Total	100%	100%

This total return asset allocation model holds true for all types of funds. As Lee R. Thomas III, explains in his groundbreaking 2004 paper on asset allocation: 'Namely, members want to achieve good returns but they do not want to experience any material fall in their account value. In conventional funds, risk has been highly 'symmetrical' – high reward requires high risk, while low risk only generates low reward.

'Whilst over the long term, pure exposure to equities offer strong potential to provide the level of return required, relatively few members are comfortable with the volatility they may have to experience along the way. Extreme market volatility may deter scheme members from contributing all together. What members are asking for is 'asymmetric' risk – low risk with higher reward. Until recently, there were no mainstream products that could provide this. However, we believe this demand for asymmetric risk can now be successfully accommodated through a new generation of funds known as total return funds'ⁱⁱ

He goes on to say the confluence of two main trends makes the investment world ripe for change. 'First, a growing sense of frustration among many investment management clients exists. The main complaint is that despite applying what they thought were highly sophisticated techniques for managing their money, hiring the best consultants in the business, and conducting extensive and expensive manager searches, their efforts have produced little overall alpha (think excess return over a specific market return).'

The second trend concerns the opportunity to include technology and financial product innovations of derivatives and the like. 'A number of stimulating intellectual concepts have been developed – modern portfolio theory (MPT), the capital asset pricing model (CAPM), the Black–Scholes option pricing model and the Miller and Modigliani theorem (MM Theorem)'

As a result, the conventional manner of portfolio construction almost inevitably produces inefficient portfolios that do not have the highest expected return for their level of risk – because the alpha-generating part of the portfolio is more or less random, an afterthought. I advocate an alpha-centric portfolio framework for portfolio construction.ⁱⁱⁱ

After all now that we have the ability to capture market beta at little or no cost, why wouldn't we strive to seek out skilled managers to provide the alpha generation for our

portfolios knowing that it is worth spending the money to discover managers with such performance generating skills?

With this in mind it is worth examining how total return funds achieve their target.

The concept of total return investing has filtered through from the retail investment market, rather than the institutional pensions market. In particular, it has been fuelled by the introduction of UCITS III – the EU-wide directive (as amended Feb 2007)^{iv} that has given retail marketed funds wider investment powers to use derivatives to hold money market instruments and mix different assets in the same fund. Total return funds aim to achieve consistently positive returns through a number of tactics – some or all of which may be employed in the same strategy:

- Diversification – a total return fund may have the flexibility to invest across multiple asset classes, including equities, bonds, convertibles and cash, in order to maximise sources of return and diversify risk.
- Strategic/Tactical asset allocation – while a total return fund may have a focus on bottom-up security selection, there may also be a strong focus on strategic/ tactical asset allocation to ensure the fund has the optimum blend of assets to achieve positive returns throughout different market conditions. This asset allocation may be achieved through a derivatives-based overlay and other innovative tactics such as ‘Portable Alpha’ strategies to allow stock and manager selection to focus on the best ideas.
- Derivative-based risk protection – derivatives may be used to protect against market volatility. However total return funds cannot – unlike absolute return/hedge funds – short sell in order to actively profit from market falls.

An increased allocation to alternative investment strategies provides exposure to asset classes chosen specifically for their higher return potential and low correlation – which is critical to diversification.

What is fundamental to grasp is that while each of these strategies have different risk profiles, all of them clearly intend to achieve a positive return. The thing that differentiates them is the level of excess return targeted and the time horizon over which this target excess return is expected to be achieved.

We believe total return investing offers the most appropriate proposition to meet the needs of both trustee and employee. An objective to outperform the return on cash is highly intuitive and far more understandable from most members’ perspectives than an objective to outperform an equity or bond/equity benchmark.^v

As David Swensen so eloquently said, ‘Ultimately, thoughtful asset allocation work provides the basis for building a successful investment program’.^{vi}

This now leads us to some potential answers of what to do for \$20 - \$50bn superannuation/ pension fund. Thomas said that ‘systematic risk can be added through passive, rather than active, management. As financial markets have many different betas, not just a single beta, then by combining the various exposures one potentially produces the beta portfolio. If we agree with this then we can capture beta returns by inexpensive index tracking product solutions.

On the other hand we if we agree that the alpha portfolio depends on active management, the only way to add incremental return other than through systematic risk is to find a manager who can beat the market, one who can get excess return that is not proportionate to the excess systematic risk added to the portfolio. Such a manager has talent, the ability to beat quasi-efficient markets. Typically, a manager's outperformance is called alpha, so the portfolio that contains active bets is called the alpha portfolio. And managers that produce alpha are collectively known today as hedge fund managers^{vii}

So if we know that active hedge fund managers show skill in producing alpha perhaps the recent *Alternatives Survey of European Investors* conducted by JP Morgan can shed some light on what investors are thinking and saying about this often confusing investment area.

Some of the relevant findings are outlined below:

1. Allocation of current investors

Of the three alternative asset classes JP Morgan focused on in this survey, private equity, real estate and hedge funds - it was hedge funds that recorded the greatest increase in interest, with the percentage of institutions holding them almost doubling from 22% to 42% since 2003. Over this four-year period, average portfolio allocation among European institutions rose from 2.5% to 5.1%.

