



Maximising investment efficiency



In today's financial marketplace, maximising the return of an investment strategy is critical to a large super fund's long-term success.

Recent developments in Australian equities strategy demonstrate that it is possible to embrace the separation of implementation and decision-making, in active portfolio management, as a method of maximising the net return. Clients benefit from this approach through improved flow management and reduced turnover – leading to improved net returns through lower capital gains tax, brokerage and market impact.

Centralised portfolio management

Late in 2004, Vanguard extended its suite of implementation services to provide for the efficient implementation of active Australian equity strategies – at the security-level. This centralised portfolio management service has great

potential to maximise the net returns of multi-manager active portfolios, by minimising costs.

The inspiration for its development was a seminal paper by Dan diBartolomeo of Northfield Information Services, Inc. entitled: *A Radical Proposal for the Operation of Multi-Manager Investment Funds*. This paper can be found in Vanguard's Institutional resource library at www.vanguard.com.au.

In his paper, Dan proposes that large investment funds, employing multiple active equity managers, convert to a system of centralised management. He states that “more efficient use of manager forecasting skill should lead to higher returns and great improvement in the ability to control risk of the total fund.”

The separation of implementation and decision-making in active portfolio manage-

ment is an innovative strategy and is at the heart of centralised portfolio management.

How does centralised portfolio management work?

There are two rule sets – mandated by the sponsor fund – that govern the determination of the policy benchmark and implementation of the centrally managed portfolio. Some typical examples are:

- Where a sponsor fund has a single small-cap specialist manager, small holdings can be excluded from the policy benchmark. Such exclusions typically have a very small effect on portfolio risk yet they reduce ‘information leakage’ to the centralised portfolio manager.
- The policy benchmark can be updated periodically – weekly, fortnightly or even monthly – rather than continuously. This reduces the likelihood of any interference between active manager trading and that of the centralised portfolio manager. It also helps to reduce the turnover



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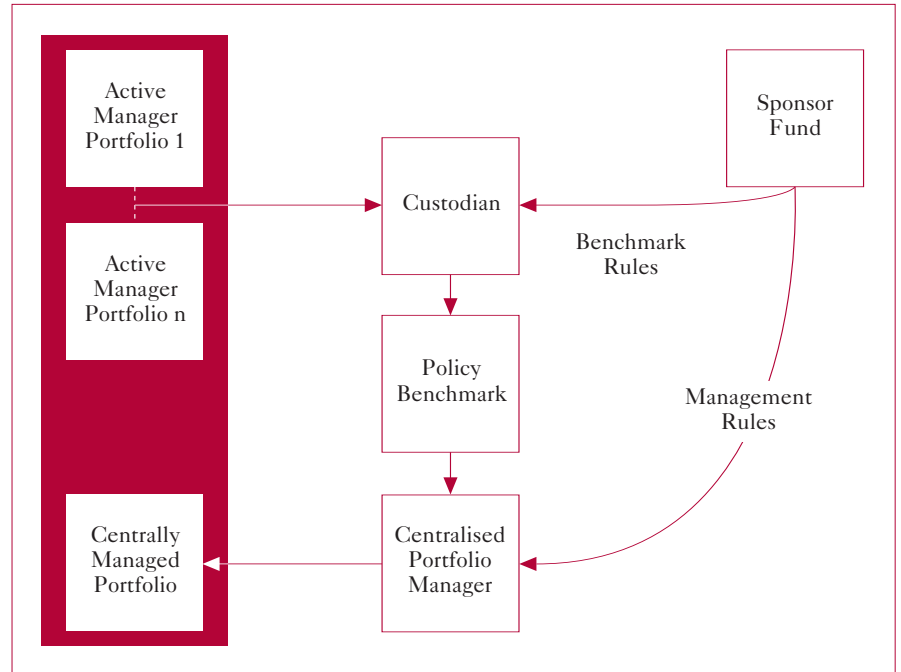
of the strategy, as opposing trades of the underlying active managers net off on consolidation. However, less frequent updating will increase the tracking error between the centrally managed portfolio and the underlying active strategy.

