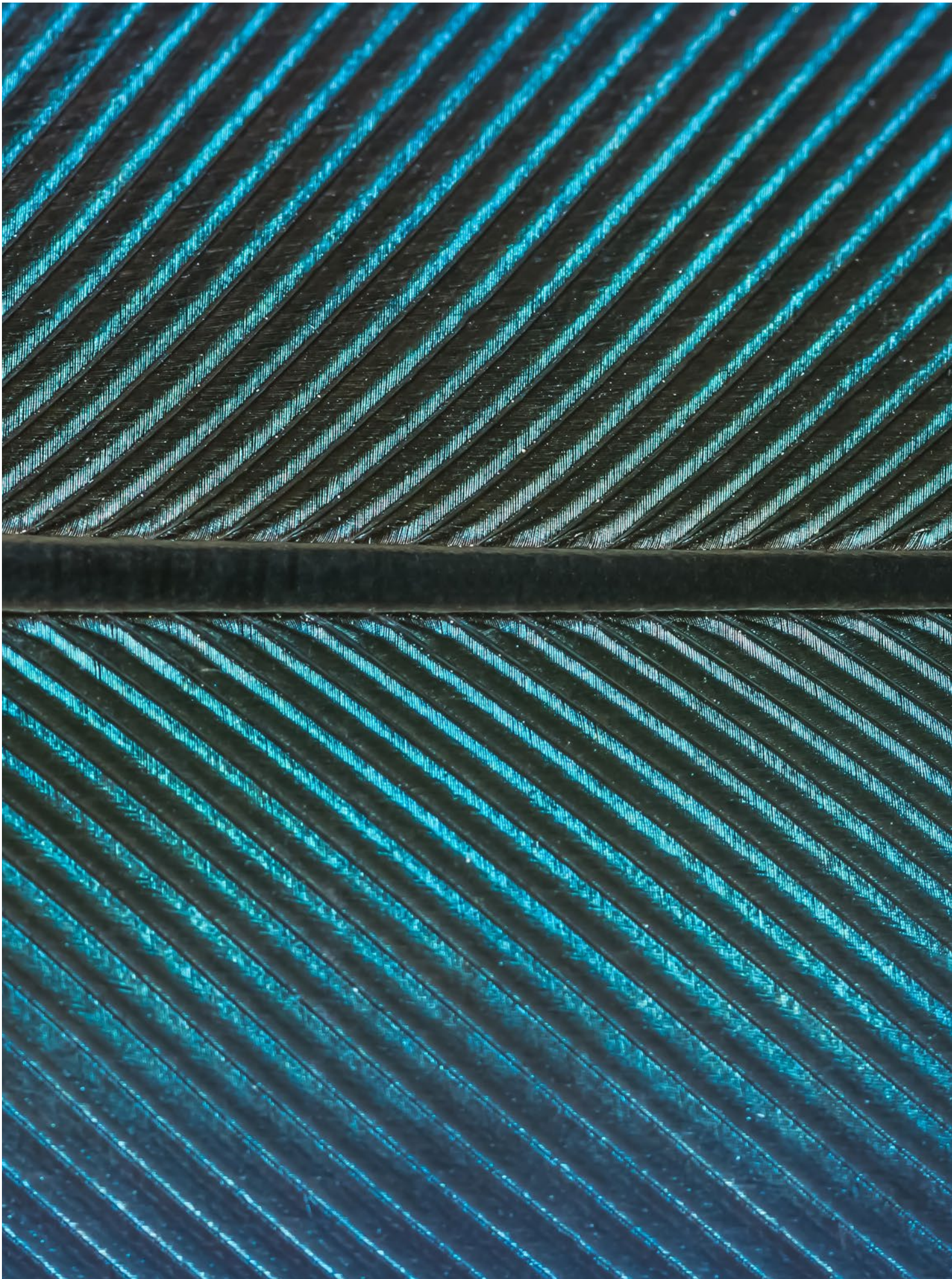


Thinking Ahead Institute

Total Portfolio Approach (TPA)

A global asset owner study into current and future asset allocation practices





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Introduction

Total portfolio approach ('TPA') – in summary

Willis Towers Watson (WTW), in conjunction with the NSW Treasury Corporation (TCorp – a Thinking Ahead Institute member), conducted a global study into current and future asset allocation practices of leading asset owners, with a particular interest in better understanding the characteristics of what has become known as a Total Portfolio Approach (TPA) to portfolio construction.

This paper includes discussions on the findings of this 'peer study' and describes the research investigations being carried out in the Thinking Ahead Institute to take this concept further.

Total portfolio approaches have been evolved by some leading organisations around the world as a more 'joined up' investment philosophy that results in a more streamlined approach to portfolio construction.

ATP, CPPIB, Future Fund, GIC, New Zealand Superannuation Fund and QSuper (and TCorp themselves) have all identified themselves with this approach. Total portfolio approaches actually cover a spectrum of approaches that tick three boxes:

- **They start with goals** – very clearly specified investment goals
- **They employ one joined-up process** – a competition for capital amongst all investment opportunities
- **They are dynamic** – they operate in real-time governance.

This study of leading asset owners confirms that both in theory and in practice, TPA offers theoretical advantages over the more traditional Strategic Asset Allocation (SAA) approach, with these three edges in dynamism, decision framing and decision-making as described below.

