The Frontier Line

Why asset owners need to strengthen oversight of internal funds management

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Frontier Advisors
Forefront Thinking

About us

Frontier Advisors has been at the forefront of institutional investment advice in Australia for over 25 years and provides advice on over $630 billion of assets across the superannuation, charity, public sector, insurance and university sectors.

Our purpose is to empower our clients to advance prosperity for their beneficiaries through knowledge sharing, customisation, technology solutions and an alignment and focus unconstrained by product or manager conflict.

Paul Newfield
Director of Sector Research

Paul Newfield is Director of Sector Research, having joined the firm in July 2019. Paul has a primary focus on driving innovation and client alignment in our research program and works closely with our Global Investment Research Alliance (GIRA) partners. Paul joins Frontier from Willis Towers Watson where he held the role of Senior Consultant for over eight years and was involved in a number of governance and strategy areas, including liability driven clients and retirement incomes.

Prior to that, Paul spent twelve years at Mercer where he held a variety of senior roles in both Australia and New Zealand, including leading Mercer's retirement business in New Zealand and was Board Chair of their trustee company. Paul is a Fellow of the Institute of Actuaries and holds a CIMA certification as well as a Bachelor of Economic Science.

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Introduction

Australia's $3.5 trillion superannuation industry is one of the largest and fastest growing in the world – a dynamic which is re-shaping the way Australia's largest asset owners manage money.

Investment mandates awarded to external fund managers are being replaced by internalised teams using their own sophisticated investment models.

The larger a fund grows, the stronger the incentive. Internal management can lower fees, provide asset owners with more control over their portfolios, and provide other benefits. However, as Scott Lawrence and Geoff Warren pointed out in their recent paper on super fund size, the success of internal management is by no means guaranteed.

The strategy inevitably raises unique governance questions, while its rapid growth suggests a more robust approach is warranted. There is no clear data about the size of internalisation strategies, with estimates ranging from $700 billion to $1 trillion of all industry assets and anecdotal evidence suggesting the figure could even be as high as $1.3 trillion.

While APRA has recently overhauled risk-focused regulation and guidance aimed at fund liquidity and valuations, internalisation strategies are covered in a more general way.

While some leading funds are improving the way they monitor, assess, manage, and ameliorate these risks, more needs to be done across the industry.

There are two areas that asset owner boards and management should be focused on: internal investment teams; and the internal investment models that funds rely on.

Without stronger oversight, review and challenge, it is likely the drive towards larger internal investment teams and the greater use of internal investment models will lead to more risk.

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The trend towards internalisation

Australia's $3.5 trillion superannuation industry is now larger than that of every country in the world barring the USA, Japan, Canada and the UK. It is also growing faster than all four of them thanks to a higher proportion of growth assets and rising mandatory super contributions.

Meanwhile, the number of super funds managing Australia's growing pool of funds has been rapidly declining as another era of consolidation continues, creating a new wave of mega-funds. Many of these funds have been using their size as a prompt to internalise asset management.

But while the trend towards internalisation is clear, industry data doesn't specify the exact size and asset classes now managed internally.

The Association of Superannuation Funds of Australia (ASFA) suggests about $1 trillion is directly invested by large super funds, although it isn't clear whether this differentiates between mandates and funds managed internally[1].

Table 1: Manner of investment (funds with more than six members)

Manner of investment	$ billion
Directly invested	1,013
Placed with investment managers	1,269
Total assets	**2,282**

Source: APRA Statistics, March 2023

A separate analysis of APRA-reported industry fund data suggests this segment may now be managing $700 billion of assets internally. Industry funds have been the biggest recent proponents of internal management and have been growing faster than other sectors.

