

### Tactical asset allocation - did you throw the baby out with the bath water?

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#### Introduction

There has been a lot of debate over the past decade about the ability of investment managers to generate additional returns by adopting a Tactical Asset Allocation (TAA) approach to portfolio management. Economic cycles swing from boom to bust, investor behaviour from bullish to bearish and market valuations from cheap to dear. These observations move around a secular trend, or benchmark. This paper is primarily focussed on the question of TAA value add from a practical, experiential viewpoint and outlines a TAA approach and process which has delivered superior returns on a consistent basis. The move to sector specialist programmes in Australia has raised the question – who is looking after the interaction between asset classes? A casual observation is made on this question in the context of the findings of this paper.

## **TAA Research Evidence**

At the Global Asset Allocation Summit held in Sydney in March 2007, key topical interest lay in a number of areas, including the benefits of diversification, alpha-beta separation, the rise of alternative assets and the breadth of asset choice. There was an over-riding theme at the conference – "asset allocation is back"! The benefits of *broadly-defined* asset allocation are widely known and generally accepted in the industry, these having been tested and demonstrated in a number of studies (for example Brinson et al. (1)).

Studies into the specific area of Tactical Asset Allocation (TAA), and in particular those exploring and testing the benefits (value-added) of TAA, by contrast are few in number – indeed scarce in Australia. Mercer <sup>(2)</sup> concluded that the traditional active balanced fund manager on average subtracted value from TAA. While this was corroborated by Faff et al <sup>(3)</sup>, who concluded that active managers were unable to deliver superior returns through TAA, Mercer did however make some important conclusions:

- firstly, notwithstanding a lack of performance history, the average specialist TAA manager did add value;
- secondly, the performance of some of these specialists was quite impressive; and
- thirdly, inclusion of a specialist TAA overlay manager may modestly increase a fund's return/risk ratio.

In forming these conclusions Mercer noted that the lack of a long performance history for specialist TAA managers made robust conclusions difficult.

In July 2007 Standard and Poors (S&P) <sup>(4)</sup> released a broad-based, Australian multi-sector manager report which made a number of important conclusions:

- firstly, there was no evidence that managers can consistently add value implementing active TAA;
- secondly, it was difficult to extract information from managers; and
- thirdly, in most cases long term analysis was not possible due to significant changes to managers' investment teams or asset allocation processes.

## Perspective on the TAA Evidence

In summary, the available research evidence of TAA value-add in the case of Australia is scarce, appears less than robust and is mixed – at worst value-destructing, and at best *marginally* value-adding, the latter observation typically associated with specialist manager skill. The research evidence also highlights a lack of consistency from TAA value-added over the longer term, yet acknowledges that longer-term analysis itself is largely not possible in the face of significant changes to TAA teams and/or processes let alone data availability.

S&P's observation of "significant change" to managers' teams and asset allocation processes is an important one, as it portrays the TAA space as dynamic and evolving. Active TAA managers have pursued a specialty focus in their pursuit of alpha generation, evidenced by the proliferation of hedge fund and GTAA (Global Tactical Asset Allocation) managers and strategies. Notably, the asset class range for TAA positioning has expanded (for example into alternative assets and global property), as has the range and flexibility of derivative instruments available for TAA positioning. In short, TAA resources and processes have been expanded and augmented in recent years.

While "significant change" in TAA resources, processes and expertise is evident and acknowledged, it has not yet been examined. In concept, if "significant change" was found to be statistically significant, there exists the possibility that currently-held conclusions regarding TAA value add may indeed change, or at a minimum be made more robust. Hence examination into the impact of "significant change" on TAA value add appears warranted. This paper will provide some perspective on the issue of "significant change" from a practical, experiential viewpoint. It will do so by examining long-term data from one diversified fund which has benefited from a history of active TAA but which has in recent years developed further its TAA resources, asset allocation process and expertise. More on this later.