In the following section, we summarise the major findings of the peer group study. We close with our conclusions and the outline of further research being undertaken by the Institute.

We would like to record our appreciation and extend our thanks to Stewart Brentnall and his colleagues at TCorp for their important role in the completion of this study.



“Total portfolio approaches have been evolved by some leading organisations around the world as a more 'joined up' investment philosophy that results in a more streamlined approach to portfolio construction.”

Participant funds

Location and demographics

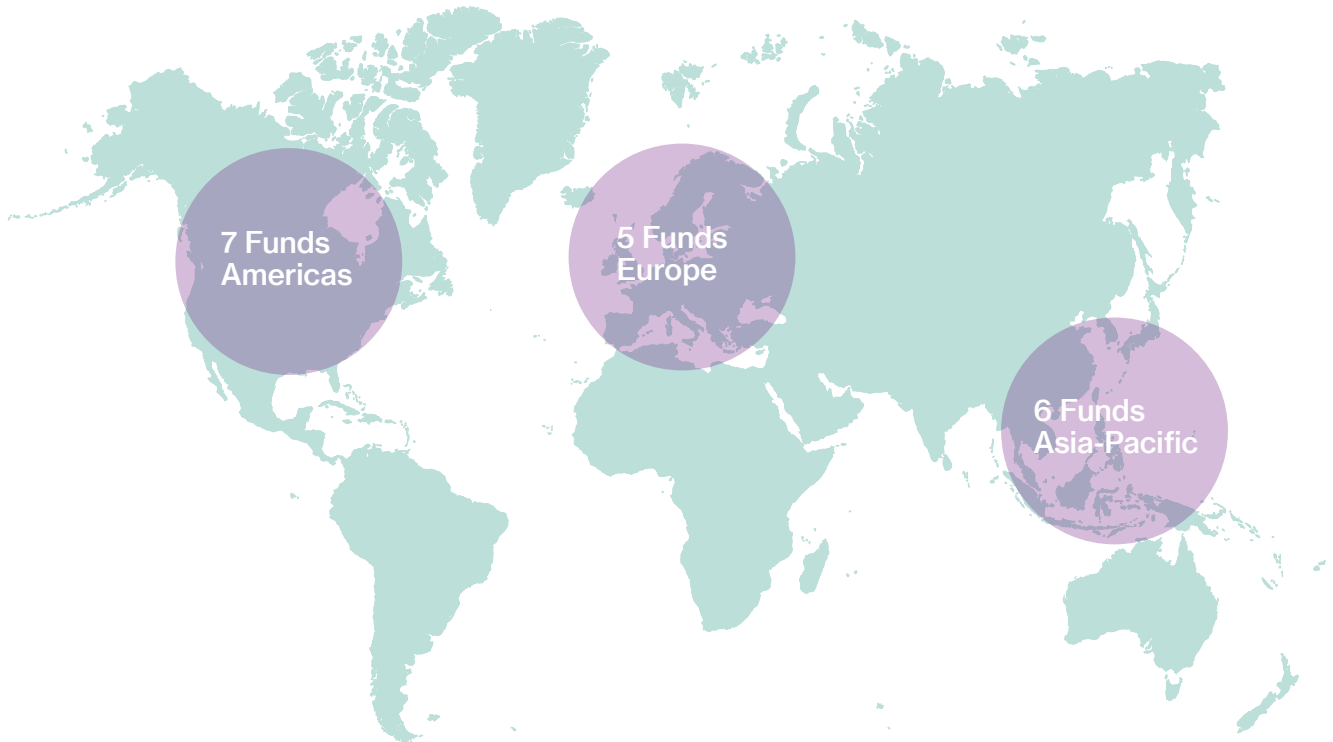


Figure 1 – Fund size (US\$bn)