2. Return expectations

The average annualised return that investors have achieved from hedge funds has been almost 9% (and reviewed down to 7.5% in the 2008 Deutsche Bank Alternative Investment Survey) – representing a premium of 4 to 5% above cash. It is interesting to see how respondents' experience of hedge funds performance is very similar, whereas the dispersal of returns for real estate (considered to be a 'safer' asset class) and private equity has been much greater.

Moreover, most investors expected this level of return to remain sustainable. On average, respondents said they expected hedge funds to achieve (on average) an annualised return of 8.0% over the long term. Investors in all seven European regions mentioned concerns regarding their ability to access top managers, the challenge of selecting and monitoring managers and the level of management fees charged. So as always, finding a trusted research partner one can work with is critical.

It is interesting that investors are concerned about the perceived risks surrounding hedge funds, despite expecting them to deliver lower levels of volatility and more predictable returns than either private equity or real estate. As David Swensen has stated, the numbers suggest that absolute return investments in any given period will generate higher returns than domestic stocks with less risk.^{viii}

Indeed, the potential for poor returns did not emerge as an explicit concern in any region, while only Italy selected volatility as a key concern. It therefore seems that investors are most concerned about the practicality of investing in this asset class rather than a lack of confidence in the ability of hedge funds to achieve their target returns.

3. Intentions and expectations

There is a significant potential for further inflows into hedge funds, with 63% of current investors planning to increase their allocation. On average, investors are targeting a 7.4% allocation to the asset class – a significant increase on the current allocation of 5.1%

It also appears that investors are keen to increase their hedge fund exposure quite soon. Survey respondents said they intended to implement their strategic asset allocation change within 1.1 and 2.5 years – a far shorter time period than for real estate or private equity.

As with real estate, the biggest attraction of hedge funds was the low correlation with other asset classes – a benefit mentioned by more than half (53%) of investors.

Hedge fund investors have experienced consistent performance and expect attractive risk-adjusted returns. In fact both venture and buyout investments resemble high-risk equity assets, raising the possibility of classifying the private assets with marketable securities.^x These expectations suggest a compelling investment case for hedge funds.

However, the influence of hedge funds is set to be far wider than the actual allocation of institutional investors to the asset class would suggest, as hedge fund techniques are being more widely used within “traditional” asset classes such as equity and fixed income.^x

Such non- traditional strategies may also be called ‘Extension Strategies; capital efficient strategies; alpha beta separation and beta hedge fund replication strategies and probably lots of other things. However they are all aiming to capture greater risk adjusted returns and capture these returns without the traditional long only portfolio constraints.^{xi}

As Deutsche Bank reported in their *2008 Alternative Asset Survey*, hedge fund flows being the lowest of any first quarter in four years (USD\$16.5 billion), investors nonetheless indicated that the industry will continue to grow. Respondents suggested a median industry inflow of USD\$200 billion in 2008, demonstrating optimism about the hedge fund market that is at odds with their generally bearish economic outlook.^{xii}

For evidence of this approach at work we need look no further than the 2006 asset allocation for the Yale University Endowment portfolio of approx., USD\$30bn – a portfolio that has produced after fee returns of 16.3% pa for the past 21 years by comparison with a traditional 70% Equity 30% Bond portfolio that has shown 11.1% pa for the same period, before we analyse for volatility, which we estimate was lower in the Yale portfolio^{xiii}:

Hedge Funds	23.3%
Real Assets – property, infrastructure etc..	27.8%
Private Equity	16.4%
General (traditional) Equity	26.2%
Fixed Income	3.8%
Cash	2.5% ^{xiv}

So understanding this topic may be over but the ability to implement such an asset allocation for your own needs may be further away. However by engaging appropriate investment professionals alpha-centric portfolio frameworks and construction can now begin to be incorporated to produce sustainable total return portfolio solutions.



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- ⁱ Robin Ellison, Adam Jolly – *The Pension Trustee’s Investment Guide* Thorogood UK, 2008 p26
ⁱⁱ Ibid p27
- ⁱⁱⁱ Lee R. Thomas III, *Asset Allocation in the New Millennium*. Association of Investment Management Research (AIMR) 2004. www.aimrpubs.org
^{iv} Ernst & Young *UCITS III – A Practical Guide* June 2003
- ^v Extracted from; *Total Return and alternative investment strategies white paper 2007 - Putting total return and alternative investment at the heart of DC investing - Creating a new default option for pension scheme members*.
JP Morgan Asset Management April 2007 p8- 9
- ^{vi} David F Swensen, - *Pioneering Portfolio Management– An Unconventional Approach to Institutional Investment*. Free Press 2000 p131.
^{vii} Lee R. Thomas III, *Asset Allocation in the New Millennium*. AIMR 2004. www.aimrpubs.org
- ^{viii} David F. Swensen - *Pioneering Portfolio Management, An Unconventional Approach to Institutional Investment*. Free Press USA 2000 p 116.
^{ix} Ibid p117
- ^x *The Alternative Investments Survey – Are Alternative Investments Mainstream - European Survey Nov.2007*
JP Morgan Asset Management
- ^{xi} Pres., Corey Case, Scott Stein – *Rethinking Portfolio Allocations for the Future; Blending Specialized Alpha Strategies with Traditional Assets*. JP Morgan Alternatives Asset Management webcast March 2008
^{xii} *2008 Deutsche Bank Alternative Investment Survey* - Deutsche Bank AG.
^{xiii} Ibid.
^{xiv} Ibid.