# **TAA Services**

S&P's report on Australian multi-sector funds was wide-reaching, incorporating 20 (single and multi-) managers offering 60 investment products across 250 funds. Along the lines of Mercer, TAA services provided by active diversified fund managers can be broadly defined as follows:

- Traditional / TAA Overlay: Managers with dedicated TAA skills and/or specialist TAA managers who manage typically on a TAA overlay basis for an excess return objective of around 0.50%-0.75% pa
- TAA Trust: Specialist TAA managers who manage 15%-20% of a fund's total assets in a specialised pooled investment vehicle for an excess return objective of around 3% pa. A higher return objective is required on the Trust's portion of fund assets such that it meets the total fund TAA objective.

#### TAA Approach and Process – a practical, experiential viewpoint

Strategic Asset Allocation (SAA) is about spreading risk by diversifying across multiple, imperfectly correlated asset classes to meet a long-term risk-reward tradeoff which is set within a prescribed, long-term investment objective of a multi-sector investment strategy. Stability in the risk-return parameters is assumed over the long-term, with asset allocations passively managed.

TAA is about making purposeful shorter-term deviations from the SAA asset class benchmarks due to the belief that markets are not efficiently priced at all times and that market mispricing – eg a deviation from an asset class's fair value - gives rise to an opportunity to enhance returns and/or reduce risk over the shorter-term (defined as less than 12 months). TAA is also about managing tilts at the total fund level, for example via a target growth/defensive asset mix, hence an active TAA tilt for any single asset class is generally not viewed in isolation.

With the research evidence as scarce as it is, it is no surprise that TAA has its supporters and detractors, believers and non-believers. This paper will discuss one case ,where active TAA has been applied to multi-sector strategies for over 20 years. The company's <sup>(a)</sup> TAA service model is that of a Traditional / TAA Overlay Manager. It manages around 90 multi-sector funds across eight core strategies, spanning high growth through to balanced and capital stable options.

In short, the company is a large, active TAA manager which has a demonstrated long-term commitment to TAA and a long-term TAA performance history open to analysis. It has also added to its TAA commitment in recent years, expanding its TAA resource and enhancing its TAA process since early 2003.

In respect of TAA philosophy and management, the company believes that investment markets are ultimately driven by the economic cycle. Changes in economic fundamentals and in market expectations of future economic conditions give rise to asset class pricing anomalies which may be profitably exploited. The company engages in TAA with the express aim of increasing long-term investment returns relative to the strategic asset allocation of its various multi-sector strategies.

The objective of TAA value add, is to add in excess of 50 basis points per annum over and above the SAA benchmark for the representative multi-sector strategy over rolling three year periods. Risk is managed by the asset class ranges and mandate restrictions. Positions are applied across all multi-sector strategies via an algorithm (the Marketometer) which allocates risk accordingly. There are four equal-sized risk units for overweight and underweight positions around the benchmark position. In the Marketometer system, a score of 5 (midway on the range) implies a neutral or benchmark position; a score of 1 implies a minimum weight to a given asset class whilst 9 implies a maximum weight to a given asset class. As an example, a score of 7 reflects a TAA overweight position equal to half the permissible overweight load.

In respect of TAA process, application of the TAA philosophy is expressed through the utilisation of both quantitative and qualitative inputs. The TAA process combines investment modelling (the quantitative) and investment manager market insight (the qualitative) to determine appropriate asset class tilts for all multi-sector strategies and their inherent risk characteristics.

Qualitative assessment feeding into the TAA decision making process incorporates input from the global network (discussions with investment strategy teams), discussions with local asset class teams in preparing expected returns and discussions held at the monthly asset allocation committee (AAC) meeting. A "house view" is formulated, being a summary of current and expected global economic and market trends as well as portfolio positioning.

At the AAC a compendium of information containing an update of economic and market signals, risks, returns, outcomes of quantitative TAA and currency modeling is tabled. The head of each asset class presents the outlook for their asset class and/or sectors, and in the context of TAA positioning contributes to broad discussion on risk and return expectations. Each asset class specialist expresses their TAA conviction as risk-unit deviations from benchmark (a Marketometer score).

