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THE ROAD TO REWARD:

FOR BETTER AFTER-TAX RETURNS, SHOULD SUPER FUNDS BE TURNING TO THEIR CUSTODIAN OR A SPECIALIST INVESTMENT MANAGER FOR HELP?

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Investing with an after-tax focus is an idea whose time has come. But every idea is only as good as its implementation, and superannuation funds are now facing the important question of who can help. This paper examines two alternative approaches available to funds today. The first is a custodian solution known as propagation (or Tax Parcel Optimisation). The second approach employs a specialist investment management solution known as Tax-Managed Centralised Portfolio Management (CPM). The paper describes the differences and highlights factors which make one approach more appealing than the other, depending on the fund's varying objectives and preferences.

The paper also offers the results of Parametric's analysis of the real-life trading histories of a sample of Australian superannuation funds to compare the return benefits of propagation and Tax-Managed CPM. It finishes by suggesting a decision framework to help funds practically consider these key alternatives to determine the "best fit" solution for their needs and objectives.

This is important and timely research because, increasingly, funds are seeing propagation and Tax-Managed CPM as two different ways of delivering better after-tax returns to members. Surprisingly, there seems to be a lack of robust research findings and practical guidance available to help funds make an informed choice. The paper's aim is to provide superannuation funds with the "missing pieces of the puzzle" necessary for them to choose between propagation and Tax-Managed CPM in an educated way. The research suggests a marked difference in return enhancements and observes an average performance improvement of five or six basis points each year from propagation compared to an improvement of approximately 50 to 90 basis points each year from Tax-Managed CPM. While these return differences should form an important part of a fund's decision-making, there are, of course, legitimate reasons why funds will not base the decision between propagation and Tax-Managed CPM solely on the expected return benefits.

What is propagation?

Propagation is a tax record-keeping process which is designed to remedy a shortcoming in the way custodians typically set up multi-manager equity portfolios for an institutional client. The typical set up in the non-propagated case is for the custodian to establish a discrete custody account for each manager. Each manager's hold-

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ings and trades are "ring-fenced" within the manager's own account.

From a capital gains tax (CGT) perspective, when a manager trades stock parcels, the trades are allocated tax lots from the manager account's CGT records alone. So, for example, if a manager trades BHP and the superannuation fund has chosen a default "Highest (Cost) In, First Out" (HIFO) tax lot selection, the custodian's system will look across that manager's (and only that manager's) entire holding of BHP stocks to allocate the stocks with the highest tax cost base to the trade. This allocation drives the amount of CGT ultimately payable by the superannuation fund in respect of the trade.

The problem with this non-propagated set up is that it ignores important opportunities to reduce CGT.

Australian tax law recognises one legal taxpayer (the superannuation fund) and allows tax lots to be allocated from, and CGT to be calculated across, the entirety of the fund's holdings. There is no requirement to limit the tax lot selection to the one manager's custody account, which means that the typical multi-manager custody set up is selected for operational convenience, but belies (though it does not contravene) the tax law. In the above example, it is in law permissible for a fund to choose from any manager's holdings of BHP stocks to allocate tax lots to one manager's trades, and yet so few funds are taking advantage of this benefit. This clearly creates a bigger opportunity to reduce CGT. If the fund structure is able to allocate tax lots from a much wider universe of BHP stocks, all the fund needs to do is to find one parcel sitting in a different manager's custody account with better tax characteristics (i.e. a higher tax cost and/or longer holding period) to reduce its CGT bill.

This is the solution that propagation provides – to remove the "ring-fencing" for CGT purposes and allow tax lot selection and CGT optimisation to occur across the whole of the superannuation fund's equity portfolio.

How does propagation differ from tax-managed CPM?