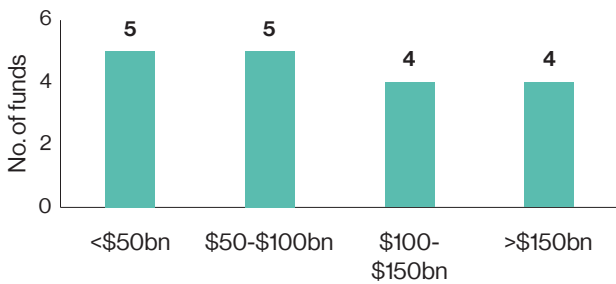


Figure 2 – Investment professional team size

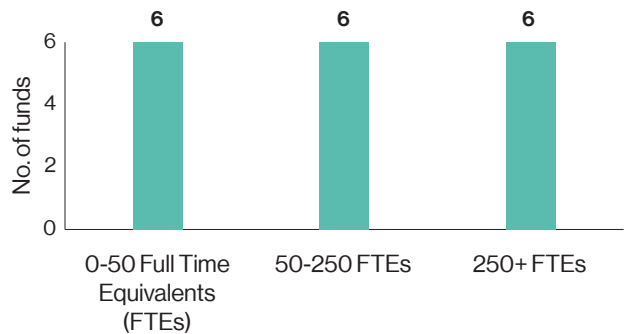


Figure 3 – Definitions of success

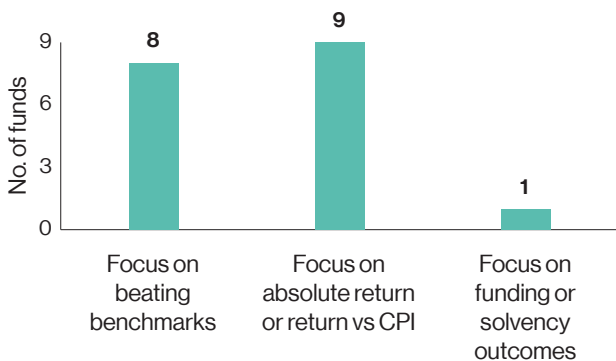
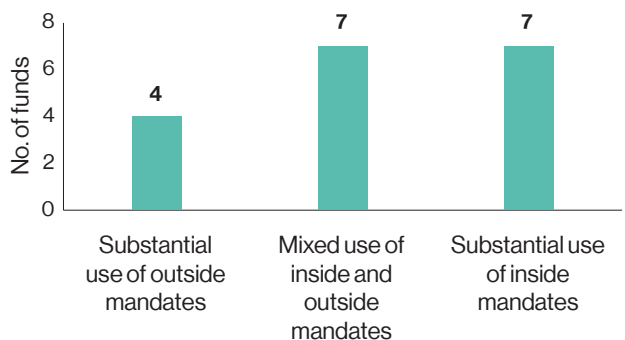


Figure 4 – Insourcing



Findings

1. A Total Portfolio Approach has a number of different attributes; asset owners differ in how much emphasis they place on these

In the on-line questionnaire, we described portfolio construction approaches as lying on a spectrum, with traditional SAA based approaches sitting at one extreme and a “fully fledged” version of TPA sitting at the other extreme.

Whilst this is a simplification, it is still broadly correct. However it is helpful to reflect that there are a number of components to the portfolio construction process and that a TPA can be thought of as reflecting greater levels of conviction (in moving from the left-hand side ('LHS') to the right-hand side ('RHS') on a number of different components, as illustrated below:

Different funds placed greater emphasis on some of these elements than on others, at least in terms of how they thought about applying a TPA.

Whilst many funds embraced the principles of moving further to the right-hand side on the spectrum below (i.e. they embraced total portfolio thinking), the extent to which they were able to actually do so was influenced by a number of factors (see next point).



<i>Performance assessed vs.</i>	Benchmarks	Fund goals
<i>Success measured by:</i>	Relative value added	Total fund return
<i>Opportunities for investment defined by:</i>	Asset classes	Contribution to total portfolio outcome
<i>Diversification principally via:</i>	Asset classes	Risk factors
<i>Asset allocation determined by a:</i>	Board-centric process	CIO-centric process
<i>Portfolio implemented by:</i>	Multiple teams competing for capital	One team collaborating together

2. Portfolio construction approaches vary widely, with a particular fund's approach largely determined by their organisational design and governance structure

The key to simplifying a complex organisation and understanding its effectiveness is to break it down into its three functional parts:

- **Governance model** – organisational structure, resources, decision making, technology
- **People model** – talent, culture, employee value proposition, incentives
- **Investment model** – beliefs, risk framework, portfolio construction process, systems and tools.

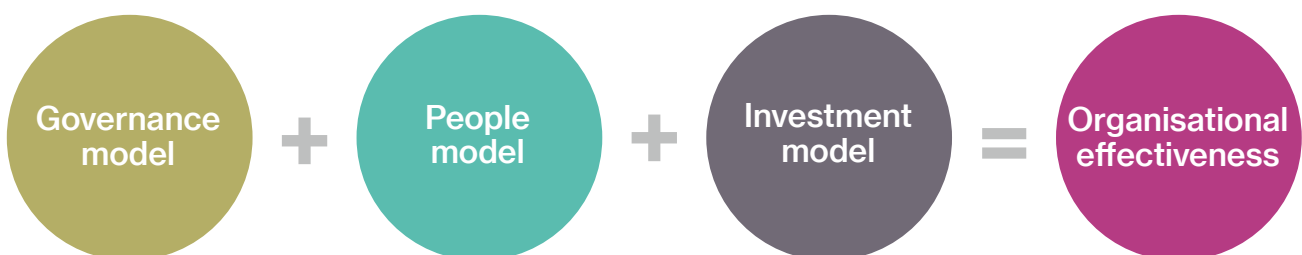
A notable feature of the peer study was that the investment model (and hence the fund's approach to portfolio construction) was substantially influenced by the fund's governance structure and the people employed (with their respective investment beliefs and skills).

The impact of governance is seen in the inherent stickiness of the principle that “the board owns the SAA” – this makes it difficult to move away from an SAA-based approach and to adopt a TPA.

This is because a TPA works better with a governance structure that facilitates delegation, but with appropriate levels of oversight and engagement between the board and the management team.

Funds that are more advanced in applying a TPA appear to have had a significant “impulse” that led change, for example from:

- A strong leader (often the CIO) who has led significant organisational change, driven by a strong belief that pursuing a different approach would result in significant benefits
- The benefits of starting with a “blank sheet of paper”, either because the fund was newly formed or was the result of an amalgamation of a number of funds.



“A notable feature of the peer study was that the investment model was substantially influenced by the fund's governance structure and the people employed.”