- The delivery of the policy benchmark, to the centralised portfolio manager, can be lagged. This also reduces the likelihood of trading interference between the active managers and the centralised portfolio manager. However, increasing the lag does not reduce turnover but will increase the tracking error between the centrally managed portfolio and the underlying active strategy.
- The sponsor fund can mandate a level of risk tolerance between the centrally managed portfolio and the policy benchmark. Each time the policy benchmark changes, there is a shift in the relative risk of the centrally managed portfolio. Replicating the changes minimises the tracking error but replicates the turnover. Accepting a modicum of tracking error allows the centralised portfolio manager to significantly reduce turnover.

The lagged nature of the policy benchmark demands an analysis of the historical trading activity of the underlying active managers. Those with very high turnover approaches often have alphas that can decay within the sampling window and/or lag. Those with alphas that are realised over the medium to longer term, are more natural candidates for inclusion in the policy benchmark. We work with prospective clients to determine appropriate rules for the policy benchmark and implementation of the centrally managed portfolio.

Diagram 1 illustrates an example of centralised portfolio management in operation. Rules governing the construction of the policy benchmark are agreed, and through their application, the Fund's master custodian periodically provides data on the aggregate Australian equity portfolio as represented by the policy benchmark, to the centralised

Diagram 1 Example of centralised portfolio management



portfolio manager. The centralised portfolio manager then implements the strategy, whilst also efficiently managing all cashflow as part of the process.

The following sections outline why this strategy is expected to outperform the underlying (aggregate) active strategy over time, as well as quantifying the expected outperformance using some theoretical assumptions.

Key benefits of the strategy

1. Minimising distraction of active managers from their primary task of adding value

Client-directed flows are generally a small percentage of total portfolio activity. They are a distraction for many active managers and often lead to 'cash drag' and a con-

sequent reduction in net performance. Vanguard's activity as an index manager is dominated by client-directed flow and – as the centralised portfolio manager – we can efficiently invest all cashflow. The expected net positive flow over time can be delivered to active managers in specie, rather than in cash, to maintain target allocations.

Many funds use transition managers to effect a new manager selection. Part of our role as the centralised portfolio manager is that of a standing transition manager – with similar expected benefits.

2. Cost savings due to reduced turnover

With careful selection of the frequency of policy benchmark updates and the risk tolerance for the centrally managed portfolio, there is a significant reduction in turnover compared with the underlying active portfolios. The degree of trading avoided varies from case to case, but is typically between 50% and 75% of the underlying trading. For taxable investors, there is a further saving from reduced turnover, being the reduction in capital gains tax paid.

3. Cost savings from the investment of flow

Vanguard, being focused on best execution, pays lower brokerage rates than most active managers. We also expect to trade with less market impact as less information is ‘released’ to the market due to time lags in implementing changes and the ‘anonymising’ effects of the aggregation process.

4. Releasing active manager capacity

As the centralised portfolio manager is implementing the aggregate active strategy – not the individual active portfolios – the market impact of implementation is reduced. This can ‘free up’ some of the management capacity of the underlying active managers, allowing a fund to invest a greater amount in a given manager mix.

Case study example

An example of the estimated savings for a large institutional investor is shown in the table below. This is a theoretical example, where we have made the following (reasonable) assumptions:

- Proportion of total Australian equity portfolio ‘centralised’: 33% pa
- Turnover of active managers: 80% pa (one way)
- Cashflow: 10% pa
- Turnover of centralised portfolio: 26% pa (one way)
- Brokerage paid by active managers: 0.25%
- Brokerage paid by centralised portfolio manager: 0.10% (maximum)
- Average bid/ask spread plus market impact of active managers: 0.20%
- Average bid/ask spread plus market impact of centralised portfolio manager: 0.10%

With an assumed 33% of the total Australian equity portfolio managed through the centralised portfolio strategy, the estimated saving is more than 0.20% pa of its value.

For a A\$3 billion fund with A\$1 billion in Australian equities, this is an estimated saving of more than A\$2 million pa.

Vanguard capability

Vanguard established its Australian business in 1996 and its Melbourne-based investment management team now manages A\$34 billion of indexed assets. With a business relationship going back over 17 years and the neutrality of the ‘exclusively index’ approach Vanguard has built in Australia, it was natural for MLC to work with Vanguard, in Australia, to develop an implementation of centralised portfolio management.

In late 2004 MLC appointed Vanguard to manage an ‘emulation portfolio’, for their multi-manager Australian equity fund, that tracks the performance of a customised benchmark based on a combination of their active manager portfolios.