It should be clear from the above description that propagation is not an investment management solution. It is a kind of ex-post tax management technique in which tax is not considered as part of investment decision-making and execution, but is dealt with as part of the custodian's tax record-keeping, as a kind of "damage dampener" after the fact. It leaves a fund's investment structure, strategies and manager mix unchanged, which is one of the attractions of propagation. But, it focuses solely within the domain of reducing CGT and ignores other taxes and tax offsets that impact investment returns. It is not a service that offers performance measurement or benchmarking of an equities portfolio on an after-tax basis.

If degrees of simplicity and sophistication are plotted on a spectrum, propagation sits far at one end of the spectrum, and Tax-Managed CPM far to the other end. This is certainly not a criticism of propagation as it is important for funds to be able to choose from a menu of after-tax solutions ranging from the simpler, more "light-touch" all the way to the best-of-breed high-end solutions. Typically, the main attractions of propagation for funds are:

- Its impact is confined to a fund's back office, with its front office arrangements not affected.
- It does not introduce an additional party to the fund's investment arrangements, nor additional tracking error (investment risk).
- As a relatively simple solution, it costs less than more sophisticated solutions (like tax-managed CPM). For funds competing strategically on the basis of headline fees (rather than net returns), this will remain a particularly attractive feature of propagation.

Tax-managed CPM contrasts with propagation in many ways. CPM is not just an after-tax tactic. It is an integrated investment management solution which adds an experienced implementation manager – the one manager with a complete, holistic view of the fund's entire equities portfolio – to help to co-ordinate the fund's existing manager mix. The CPM manager's role is to add value through implementation efficiency; that is, to exploit a small (client-set) tracking error budget, and to deliver the investment recommendations of the other managers in a way which manages on an "ex ante" basis a broad range of taxes, transaction costs and other agency costs impacting the fund's portfolio. Tax-Managed CPM accounts provide detailed performance measurement, benchmarking and attribution on both a pre-tax and an after-tax basis.

The centralisation aspect of a Tax-Managed CPM approach is what creates a natural or innate propagation environment. By this, we mean that all equities sit within a single CPM custody account . Hence, any benefit that a fund would expect from using its custodian's propagation service is also delivered naturally by a CPM portfolio.

Centralising a fund's equity holdings within one physical investment pool - representing the best ideas of the superannuation fund's chosen managers - has a number of other benefits, including greater transparency, ease of implementing consistent whole-of-portfolio objectives (such as a factor tilt, downside protection strategy or centralised proxy voting), removing portfolio redundancy and eliminating the need for a transition manager.

Typically, the main attractions of tax-managed CPM for funds are:

- It is an all-encompassing implementation solution - especially useful for funds with a change program.
- It is designed to improve investment returns appreciably, so it can "pay for itself" in terms of generating excess returns well above fees (see further below).
- It simplifies fund analytics and empowers fund decision-making by having its equity holdings all in the one place rather than spread across discrete manager silos.

The following table summarises the key differences between propagation and tax-managed CPM.

Figure 1. Differences Between Propagation and Tax-Managed CPM

	Propagation	Tax-Managed CPM
Provider	Custodian	Specialist manager under Investment Management Agreement
Impact on investment approach	None – 'back office' solution	Some – unbundles current manager delivery into intellectual property (retained by active managers), and implementation (by new CPM manager)
Scope - tax	CGT only	All investment taxes, including income tax, CGT, franking credits and Foreign Income Tax Offsets
Scope – non-tax	None	Other implementation drag, including redundant trades, excessive brokerage and FX commissions, multiple cash accounts and transition management
Performance reporting	No after-tax benchmarking or performance reporting offered	After-tax benchmarking, reporting and attribution across all managers and CPM portfolio
Transition to solution	No project resources, but typically can only transition once a year (1 July)	Any time during year; moderate project with 3 months to implement
Impact on operational risk	None	Potentially simpler; exposure to one manager, not many
Track record	Limited and short term	Well-established and proven in U.S. over 13 years; limited in Australia

It is noted that a key feature of propagation is its simplicity and "light-touch" impact, which no doubt is valued by funds facing the task of managing a dynamic set of priorities with a limited resources budget. Yet within that set of challenging and competing priorities is the fund's most fundamental mission: Its sole purpose of delivering a savings pool to members to fund their retirement. Current estimates are that members' collective savings are $768 billion short of what they need to have a reasonable standard of living in retirement , . Hence, we turn now to the important matter of quantifying the benefits of a propagation approach compared to tax-managed CPM in order to measure the impact on funds and member returns on an annual basis.