3. The theoretical advantages of TPA are largely accepted

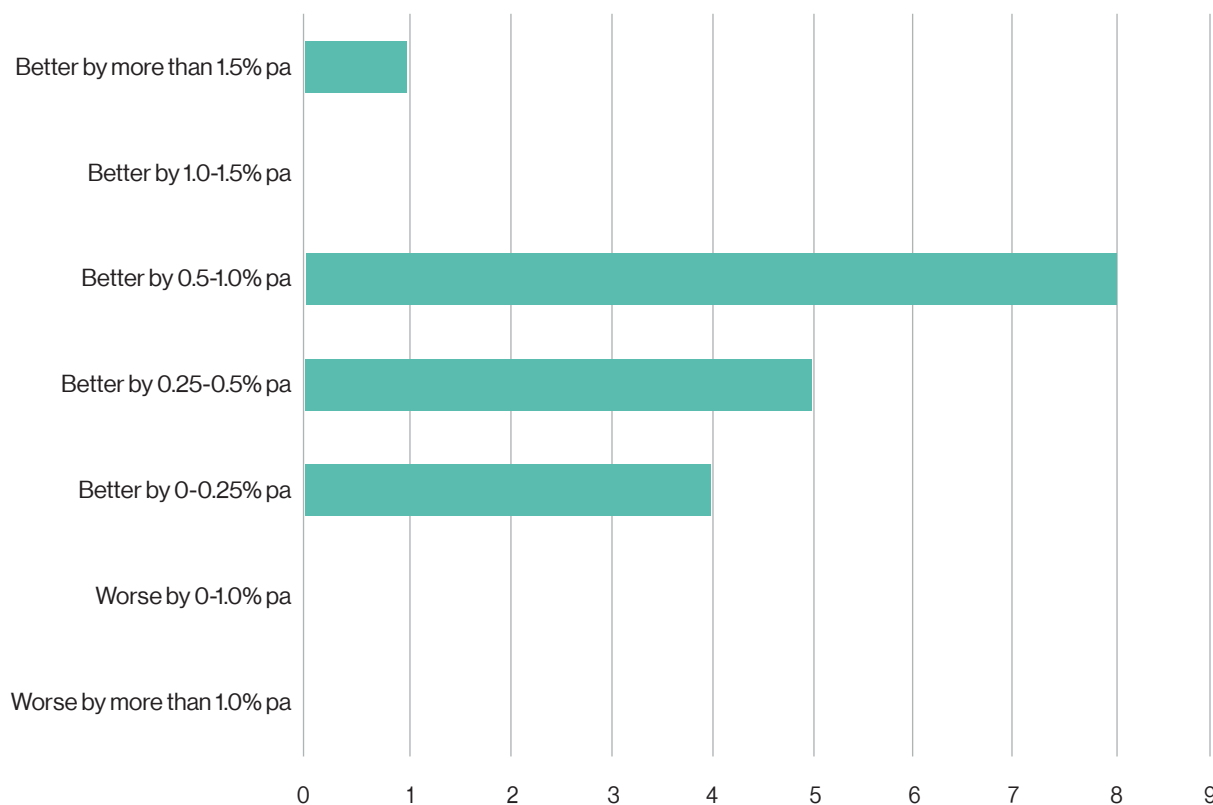
Half of the funds in the study thought that TPA should produce a performance advantage of at least 50-100 bps p.a. vs. SAA on like-for-like terms.

None of the participating funds believed that TPA is likely to result in lower returns than an SAA based approach.

One participant believed the return advantage to TPA was more significant (more than 1.5% p.a.) although in this particular case it was assumed that leverage could be used to create a more diversified portfolio that had a higher expected return, but similar risk to the unlevered portfolio / SAA.