[1] Super Statistics - ASFA. (2023, June 08). Retrieved from https://www.superannuation.asn.au/resources/superannuation-statistics

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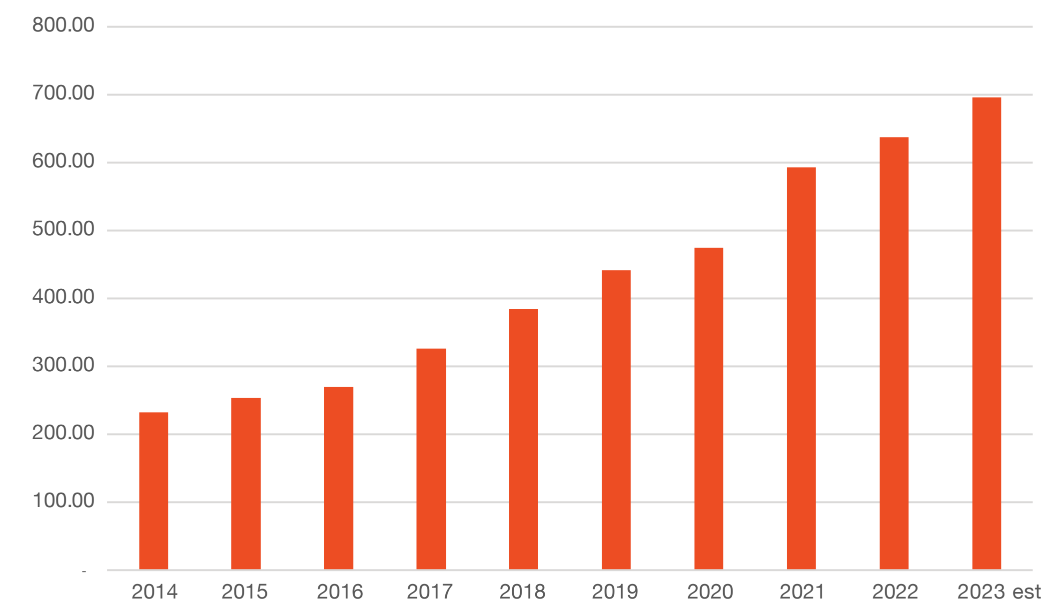
Chart 1: Industry funds internal management (billions)



Source: APRA data, Frontier Advisors

While internal teams have generally delivered good outcomes, there is also little independent review or direct public scrutiny of their performance compared to external managers (although internal teams aren't marketing products and competing to attract external capital).

Undoubtedly more publicly available data about the level and areas of internalisation would be in the public interest.

Defining the risks of internalisation

As funds continue to grow their internal investment capabilities, managing the benefits and risks will become even more important. More assets are being allocated to internal teams, more delegation is occurring, while markets, models and decisions are becoming more complicated.

There are also more investment management lenses being integrated and assessed for both external fund managers and internal management teams at ever deeper levels, such as ESG, culture, abilities, and impacts relative to Your Future, Your Super benchmarks and peers.

The most important areas of focus for the boards and management of super funds should be:

Internal investment TEAMS

Internal investment MODELS

Frontier typically spends 50 to 100 hours of time assessing an external manager, including multiple meetings with manager personnel assessing their systems, meeting different cohorts of their personnel, looking at performance, their documentation, processes, the business, the culture of the team and the firm, ESG credentials, and fees relative to value created.

This ultimately culminates in a detailed manager assessment document, which is formally presented to a ratings committee of experienced researchers and consultants. The assessment is subject to enormous scrutiny.

Internal teams face a wide variety of different assessment practices. Some are reasonably detailed (close to, but not the same as, the process described above), but these tend to be the exception. Many are light touch and do not represent a detailed or thorough assessment akin to that applied to an external manager.

Many other operational areas within funds are subject to external testing, checking, and continuous feedback loops where constructive assessments can add value and ameliorate risks. This is true of finance functions (via internal and external audit), compliance functions (via legal reviews) and IT risks (external system vetting).

In some cases, clients use other parties to assess internal investment teams

The governance of internal investment models is especially challenging.

Almost every single investment decision today by funds, executives, investment committees and trustee boards is underpinned by a plethora of quantitative analysis.

Models are used for execution and internal management, as well as a significant number of operational aspects (rebalancing, trade execution, performance attribution, factor risks) and strategy decisions.