Comparing benefits – data and methodology

The results presented in this paper have been calculated based on the trading histories of 16 superannuation fund equity portfolios (10 Australian equities, six international equities) over periods generally ranging between two to four years (with a two-year minimum). The funds had previously approached us and agreed to provide multi-year trading histories for fund-specific research and analysis. Subsequently, the funds consented to their data being analysed and results included (on a no-names basis) for the purposes of this broader published study.

To measure the benefits of propagation, we identified two portfolios for which the funds had provided actual tax lot-specific data at start date and transaction data for three and four years each. One fund used seven different Australian equity managers over the trading period, the other used five. Monthly gross turnover ranged from a low of 1.13% to a high of 11.47%. The overall portfolios, which were predominantly large caps but with a small-caps allocation as well, had each generated strong pre-tax returns of more than 9% per annum and more than 15% per annum across the periods analysed.

It is assumed the funds already adopted a tax-efficient 'highest (cost) in, first out' (HIFO) tax lot selection method and month-end trading only with no transaction costs or fees. With these assumptions, a calculation was made on the after-tax returns of the portfolio over the trading period analysed under two scenarios – propagated and non-propagated – and a comparison of after-tax returns at the end of the period. After-tax returns were calculated based on the superannuation fund tax rate and rules using a pre-liquidation calculation methodology.

To measure the benefits of tax-managed CPM, it is assumed as a starting point that all portfolios were propagated and included portfolios for which the fund had provided with actual or approximate tax lot-specific data at start date (reinstating the sample size to 16). Using the same assumptions and calculation methodology as set out above, each portfolio's trade history was run through a simulated tax-managed CPM process. For each portfolio, a calculation of the after-tax return at the end of the period in the tax-managed CPM scenario was made as well as a comparison to its counterpart scenario with no CPM and no tax management (propagation only).

Results

The analysis showed that propagation delivered an after-tax return increase of five basis points each year for one fund and six basis points each year for the other fund. Tax-managed CPM, by comparison, delivered over the total sample set of funds average after-tax return increases of 44 to73 basis points each year on Australian equities and 46 to 86 basis points each year on international equities, as set out in Figure 2 below.

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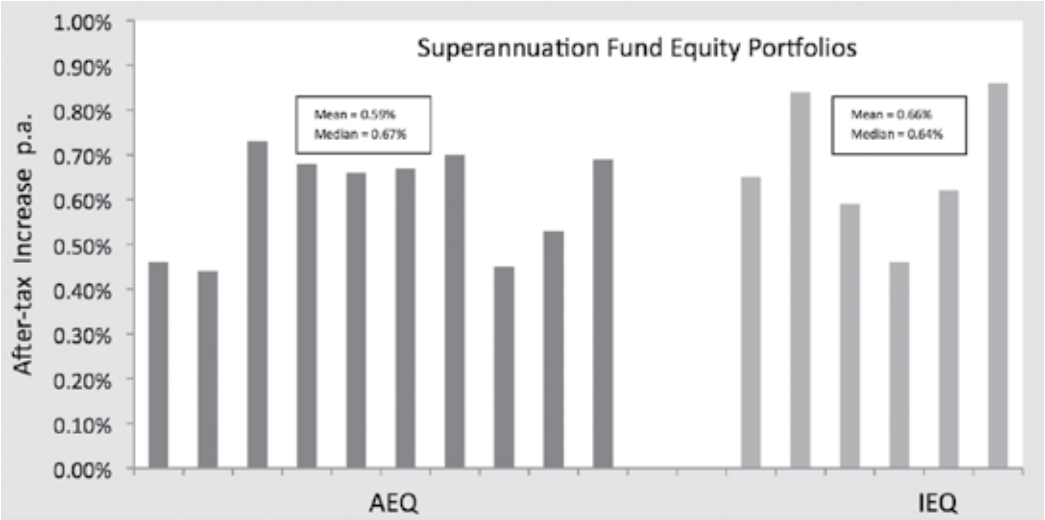
Any benefit that a fund would expect from using its custodian's propagation service is also delivered naturally by a CPM portfolio.