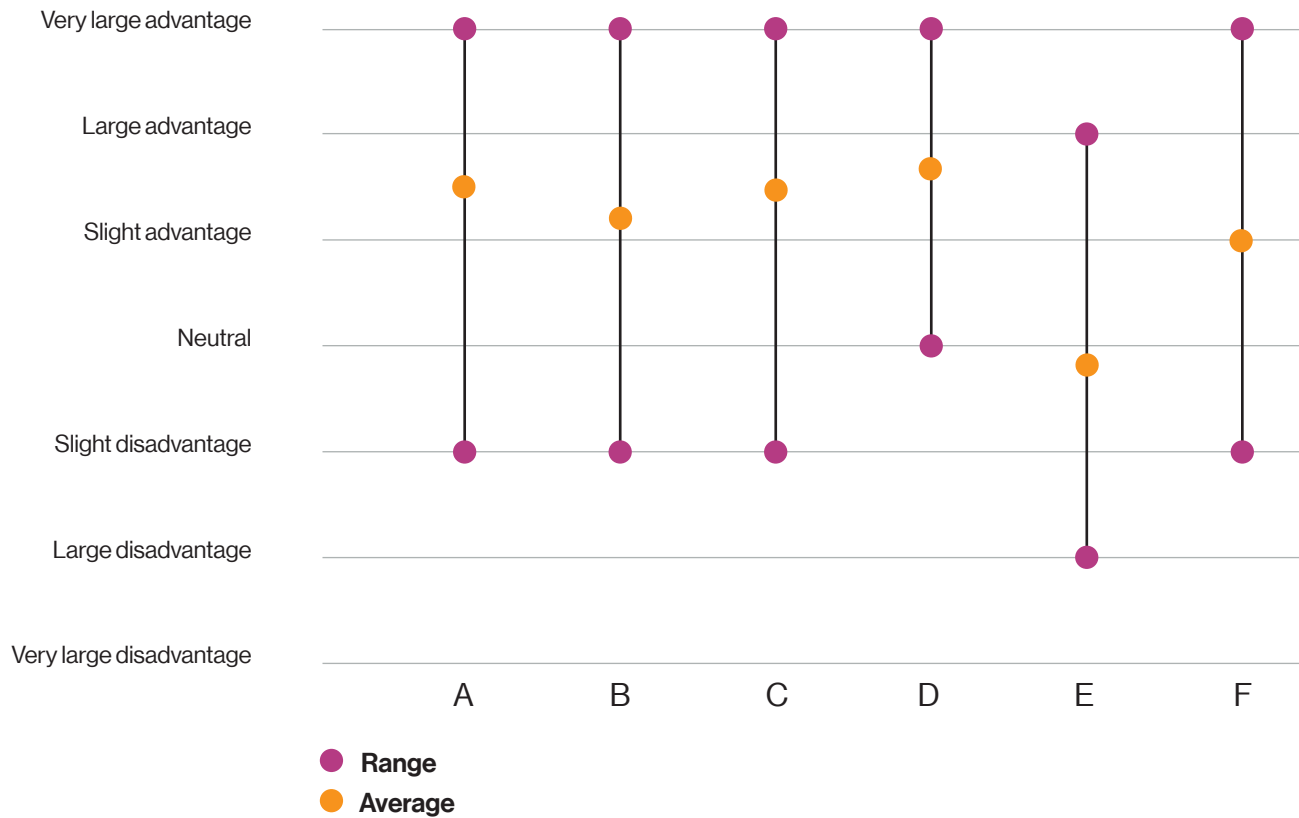
The principal of trying to gauge a like-for-like comparison is designed to establish a comparison based on the same governance resources. But it is not easy to apply this principle, given how SAA and TPA employ different governance models. We suggest the reliability of the responses must therefore be qualified in this context.

Figure 5 – How much better/worse (in annual return terms) do you think a TPA approach is over an SAA-based approach?



4. The advantages of TPA were mostly ascribed to 'hard' sources, i.e. elements of the investment model

Figure 6 – TPA was supported as providing advantages over an SAA based approach on five of the six criteria listed



Key

- A = Improved dynamism of decision-making
- B = Greater focus on achieving the fund's goals (rather than outperforming benchmarks / peers)
- C = Greater focus on allocating to risk exposures (rather than asset classes)
- D = Accessing a wider opportunity set (less focus on asset class "buckets")
- E = A greater ability to integrate sustainability into the portfolio
- F = Better quality of decision making

In particular the following were noted as advantages of a TPA:

1. Improved dynamism of decision making (accessing time-varying risk premia)
2. A greater focus on the use of risk factors in portfolio construction
3. Accessing opportunities that lie outside of conventional asset class buckets.

Views were more dispersed on opportunities that reflect "soft" sources of advantage (i.e. aspects of the governance and people models).

TPA was not viewed as having any significant advantages over SAA in helping integrate sustainability more fully into the portfolio.

5. The development of a skilled internal capital markets team is a key component of implementing a strong version of TPA

A feature of the asset owners who are more advanced in applying a TPA, is the existence of a skilled internal capital markets team, responsible for implementing portfolio market (“beta”) exposures, and then adjusting these cost-effectively and timeously when necessary.

This capability can be used both for implementing the fund’s longer-term exposures more efficiently, as well as for implementing positions that reflect more the fund’s dynamic, or medium-term views.

A feature of the participating funds that are more advanced in employing a TPA was the use of a modest amount of leverage in the fund; principally to achieve a better balance of exposure to risk factors. In the public markets, this was typically achieved through the use of derivatives, implemented and overseen by the capital markets team.

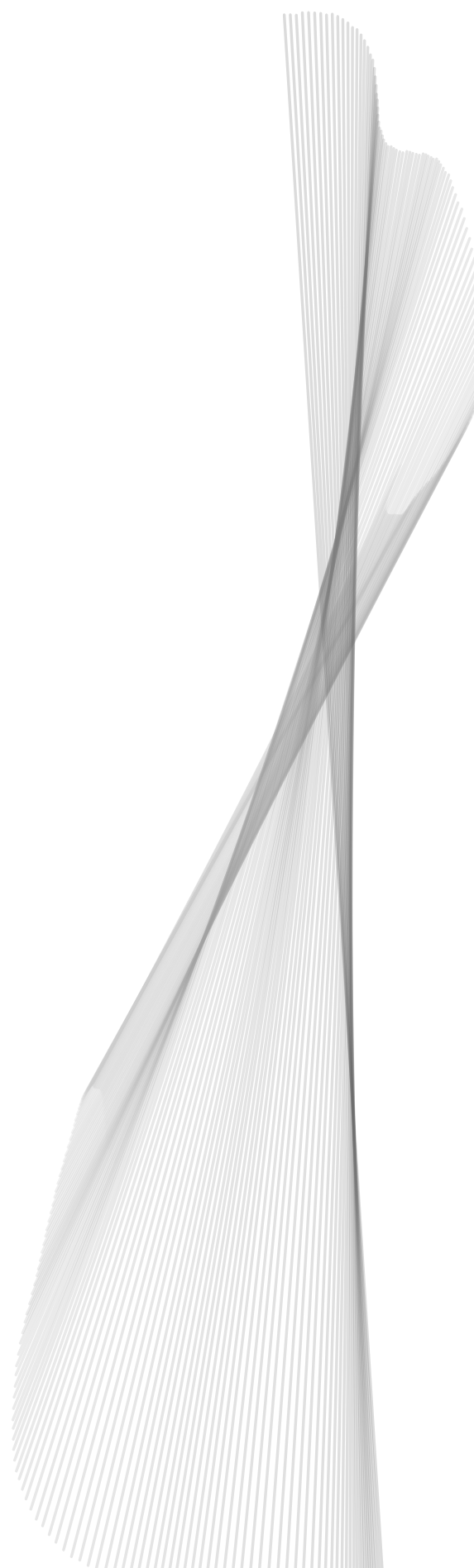
Alongside the skilled front-office team, there is often the requirement to develop the requisite middle and back office capabilities to support these activities.