Within funds, the number of models is growing due to larger internal teams, more investable markets, the number of factors to consider in decision making, and the amount of data available.

The ways models are constructed is expanding in sophistication and there remains a wide degree of heterogeneity of the models (different architects underpinning the models, different coding languages – some in Excel, R, Python, VBA, MATLAB, C, different vintages, different governance frameworks at the time the models were set and so on).

When trade executions falter or investment banks get into challenges from financial risks arising (as opposed to outright fraud or system failures), the genesis is often financial models that underpin decisions. Ultimately this is a preventable governance failure which is owned by the trustee board.

A famous example is the 1998 bailout of highly leveraged hedge fund Long-Term Capital Management. It used complex mathematical models to trade various financial instruments but almost collapsed because its models underestimated the potential for extreme market movements.

Similarly, the subprime mortgage crisis leading up to the 2008 financial crisis occurred when financial institutions relied on models that underestimated the risk associated with mortgage-backed securities and collateralised debt obligations (CDOs).

While these situations may not have been ultimately preventable, they underline the need for better governance of and reliance on models.

Ultimately, trustees need to satisfy themselves that internal capabilities stack up from not only a cost perspective but also from a return and risk perspective.

Why risk in models is potentially greater than risk within internal teams

Models tend to persist longer than the people overseeing them are employed.

People tend to believe models, particularly if quantifiable, which can lead to over-confidence.

Models cannot answer back to queries or be properly interrogated unless examined under a microscope by people who understand the market/operational area the model covers and understand how those models are built and governed.

Models tend to be very heterogeneous and in the absence of clear guidance, protocols and firm model taxonomy. Even people in the same area of investments can set up a model in a completely different way.

Investment committees, trustees, compliance and governance teams can question and examine the thesis articulated by internal teams but in many cases, there may be a large technical gap between them and those who build and run the internal models.

Internalisation risks only lightly addressed in regulatory guidance

There are very few direct regulatory references to help funds manage the risk of bringing investment capabilities in-house and of using internal models. These areas fall within APRA's two main focus areas[2]:

- Completing key reforms to strengthen the financial and operational resilience of APRA-regulated entities and improve outcomes for superannuation members.
- Continuing to hold trustees to account to improve superannuation member outcomes.

APRA also has been looking at risk culture[3] for some time and has previously said:

> *Risk culture is complex. It is shaped and influenced by all the features of an entity but is intangible because it is based on perceptions and behaviours, and is constantly changing. It should be no surprise therefore that APRA's 2019 review of risk governance in 36 of the country's largest banks, insurers and superannuation licensees found the concept wasn't well understood.*

Internal investment teams and internal investment models are susceptible to the general risk factors outlined in the APRA diagram below.

Figure 1: Risk culture is not always well understood.

Source: APRA Information Paper: Self-assessments of governance, accountability and culture

More specifically, Prudential Standard SPS 530 Investment Governance stresses the responsibilities of the board overseeing internal investment management teams:

> *The Board is ultimately responsible for the establishment, implementation, oversight and maintenance of an RSE licensee's investment governance framework. This unambiguously points to the Board as owning all implementation issues, including internal investment management teams.*

[2] APRA releases policy and supervision priorities for 2023 | APRA. (2023, September 13). Retrieved from https://www.apra.gov.au/news-and-publications/apra-releases-policy-and-supervision-priorities-for-2023

[3] APRA's evolving approach to supervising risk culture | APRA. (2023, September 13). Retrieved from https://www.apra.gov.au/apra%E2%80%99s-evolving-approach-to-supervising-risk-culture

Prudential Practice Guide SPG 530 Investment Governance raises more detail, with Clause 12 stating[4]:

When deciding to manage some, or all, of its investment functions internally, an RSE licensee would determine, inter alia:

a. *The governance model, including appropriate delegations, for overseeing the internal investment management function.*

b. *The ongoing monitoring and management of performance and risk outcomes, particularly where under-performance is identified.*

c. *How it will attract, retain and remunerate appropriately skilled investment staff and manage potential cultural changes.*

d. *How it will manage exposure to potential internal errors and operational deficiencies.*

e. *The cost-benefit analysis of moving to either a fully internalised or hybrid model.*

It provides more detail about how the governance works as opposed to issues such as whether the team is competent; its competitive advantages assessment and objectives are suitable; how success or failure is objectively measured; how the people and strategy compares to external or other internal teams.

