



Trends in asset allocation and risk management: the Asia Pacific asset owner experience



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cutting through complexity

Table of contents

Foreword	06
Setting the scene	08
Executive summary	14
Key findings	24
Conclusion	54
About KPMG	58
About BNP Paribas	62

Foreword

Asset owners play a critical role in the economies of virtually every country. Whether they are pension funds, sovereign wealth funds, insurers, official institutions or foundations and endowments, their impact has been and continues to be profound. However, the asset owners of today face multiple challenges in discharging their duties and meeting their objectives. From an investment perspective, they have to navigate through volatile markets and low interest rate environments, and have a wider range of asset classes and markets to invest in and monitor. Operationally, they face heightened scrutiny both internally from management and externally from regulators. Many are changing their strategy to manage some of their investments themselves.

Considering these challenges and the many evolutions afoot, now more than ever, asset owners must have the necessary risk and performance analytics at their disposal.

Risk and performance analytics play an important role in the investment process and in the operations of asset owners. On the investment side – from setting objectives, to implementing strategies and monitoring the investments – a holistic analytical approach to risk and performance measurement is critical. From an operational perspective, having the right choice of analytical platforms and service models helps improve workflow and operational efficiency. A clear trend emerging in the marketplace is the greater segregation of roles within asset owners, to focus on investments, and to focus on operations, as two complementary yet different skill sets. A robust risk and performance analytics service model caters for both audiences and ensures that questions from either can be answered effectively.

A clear trend emerging in the marketplace is the greater segregation of roles within asset owners, to focus on investments, and to focus on operations, as two complementary yet different skill sets.

Together with KPMG, BNP Paribas Securities Services is proud to present this unique survey of the risk and performance analytics practices of some of the major asset owners in the Asia Pacific region. We have sought the expert opinions of key players in the asset owner space, from a wide range of countries and from multiple types of asset owner. As they grapple with these challenges, they have revealed key insights into their thinking, their experience and what they will focus on in the coming three years. One of the insights in this survey is a heightened focus on investment in analytics, as pressures – both external and internal – drive up reporting needs. The survey has also revealed that operational and regulatory pressures are pervasive and are expected to increase. Finally, participants of the survey have underlined the increasing use of sophisticated techniques such as risk budgeting to enhance their investment approach.

We hope this survey provides you with deep and meaningful insights on the risk and performance analytics practices in the Asia Pacific region, and look forward to engaging with you on any aspect of the findings.



Lawrence Au
Head of Asia Pacific
BNP Paribas Securities Services

A handwritten signature in black ink, appearing to read 'Lawrence Au', written in a cursive style.





Setting the scene

Survey approach

We interviewed 27 asset owners, based in 11 countries across Asia Pacific, on the strategic developments and emerging issues surrounding the expanding asset base and investment scope of asset owners in Asia Pacific. The survey questionnaire comprised 26 questions structured around three key themes:

- Drivers of change
- Operational trends
- Operational challenges

The interviews were approximately one hour in length and were conducted face to face or over the phone. Eight interviewees opted to provide written replies.

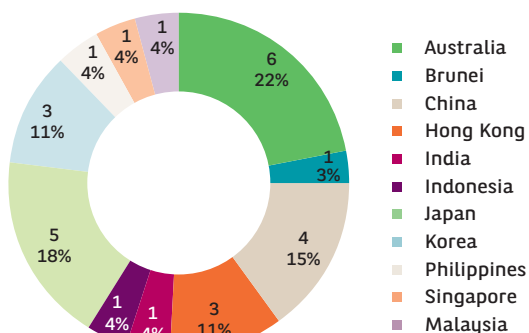
Through these discussions and responses, the survey captures the diverse views of the market and offers insights into the dynamic and changing environment in which asset owners operate.

Respondent profile

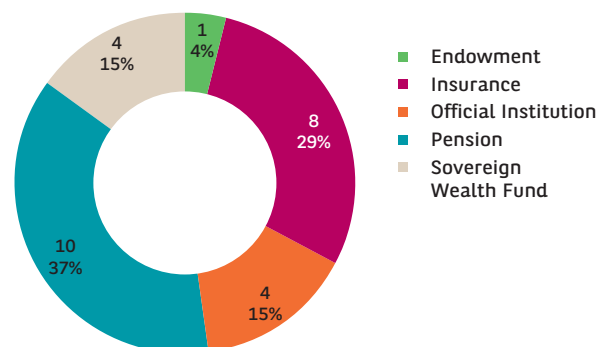
Our respondents include public and private pension funds, official institutions (including central banks, statutory boards, and other official agencies), sovereign wealth funds, endowments and insurance companies, representing some of the largest and most prominent asset owners in Asia Pacific:

- Total assets for all respondents exceed US\$2.2 trillion
- Over 70% are among the top 75 largest asset owners in Asia Pacific
- Four are among the top 10 insurers in Asia Pacific
- Two are among the 10 largest sovereign wealth funds in Asia Pacific
- Two are among the five largest superannuation funds in Australia

Respondents by country



Respondents by asset owner type



27 participants across 11 countries

One-third of the assets held by the top 500 asset owners belong to Asia Pacific asset owners

Asia Pacific is home to some of the largest pension funds, sovereign wealth funds, insurance companies and central banks in the world. Japan and Australia rank second and fourth respectively in terms of total pension assets¹, whereas China ranks first in terms of total sovereign wealth assets² and central bank assets³. As economies continue to expand, the growth potential for Asia Pacific asset owners is tremendous.

Asia Pacific's **pension** reserves are in the accumulation and growth phase. In the Philippines, China and Indonesia, pension assets, at less than 10% of GDP⁴, are expected to grow from their relatively low base as government attention turns to the nations' aging populations. In Japan, although the pension asset to GDP ratio is higher, the largest pension fund, the Government Pension Investment Fund (GPIF) – which at approximately USD1 trillion⁵ – is not expected to peak until 2050. Similarly, assets in Korea's National Pension Service (NPS) – which at approximately USD300 billion⁶ make it the fifth largest pension fund in the world – are estimated to accumulate until the mid 2040's. In Australia, the 9% "Superannuation Guarantee" system also ensures that pension reserves grow at a consistent pace.

Asia Pacific has the largest share of assets in terms of **central banks** and **sovereign wealth funds**. Between 2002 and 2012, central bank balance sheets have largely grown via an accumulation of foreign assets in the form of US-dollar-denominated bonds, with over 80% of changes in composition to central bank assets a result of increases in foreign assets⁷. Going forward, the region is expected to further build on its lead with foreign currency reserves continuing to grow (China's reserves reached USD3.44 trillion – roughly the size of the German economy – in the first quarter of 2013⁸).

In the **insurance** market, Asia Pacific has a smaller share. However, the rate of accumulation again outpaces the rest of the world. Globally, growth of life insurance premiums is expected to be at 3.2% in 2013, and to grow to 3.9% in 2014. Meanwhile for emerging Asian markets, growth is expected to accelerate to around 10% in 2013 and 2014⁹. Mature Asian markets are also projected to grow at a quicker pace than developed markets in other regions⁹.

¹ "Global Pension Assets Study 2013", Tower Watson, January 2013

² Sovereign Wealth Institute

³ International Monetary Fund

⁴ "Growth of Asian Pension Assets: Implications for Financial and Capital Markets", Asian Development Bank, May 2012

⁵ "Investment results for the third quarter of fiscal 2012", Government Pension Investment Fund, March 2013

⁶ "Portfolio View", National Pension Service, 2011

⁷ "Key facts on Central Bank Balance Sheets in Asia and Pacific", Bank for International Settlements