6. IT, technology and data issues are receiving much more attention, but there is always more to do on these

A majority of the participants were of the view that they do have access to good quality data to make asset allocation decisions. But the interviews revealed that timely access to good quality data at more granular levels was challenging; and that it is an on-going challenge to improve access to good quality data and to make greater use of technology to assist with analysis and decision making.

Different access vehicles have fundamentally different data requirements – for example think of the data differences in assessing public and private markets opportunities.

This area is likely to become an increasingly important one for all asset owners; as “strong” versions of TPA require timely access to good quality data; it is even more important for asset owners looking to move further to the right-hand side on the SAA – TPA spectrum.



7. There is a clear desire to make greater use of total portfolio thinking, but progress is likely to be slow

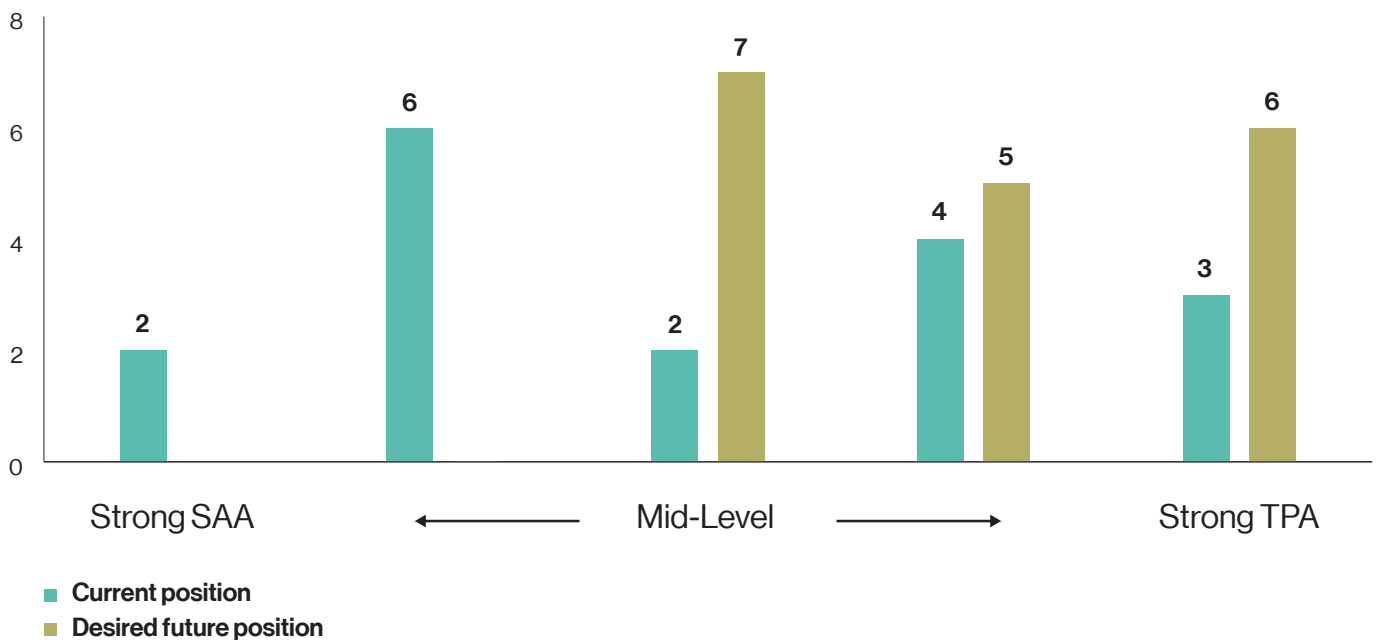
We would agree with the study participants that there is only a small number of funds (around 5 or 6) that can be described as having adopted a “fully fledged” or strong version of TPA. (It is also notable that we would describe these funds as having very strong governance, and that their realised portfolio returns have been strong too).

Most participants expressed an intended change in approach to portfolio construction, with the direction of travel towards a greater adoption of total portfolio thinking (see chart below).

However, there will likely only be a slow trajectory towards greater adoption of a TPA. This is because of the difficulties in advancing an asset owner’s governance capability and also developing a more collaborative culture.

In other words, in order to make progress on developing an asset owner’s investment model, there is a need to work on developing the governance and people models, given how much they influence the success of the investment model adopted.

Figure 7 – How would you describe your fund’s high-level approach to portfolio construction?



“...in order to make progress on developing an asset owner’s investment model, there is a need to work on developing the governance and people models...”