Some of this is covered under Clause 65 of SPG 530, which states:

> *An RSE licensee would have the appropriate skills and resources available to undertake the internal management of investment portfolios if it chooses to do so. The number of personnel, and their skills and experience, would be comparable to what would be expected of an external investment manager undertaking an equivalent activity. Further, the systems, data, operations and policies supporting internal investment management would be comparable to what would be expected of an external, highly-capable investment manager undertaking an equivalent activity.*

APRA Prudential Standard CPS 220 Risk Management mentions the need for risk management with clauses 14 and 15 relevant to internal investment models:

> *An RSE licensee's risk management framework must enable the RSE licensee to develop and implement strategies, policies, procedures and controls to appropriately manage different types of material risk.*

> *An RSE licensee's risk management framework must provide reasonable assurance that each material risk to the RSE licensee's business operations is being prudently and soundly managed, having regard to the size, business mix and complexity of those operations.*

[4]Clauses 51 to 66 of SPG 530 are also worth noting.

A better approach to current internalisation governance practices and models

While there are some funds with strong oversight and risk management, we see a wide range of practices across the industry. Far more could be done in many instances.

For example, funds internalising often conduct a clear cost analysis.

However, SPG 530 suggests return equivalence/enhancement should be afforded greater priority (although SPG 530 is guidance as opposed to regulated, enforceable practice).

At a high level, we observe a few internal investment processes that don't compare well in their articulation or implementation versus external managers.

There is also a common difference in oversight. The external managers appointed by many large asset owners are vetted by specialist investment consultants and rarely present to the investment committee or board (a review of the manager is presented instead). By way of contrast, we see examples of internal teams which are required to present to the investment committee or board on a rolling frequency basis without a third-party review.

Asset owners should be aware this difference in governance can potentially create an internal advantage if boards, investment committee or executives are not armed with the same information to effectively question internal teams.

Frontier advocates a thorough approach similar to an assessment applied to an external manager, with a few additional points:

a. Consider the six key dimensions we examine for an external manager:
    - Business management and culture (and connection with portfolio strategy and fund culture).
    - Investment philosophy and process.
    - People.
    - Fees.
    - ESG.
    - Performance.

b. Outline a clear articulation of the strengths and weaknesses of the proposed construct.

c. Ensure there are clear objectives and constraints (are these suitable, market norms, internally congruent, achievable, and documented).

d. Outline the key risks the trustee should look for and how they should mitigate these risks.

e. Outline the flags which the trustee should set up, monitor and track that will prompt a review.

The internal investment team assessment should be assessed by working with the internal investments team but ultimately delivered to the CEO, head of audit/risk or investment committee chair.

Frontier has seen some good examples of internal investment team assessments using a similar construct to assess external managers, but there are many exceptions.

While Frontier does have regular informal meetings with internal investment teams, we do not consider these to be reflective of a formal and thorough review. This is often something that is under-appreciated by management and trustees. The principle of opening up internal teams to more scrutiny should be embraced.

In addition, there are a very large and growing number of models used by internal teams which warrant proper oversight. Again, practices range in the market from leading edge to funds where more work could be done.

Internal models typically employed by funds

Cash flow model allocations.

Attribution models across investment options or building block sleeves.

Rebalancing models.

Macro-economic type analysis models.

Risk measurement models (dashboard, relative risks, regulatory risk such as YFYS).

Capital markets models (stochastic, liquidity, stress testing, risk factors).

Equity models (return, nominal risk, relative risk).

Debt models both in private and public spaces.

Real assets models (particularly for property, infrastructure and private equity valuations).

Individual investment or stock models.

Derivative models (could be on synthetic exposure or risk structuring/hedging).