Figure 2. Annual increases in after-tax return of equities portfolio from tax-managed CPM (hypothetical)



Source: Parametric 2015. Hypothetical results are for illustrative purposes only, do not represent the actual returns for any investor or client and may not be relied upon for investment decisions. Actual portfolio returns will vary. All investments are subject to loss.

Most, if not all, of the funds in chart above were not propagated, meaning that we calculate the total return enhancement delivered by tax-managed CPM to the sample set, including propagation, to be in the range of 50 to 90 basis points each year.

Are these results reasonable and, if so, what do they tell us? It is certainly reasonable to expect tax-managed CPM to deliver more benefits than propagation given the starting point that propagation only functions within a very narrow, confined opportunity set when compared to tax-managed CPM. Funds may, however, find the size of the difference surprising. In fact, some may be sacrificing well over 40 basis points, perhaps as much as 86 basis points, in after-tax returns each year just to stick with the simplicity of their custodian's solution, in addition to forgoing the non-tax implementation savings associated with a CPM solution like generally lower brokerage, FX commissions and custody charges .

While the data indicates that propagation's value may contribute just a fraction of what tax-managed CPM can deliver, each fund's actual circumstances will, of course, differ. There are a few scenarios where the absolute value of propagation to a fund may be higher than measured here; for example:

- Where the equity holdings of several managers in a fund's multi-manager portfolio significantly overlap (portfolio redundancy).
- Where there are a number of high-turnover equity managers in a fund's portfolio.
- Where each manager's sell trades tend to be exclusive.
- Where there is a history of change in the fund's equity manager line-up so that, through time, there is a great variation in the tax attributes (cost base, holding period) of the same stocks held by different managers.
- Where the move to propagation effects, at the same time, a change in the fund's tax lot selection method from say "First In, First Out" (FIFO) to HIFO (noting that this can also be done without the fund adopting propagation).

It is important for funds to consider whether their equity portfolios possess some of the above attributes, which raises the possibility that the benefits of propagation to them may be higher than the five or six basis points per year measured in this paper. Of course, this also increases the potential absolute value of Tax-Managed CPM (which incorporates propagation) and leaves the relative attraction of tax-managed CPM over propagation, in terms of comparative returns, unchanged.

Propagation or tax-managed CPM – a practical decision framework

Decisions relating to superannuation investment portfolios are complex and rarely one-dimensional. In presenting the findings on the relative value of propagation and tax-managed CPM, the superior expected return attributes of tax-managed CPM will not necessarily be the deciding factor. Below, we list some key comparisons that should figure in most funds' propagation or CPM deliberations:

- Importance of finding new sources of returns to improve member outcomes – a fund which has a return focus as a priority should be more attracted to tax-managed CPM relative to propagation.
- Need for portfolio transparency, agility, agency alignment and other benefits of CPM – the more the fund