8. Achieving effective practice involves making sure there is a wide range of attributes from the governance, culture and investment models present and that these are in sync

We can divide how well-placed the 18 participant funds consider themselves to be on these attributes into three broad groups:

Group A – where the number of funds that were well-placed on a particular attribute resulted in a strong majority

Group B – where funds well-placed on a particular attribute were in a slight majority

Group C – where funds well-placed on a particular attribute were in a minority

The following points are notable:

Group A

1. Non-pension funds (9/18 participants) are not affected by actuarial considerations, but pension funds had issues on this attribute.
2. We see an ability to work flexibly outside defined asset classes as critical; most funds in the study agreed and felt well-placed to achieve this.
3. The ability of outside firms to assist in asset allocation is reasonably clearly demonstrated, although many funds were keen to extend strategic relationships to do more.

Group B

4. Reasonably positive comments were made about investment committees, particularly executive (internal) versions.
5. The cultural dimension of collaboration from a one team point of view drew a wide spectrum of responses.
6. Funds with TPA configurations did better with performance accountabilities than more traditional funds.
7. As mentioned earlier, there are limitations with the data platforms that inform allocation decisions; most funds see this as key work-in-progress.

Group C

8. All funds have to deal with the time-horizon challenges where short-term results must be judged in a long-horizon context.
9. The dependency on benchmarks is more of a governance convenience than an investment-efficient attribute.
10. While funds did OK on the short-term balance, they did less well on how to communicate long-term results successfully.
11. Clear performance attribution should really be a given, but in many cases is still work-in-progress.
12. The weakest result is in compensation, where attempts to create fair and effective practice is also clearly work-in-progress.

		Effective Practice Attributes	No. of funds well-placed on attribute
A	1	The actuarial funding and investment goals are aligned	14
	2	Investments outside of defined asset classes are still assessed and are candidates for investment	14
	3	The incorporation of inputs from outside advisers and managers is effective	12
B	4	Strategy decisions are considered by an investment committee that has effective governance	11
	5	Strategy consideration comes from integrated team views as opposed to by sectional perspectives	10
	6	There are quality data and measures identifying the executive's performance and accountability	10
	7	There is good data to evaluate capital allocation choices	10
C	8	There is a good balance in considering short-term and long-term goals and progress	8
	9	Our fund is not unduly influenced by our benchmarks	8
	10	The communications of our results focus on measures of long-term success	8
	11	Performance attribution produces a clear picture of the different contributors to good/bad performance	7
	12	Our compensation and incentives are fully aligned to the value and success outcomes needed	6

9. Culture is a key ingredient for TPA to work well

One of the key aspects of the people model is the organisation's culture. In order for a TPA to work well, the importance of the investment team functioning as "one team", with a strong emphasis on a collaborative culture, was a recurring theme.

The difficulties of synthesizing top-down and bottom-up views was noted; but there are significant benefits for the end portfolio in being able to work through these difficulties, again through effective collaboration and team work. Working to effective, actionable and fully agreed investment beliefs plays a part in this.

The importance of having a common fund-wide goal, and remuneration structures that are aligned to this goal were also referenced by participants. As we have commented on, this represents a work-in-progress challenge for most funds.

The key attributes of the people model generally are listed something like this:

- **Collegiality** – everyone is allowed a view, alignment around a consensus is particularly respected, although not always possible
- **Mutual trust** – when present it increases the value to collective intelligence
- **Communication and inter-personal skills** – these are critical to building collective intelligence
- **Diversity and inclusion** – as a contributor to collective intelligence and effectiveness through motivational effects
- **Talent** – ultimately the decisions to be made in portfolio construction are highly complex and demand a particular skill set, with the capacity for thinking in deeply informed, multi-strand and probabilistic terms, but also needing resilience and humility.

Governance is also critical to deliver the conditions by which culture and talent can work effectively. The funds' views aligned with our conclusion that while TPA appears to be a technical investment model question, its success will depend on meeting governance and cultural challenges.

10. Additional points:

Multi-client setting

- It was noted that a TPA is more difficult to apply in a multi-client setting. Asset owners that have the benefit of managing just one fund (or a small number of funds) have the advantage of managing fewer stakeholder relationships, as well as having a singular goal to focus on
- For asset owners with multiple clients, the SAA is often seen as a useful step in the investment process, acting as a “bridge” between the end client / Board and the asset owner / management team, which enables the client / Board to retain some influence in the risk profile and resulting portfolio adopted
- However, due to the limitations that this places on the efficacy of the investment model, there is growing use of a reference portfolio as the basis for determining the end client's or Board's preferred risk profile; with the management team then responsible for building out the more detailed portfolio that gets implemented
- The questionnaire responses indicate that a majority of the participants are (or expect to be using) a reference portfolio as part of their investment process.

Risk factors

- As outlined previously, a feature of the participating funds that are more advanced in employing a TPA was the use of a modest amount of leverage in the fund; this was principally to achieve a better balance of exposure to different risk factors
- The primary benefit of utilising a risk factor lens was to help achieve greater diversification in the actual portfolio and also to help with understanding in what scenarios the portfolio was likely to perform poorly
- Another feature of TPA is the importance of using a balanced scorecard to assess the quality of the resulting portfolio. The scorecard balances the use of both hard (quantitative) and softer (qualitative) measures of success, using a number of different lenses and giving appropriate weight to the fund's goals.