Quantitative assessment feeding into the TAA decision making process is drawn from the company's "3-D TAA" modeling process, which has its conceptual basis in the observation that market movements are motivated by, and result from, three core factors – Macro Fundamentals, Market Psychology and Market Valuation. Each of the core factors is an aggregation of a number of components (such as liquidity, inflation, momentum, risk, valuation), and each of the components is an aggregation of a number of elements or variables (such as PE ratio, corporate bond spread and consumer confidence). The elements are selected on a-priori grounds and back-tested for inclusion.

Quantitative assessment feeding into the TAA decision making process is also drawn from optimised portfolio asset allocations. The optimisation process is based on a mean-variance optimisation from modern portfolio theory. Asset class forecast returns are fed into the model and, together with volatility and correlation estimates, are used to generate an efficient frontier. A mean-tracking error optimisation is also performed. Reverse optimisation is used to generate implied returns for each asset class based on historical volatility and the current day's asset allocation. This ensures consistency in the application of the process. Portfolio risk and return profiles are also mapped against efficient frontiers to illustrate the efficiency of the current portfolios and strategic allocations. The results of this process form an important input to the asset allocation process and to the TAA decision.

An investment strategy is formulated from all inputs to the TAA process and a TAA decision is made. As a general rule TAA decisions are implemented through derivative exposures. TAA decisions move typically in a 3-12 month horizon. Relatively large positions may be taken given the width of TAA range across asset classes. Consistency in asset allocation across multi-sector funds is achieved through the use of the Marketometer process, which applies the appropriate portfolio weighting subject to portfolio benchmark and asset allocation constraints. As with all active investment processes, TAA positions are monitored on a daily basis and are subject to continuous review.

Having outlined the company's TAA approach and process, an examination into the case of a large diversified fund which engaged in active TAA throughout the past seventeen years now follows.

## Is "significant change" significant?

Earlier it was suggested that examination into the impact of "significant change" on TAA value add appeared warranted. A very simple analysis aimed at exploring this issue now follows.

In conducting the analysis, TAA value add data was examined for a large multi-sector fund <sup>(b)</sup> over the period September 1990 to June 2007, some 202 monthly observations. This period, dubbed the *"longer-*

term", easily accords with industry convention in respect of long term performance and attribution analysis. Economic cycles were apparent, swinging through boom to bust, investor behaviour ranged from bullish to bearish and market valuations ranged from cheap to dear. In setting the scene, the table below highlights the longer term TAA value add track record.

Period from	Sep-1990	
to	Jun-2007	
Value Added (mthly)	0.04%	
Monthly Tracking Error	0.26%	
t-statistic	2.09	
Probability of skill	98.2%	
Annualised Value Add	0.46%	
Annualised TE	0.91%	
Information Ratio	0.51	

The key findings from this table are as follows:

- TAA value add has on average been positive over the longer term, at 0.46% pa over 17 years
- there is a 98.2% probability that TAA manager skill has been demonstrated over the longer term.

Having set out the longer term research evidence, the issue of "significant change" can now be put into context. While active TAA has been associated with this fund since inception, TAA resources and processes were significantly altered in March 2003 - the date at which an expanded TAA team and an enhanced TAA process was brought into place.

The test as to whether "significant change" is meaningful is a simple one; in essence, the pre-change track record is compared with the post-change track record.

For ease of association, these periods are dubbed the "pre-enhanced specialist period" and the "postenhanced specialist period" respectively. The pre-enhanced specialist period is September 1990 to February 2003 (150 monthly observations, or 121/2 years), while the post-enhanced specialist period is March 2003 to June 2007 (52 monthly observations, circa 41/2 years). Statistical convention would have it that both sample sizes are large enough to consider results to be statistically significant. The table below highlights the TAA value add track record for both periods as well as some key differences between these periods.