The quote

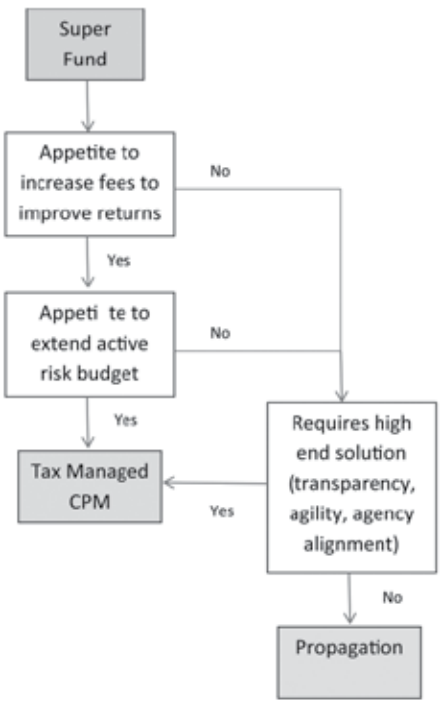
The results we present in this paper have been calculated based on the trading histories of 16 superannuation fund equity portfolios.

values these, the more attractive tax-managed CPM should be relative to propagation.

- Appetite for Simple Versus Sophisticated Solutions – funds with a very limited time and resource budget may prefer propagation over tax-managed CPM as a "light-touch" solution.
- Appetite for Investment Risk/Tracking Error – as tax-managed CPM does require the fund to establish an additional small, tracking-error budget (client-set), a fund with zero appetite to vary its tracking error budget, even minimally, will tend to prefer propagation which has no impact on investment risk.
- Fee Sensitivity – the 50 to 90 basis points return increase each year from tax-managed CPM versus five to six basis points from propagation leaves much room for CPM to remain the stronger return enhancer even on a net-of-fees basis. However, a fund with an extreme resistance to any additional headline fees should, again, prefer propagation to tax-managed CPM.

The paper has captured these choices in the following decision framework which may be helpful for superannuation funds evaluating the merits of propagation and tax-managed CPM as competing after-tax solutions.

Figure 3. Decision framework to help funds choose between propagation and Tax-Managed CPM



Conclusion

At a recent fund manager briefing, funds were warned that: "Investors will 'get less and enjoy it worse' in the years ahead as a result of poor earnings growth, low activity levels and little economic progress" .

It is no surprise then, that funds are turning to after-tax investing, and implementation efficiency in general, as a potentially fertile area to help deliver on their investment proposition to members. This reflects the growing realisation that every idea is only as good as its implementation, and that inefficient implementation has real, even if not measured, costs to superannuation funds and members.

This research paper begins by contrasting the custody industry's after-tax approach known as propagation or tax parcel optimisation with a specialist investment management solution known as tax-managed CPM and notes that, increasingly, funds are seeing these as two shortlisted alternatives to consider. It shares a concern that superannuation funds seem to lack critical information when choosing between the two, especially in regard to the relative value-add of each in terms of increasing after-tax investment returns.

We can now answer this critical question and, in doing so, add the "missing pieces of the puzzle" to help superannuation funds choose between propagation and tax-managed CPM in a much more educated way. The return differences are stark: A performance improvement of five to six basis points each year from propagation compared to around 50 to 90 basis points expected each year from tax-managed CPM (which brings with it an innate propagation environment).

Superimposing the realities of how funds operate, it is noted that superior return attributes alone will not make tax-managed CPM a universally preferable solution for all funds. Listed are other key considerations relevant to a fund's choice between a "light-touch" propagation solution and a high-end tax-managed CPM implementation solution. There is some practical guidance for funds to move through the key decision points using the decision framework.

Drawing back, the paper wants to emphasise that any steps a superannuation fund takes towards managing the tax consequences of its investment activities is a welcome step forward, and away from the tax-naive traditions of the past. It is better still when the steps encompass the more fertile area of implementation efficiency in general. The propagation or tax-managed CPM? discussion is a good reminder that the industry has passed through the important initial decision gate of whether to recognise the value of after-tax investing. This is a significant breakthrough as more funds turn to questions of how and who rather than if. As funds now head down "the road to reward", we encourage trustees and decision-makers to be diligent about choosing the right direction for their fund and dogged about demanding good, robust information to support their decisions. **FS**

The quote

The 50-90 basis points return increase each year from Tax-Managed CPM versus 5-6 basis points from propagation leaves much room for CPM to remain the stronger return enhancer even on a net-of-fees basis.