Currency models (could be valuations, cross currency pairs, gross versus net exposures, margin modelling etc).

Exposure models to various factors.

YFYS relative risk models.

There are literally hundreds of models used in funds today (see breakout box above). While not every model needs a deeper analysis and pre-implementation (or even ongoing) assessment, it is important to carefully consider the following risks, and which models should be prioritised for assessment:

Complexity of the model	**Frequency of use**	**Size of authorisation**
When model was constructed	**Spread of model knowledge within organisation**	**Worst case - how large a loss could result**
Natural reconciliation factors	**Uniqueness of model**	**Involvement of third parties (and indemnities)**

The most important thing is to make a start.

Consider a key model and begin a proper analysis based on the weight and rating of the factors above.

Another possibility is to start with a simpler (or lower risk) model and use that as a training ground to build a model governance and assessment framework.

This model review could address factors such as:

- Overall model governance – protocols and principles enshrined in the model.
- Review against high level appropriateness. What are its key dimensions? Is it fit for purpose?
- Review against policy/procedures. Does practice reconcile with policy and documents?
- Suitability of policy, sign off, control protocols enshrined in the model.
- Calibrating the potential size of the risks within the model.
- Review specific parameters of the model. What are they? Who agrees to these? Do they align with the investment governance construct? Where do the inputs come from? Are the sources, size and checking constructs suitable and what risks are there?
- Review against regulatory practice/requirements.
- Review against peers and general market practice.
- Review against industry best practice. What is leading edge and how are models evolving today (noting in some areas there is exponential change in what is evolving or being developed)?
- Review execution of model, i.e. not what is written or how it works but how it is used and checked.
- Check the code.
- Is the model well documented? Is there a standard framework? Who signs off on this particular model? How is it independently reviewed? What are the remaining risks?
- The people embedded within the model. Who is using it and do they understand it? What can go wrong? Who can change the model? Does the model constrain errors by code? How well spread is model knowledge? Can aspects/controls be circumvented?

Frontier has been involved with a small number of funds who are leading the way. Other financial services sectors have well established approaches regarding models. For example, banks and insurers must set aside additional capital as a risk buffer using increasingly standardised model templates.

Frontier has undertaken several specialised projects over recent years, assessing asset owners derivatives, effective exposure models, currency models, risk dashboards and providing input into bespoke capital markets models (and assisting a large asset owner with the construction of their own model).

Each model project Frontier has undertaken to date has been a customised project. We have built a number of frameworks and protocols which leverage global best practice constructs in order to support management and trustees in appropriately managing the risks inherent in developing and maintaining these models in house.

In our view, the governance of models requires more than an external audit. It requires the attention of skilled specialists who not only have assessed professional fund managers all over the world, but who have themselves built models and run money in a professional capacity.

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The final word

Internal investment teams and internal investment models have exploded in growth in recent years.

While both are important to deliver value, insights and efficiency, they both have the capacity to bring material risks into a large asset owner.

We believe both are generally underweighted across the industry in terms of how much risk focus is applied although we have seen some exemplars looking for best practice and continuing to grow their focus.

Nonetheless, there does remain a lot more work to do.

Trustee boards and funds should carefully consider all their insourced internal investment teams as well as the various internal investment models and focus on areas for more robust assessment.

With better governance, internalisation of teams and models can continue helping asset owners achieve their goals, beat benchmarks and peers, and mitigate significant risks.

Want to learn more?

Frontier Advisors offers a range of services to assist asset owners in this area. Please reach out to our team if you would like more information.

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Frontier Advisors is one of Australia's leading asset consultants. We offer a range of services and solutions to some of the nation's largest institutional investors including superannuation funds, charities, government / sovereign wealth funds and universities. Our services range from asset allocation and portfolio configuration advice, through to fund manager research and rating, investment auditing and assurance, quantitative modelling and analysis and general investment consulting advice. We have been providing investment advice to clients since 1994. Our advice is fully independent of product, manager, or broker conflicts which means our focus is firmly on tailoring optimal solutions and opportunities for our clients.

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