Period from	Sep-1990	Mar-2003	% Difference
to	Feb-2003	Jun-2007	from change
Value Added (mthly)	0.03%	0.08%	0.05%
Monthly Tracking Error	0.29%	0.18%	-0.11%
t-statistic	1.12	3.03	191.20%
Probability of Manager Skill	86.8%	99.9%	13.07%
Annualised Value Add	0.31%	0.90%	0.60%
Annualised TE	0.99%	0.62%	-0.37%
Information Ratio	0.31	1.46	114.67%

The key findings from this table are as follows:

- TAA value add has on average been positive over both periods
- TAA value add for the post-enhanced specialist period (0.90% pa) has materially outperformed that of the pre-enhanced specialist period (0.31% pa)
- annualised tracking error (risk) over the post-enhanced specialist period (0.62%) fell appreciably relative to the pre-enhanced specialist period (0.99%)
- the Information Ratio for TAA decisions over the post-enhanced specialist period (1.46) far exceeded that of the pre-enhanced specialist period (0.31)
- there is a 99.9% probability that TAA manager skill has been demonstrated over the postenhanced specialist period (vs 86.8% over the pre-enhanced specialist period).

In short, the evidence relating to this fund is that a "significant change" in TAA resources and process did deliver a consistent, large increment in TAA value add, with reduced risk, to deliver a meaningful increment in manager skill.

#### A casual observation in an industry context

The drive to sector specialist programmes has been a dominating theme in recent years, one which has come at the expense of balanced funds. An underpinning feature of this move is the industry's focus on specialty, concentration and conviction at the individual asset class level. Perhaps the research evidence pointing to a weak TAA track record also plays a part in this drive. But, irrespective of the single-sector trend and its drivers, there is no escaping the investment logic of diversification in a multi-asset portfolio holding along the lines of the well known maxim: "don't put all your eggs in one basket". This makes the case for SAA.

But who is looking after the interaction between asset classes? Passive rebalancing around the SAA benchmark is a valid strategy. But if active, specialist, TAA management is proven to be materially value adding in a repeatable, consistent manner over an extended timeframe, a profitable alpha opportunity is being missed. The numbers are straightforward; if a TAA value add objective of 0.50% pa is added to a multi-sector strategy's benchmark objective of 7.5% pa, then over the life of a 20 year [40 year] investment, the portfolio return would be 41% [368%] higher than if TAA was not employed. Clearly the

benefit of compounding, as much as TAA value add, is highlighted here. Nonetheless TAA value add is more than marginally accretive and hence provides adequate food for thought.

Given the expansion and augmentation of TAA resources and processes in recent years – in effect a <u>focus on specialty, concentration and conviction</u> at the TAA level – perhaps the mindset on TAA value add is coming to a turning point, ie inclusion of TAA as part of the specialist suite of alpha generation strategies. If adopted, a question as to the appropriate TAA service model then arises – Traditional/Overlay ("onestop shop"), or TAA Trust ("TAA specialist"). Both are clearly viable options.

#### Conclusion

This paper addressed the question of TAA value add from a practical, experiential viewpoint, focussing on outcomes from a large multi-sector fund managed by the company. It outlined a TAA approach and process which delivered superior returns (0.51% pa) on a consistent basis over the longer term (seventeen years). It also examined the issue of "significant change" in TAA and found that expansion and augmentation of TAA resources and processes did deliver a consistent, large increment in TAA value add, with reduced risk, to deliver a meaningful increment in manager skill.

The paper also made a casual observation relating to the issue of the Australian industry trend to sector specialist programmes in recent years and the related question of who is looking after the interaction between asset classes. There is a case to be made in respect of the potential alpha opportunities available from TAA specialists.

So. Did you throw the TAA baby out with the bathwater?

# **Bibliography**

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- "Sector Report Multisector", <u>Ken Ostergaard and Macrus Hanel</u>, Standard & Poors (S&P), July 2007
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## References / Notes

- a) ING Investment Management, Australia
- b) TAA value added analysis was conducted on the Managed Growth Superannuation Fund, a flagship fund managed by ING Investment Management Australia ("the company). The fund had AuM of A\$3.57 billion as at July 15, 2007