Conclusions

The study strengthened our starting premise that the edge in total portfolio approaches over traditional thinking is potentially large, and participants agree that it might be worth 50-100 basis points per annum in performance, based on like-for-like comparisons.

But we concluded that in most situations the fulfilment of that potential will depend more on meeting governance, behavioural and cultural challenges, than the mastery of the technicalities involved in the investment process itself.

This suggests that the TPA implementation journey for funds warrants more thinking and research. We look forward to reporting on the research we are undertaking in the Institute on this, and the outcomes from a working group convened to explore the subject further.

There are six potential areas for further investigation highlighted overleaf.

Future work

Areas of focus	Issues	Further work
<p>1. Governance Model – the blocks to effective practice</p>	<p>Investment models are substantially influenced by the governance and people models. This is particularly so due to the inherent stickiness of “Board owns the SAA” principle – this creates a certain stickiness to SAA-oriented approaches.</p>	<p>Research needs to think about whether this stickiness is likely to be overcome. If it is not overcome, does this suggest a two-tier market-place among asset owners, which may be slow to change, but ultimately be arbitrated away?</p>
<p>2. People Model – the mindset and culture</p>	<p>Individuals work in different circumstances in TPA as regards to their roles, motives and mindsets. The group decision-making also differs in favouring one team orientation.</p>	<p>What skills, roles and incentive structures should TPA organisations favour over the equivalents in traditional SAA configurations? How should the culture be positioned?</p>
<p>3. Investment Model – portfolio construction</p>	<p>The issue here is exactly how allocations are decided in TPA:</p> <ul style="list-style-type: none"> ■ beliefs are developed, positioned and applied ■ the supporting data is configured including a risk model ■ ideas are generated and propositions prepared ■ decision processes are designed. 	<p>What might we suggest about effective design features, particularly for the governance of the idea generation and the decision process?</p> <p>How should a total portfolio process and culture be configured to secure the team’s best work in deciding model portfolios and actual portfolios?</p>
<p>4. Investment Model – data challenges and risk systems</p>	<p>The research suggests that the data gaps are sufficient to produce sub-optimal decisions producing opportunity for certain funds to fix the problems through time and money.</p> <p>There are a number of risk systems being developed in the peer study. The most common choice is an outside system being appropriately customised to needs and beliefs.</p>	<p>Research should work on what organisations can do to create this improved data platform.</p> <p>Research should seek to understand the notable models from the providers of third party risk systems.</p> <p>This includes understanding of how successfully risk systems are being embedded.</p>
<p>5. Investment Model – sustainability goals</p>	<p>More specific work is needed on sustainability goals and goals more widely. Somewhat surprisingly organisations still do not recognise sustainability pathways in TPA and these should be opened up under TPA principles, with its focus on integrated thinking.</p> <p>The area needs to develop under greater clarity of strategic principles – purpose, mission, vision, goals.</p>	<p>Research should be seeking ways to integrate sustainability factors in high level portfolio construction, having regard to:</p> <ul style="list-style-type: none"> ■ Extra-financial factors ■ Externalities ■ Impact, well-being outcomes ■ Utility of investments ■ Change-the-system actions.
<p>6. Unpacking the asset owners’ ‘model’</p>	<p>The finding that the combination of the investment, governance and people models creates each fund’s unique approach is important.</p> <p>Funds need to think about this.</p>	<p>Is it possible to assess and measure the different factors and their combinations? What does this suggest with respect to competitive edge? Is there performance research we can tap?</p>

Limitations of reliance – Thinking Ahead Group 2.0

This document has been written by members of the Thinking Ahead Group 2.0. Their role is to identify and develop new investment thinking and opportunities not naturally covered under mainstream research. They seek to encourage new ways of seeing the investment environment in ways that add value to our clients.

The contents of individual documents are therefore more likely to be the opinions of the respective authors rather than representing the formal view of the firm.

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Contact details

Tim Hodgson

+44 1737 284822

tim.hodgson@willistowerswatson.com



About the Thinking Ahead Institute

The Thinking Ahead Institute seeks collaboration and change in the investment industry for the benefit of savers. It was established in January 2015 by Tim Hodgson and Roger Urwin, who have dedicated large parts of their careers to advocating and implementing positive investment industry change. It is a global not-for-profit research and innovation group made up of engaged institutional asset owners, asset managers and service providers committed to changing and improving the investment industry. Currently it has over 40 members around the world and is an outgrowth of Willis Towers Watson Investments' Thinking Ahead Group, which was established in 2002.

The Institute aims to:

- Build on the value and power of thought leadership to create positive change in the investment industry
- Find and connect people from all corners of the investment world and harnesses their ideas
- Work to bring those ideas to life for the benefit of the end saver.

It does this by identifying tomorrow's problems and investment solutions through:

- A dynamic and collaborative research agenda that encourages strong member participation through dedicated working groups
- A global programme of events including seminars and key topic meetings, webinars and social events
- One-to-one meetings between Institute member organisations and senior representatives of the Thinking Ahead Group.

These solutions fall into three overlapping areas:

- Better investment strategies
- Better organisational effectiveness
- Enhanced societal legitimacy.

The Institute has a governance board comprising both Institute members and Thinking Ahead Group representatives. For all membership enquiries please contact:

Paul Deane-Williams

+44 1737 274397

paul.deane-williams@willistowerswatson.com

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