According to Eric Smith, Vanguard’s Chief Investment Officer, “Vanguard worked with MLC to develop an appropriate benchmark approach – capturing the active returns while avoiding potential conflicts between the active managers and ourselves. We are pleased to be able to assist MLC in achieving its Australian equity investment objectives, utilising our scale and skills in the implementation of an optimised approach to track their benchmark.”

Efficiency is the winner

It is undeniable that for multi-manager Australian equity portfolios, net returns can be significantly improved through centralised portfolio management. It is reasonable to expect savings in the order of 0.20% pa – with further gains to be

Other cost-minimisation strategies

Indexing

In Australia, Vanguard began by designing, implementing and offering index funds across a wide range of the traded asset classes – the very low cost delivery of market returns. We firmly believe index funds are the ideal core of any investment strategy – particularly one with a long-term focus.

Rebalancing and cashflow management

Total fund rebalancing and cash flow management for large, institutional clients is a service designed to minimise any leakage of value from portfolios due to implementation, whilst controlling portfolio risks relative to agreed strategy.

Using this strategy, Vanguard services 6 clients with 15 investment strategies, totalling over A\$21.2 billion of assets between them, in addition to our 12 diversified funds holding over A\$1.7 billion. For these clients we handle 100% of cash flow, where we direct money to active and core index portfolios.

	Brokerage saved % pa	Spread and market impact saved % pa	Savings % pa Centralised Portfolio	Savings % pa Total Portfolio
Turnover avoided	0.27	0.21	0.48	
At 33%				0.16
Turnover managed	0.08	0.04	0.12	
At 33%				0.04
Flow managed	0.02	0.01		0.03
Total				0.23

Source: Vanguard



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made from management of portfolio flow and reduced realisation of capital gains.

The approach becomes practical (and cost effective) for institutional investors with over A\$1 billion in Australian equities.

Each mix of managers has its own dynamic – and each sponsor has other factors to consider. And the relatively simple approach described in this article can be applied more aggressively. As we have with MLC and are currently doing with number of other large

institutions, our role is to work with potential clients to tailor the solution to their circumstances.

If you would like more information on our services please contact our Institutional Sales team on (03) 8888 3876. 📞

The MLC experience

We asked Paul Duncan, Head of Investment Strategy, MLC Investment Management, three key questions about MLC’s emulation strategy after almost one year of operation.

1. What do you see as the key benefits of an emulation portfolio?

“The key benefits of MLC’s emulation initiative are the transaction-related savings that result from a more efficient implementation of a multi-manager strategy; regardless of whether this is via a model portfolio, fund-of-funds or multi-manager based approach. This occurs whenever one manager’s purchases/sales are offset by another’s sales/purchases. While each manager needs to implement their respective transactions to put their strategies into effect, the resulting turnover is higher than that implied by the net change at the aggregate strategy level. Emulating the investment characteristics of a strategy’s aggregate holdings reduces that turnover. The greater the reduction in turnover, the greater the savings due to reduced implementation-related leakages such as brokerage, bid-offer spreads, adverse market impact effects, and capital gains tax.

Savings also arise on the transactions that are still necessary within the emulation portfolio because of the lower brokerage associated with passive management and its inherently information-less trading which helps reduce adverse market impact effects.”

2. Has the MLC emulation portfolio been successful?

“MLC’s emulation initiative has successfully emulated the risk and return characteristics of its underlying multi-manager strategy. It has also achieved this with markedly lower turnover than the sum product of the strategy’s underlying managers. This has been beneficial to MLC’s investors as it reduced the implementation-related leakages which adversely impact client wealth; namely brokerage, bid-offer spreads, adverse market impact effects and capital gains tax. The last point is particularly important for investors in distributing trusts as it results in a more stable, tax effective, income stream; which makes it is easy to manage from a financial planning perspective.”

3. How important is emulation to your long-term Australian equity strategy?

“The dominant driver of the risk and return characteristics of an Australian



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Paul Duncan,
MLC Investment Management

equity portfolio are its underlying holdings. That said, we are also cognisant of the extent to which the costs associated with implementing a strategy can adversely impact client wealth and seek to ensure that these costs are appropriately managed. In that regard, as with our emulation initiative, MLC will continue to explore ways in which we can ensure the most efficient execution of a multi-manager strategy.” 📞

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