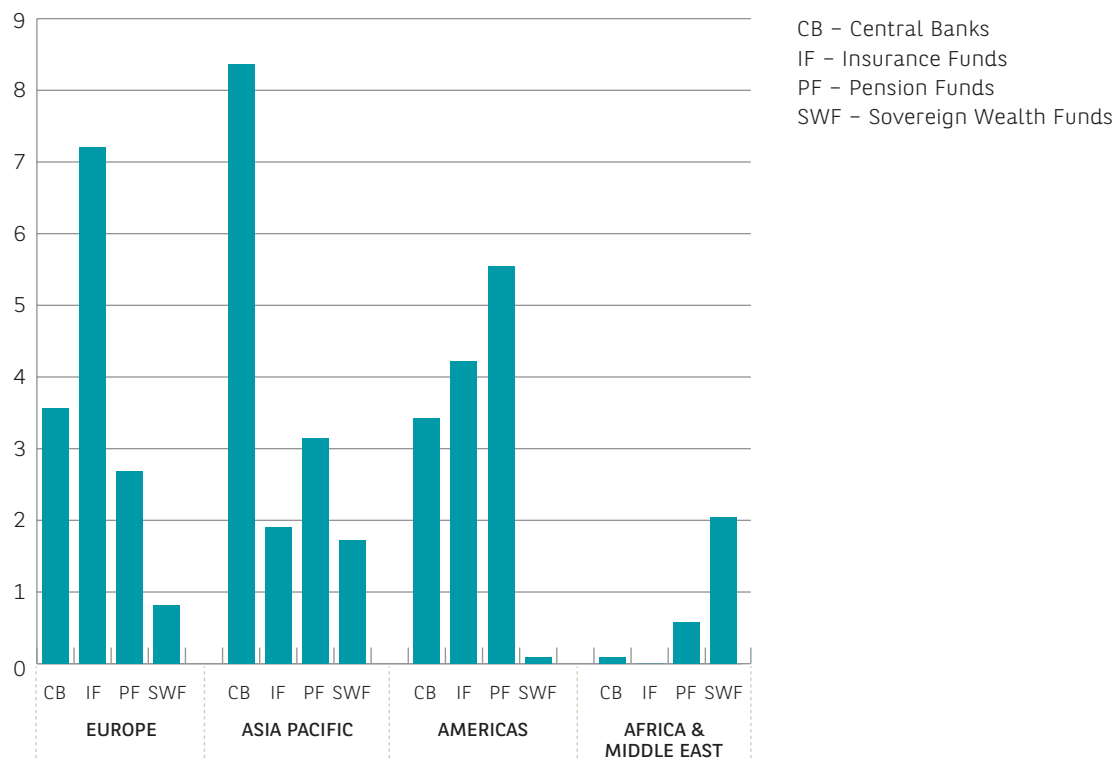
⁸ "China's Forex reserves reach \$3.4tn", Financial Times, April 2013

⁹ "Life insurance premiums growth is expected to rebound in Emerging Asia in 2013", Swiss Re, January 2013

Endowments and foundations are still small in Asia, without a single endowment or foundation from the region appearing in the list of the World's Top 500 Asset Owners. To illustrate, the typical university endowment in Asia contributes less than 1% of the university's annual expenditure¹⁰. While it appears unlikely that the region will give rise to similarly-sized endowments that feature prominently in the United States, Asia Pacific countries, led by Australia and Singapore, look set to expand from their low base.

Asset Distribution (World's Top 500 Asset Owners)

By region and asset type (all values in trillion USD)



Note: Endowments/Foundation are excluded as it represents less than 1% of the assets owned by the top 500

Source: AI Global 500 asset owner Database, Asset International's CIO; International Monetary Fund

¹⁰ "Singapore's approach to endowments rare in region", Pension & Investments, February 2013





Executive summary

Market pressures

The financial crisis and the investment approach

Since the start of the global financial crisis, fixed income yields have dropped to record lows and equities have faced increased volatility. This has challenged asset owners to revisit investment approaches and portfolio construction strategies in order to maximise return while protecting against increased uncertainty and volatility.

While listed equities and publicly traded fixed income products still dominate the portfolios of Asia Pacific asset owners, there is a clear interest to increase exposure to alternative asset classes, particularly those that can effectively offer stable, fixed income type returns.

Some survey respondents perceived this trend to be a direct result of the financial crisis. Other respondents indicated that this was more aligned to the evolution of their existing investment approach as a way to push for higher returns while also hedging against more traditional asset classes, which are tightly correlated to boom and bust economic cycles.

Regardless of the divergent views towards the financial crisis, all respondents reiterated that their macro strategies have and will remain conservative for the foreseeable future.

Divergent views on risk management approaches

In addition to confirming current conservative investment strategies, respondents were virtually unanimous in noting a changing risk culture in their organisations, largely driven by management teams and regulators. While this has led to increased risk awareness among middle and senior management, risk management approaches are still quite divergent across the region.

In mature markets such as Australia, Hong Kong and Japan, risk budgeting was a key consideration in investment approaches, with some respondents spending heavily on risk infrastructure, including procurement of leading risk solutions and recruiting experienced resources from more established markets in North America and Europe.

In other markets such as China, India and Indonesia, respondents indicated a preference for monitoring performance over risk. One particular respondent indicated that although their past returns were high, it may have been due to the higher unseen risks involved as a result of not having strong risk attribution analysis in place. However, this view is changing, with emerging market respondents generally indicating interest in exploring better risk management practices.

“

It is a change in risk culture... and management is placing more emphasis on risk measurement and risk control.

”

Australian asset owner

Spotlight: Real estate and infrastructure in Asia Pacific

Survey respondents broadly indicated their intention to increase exposure to alternative asset classes with infrastructure and real estate being particularly attractive. Not only do the two asset classes offer a way to diversify holdings, but due to their low correlation to publicly traded traditional assets, they also offer stable cash flows with fixed returns.

Sovereign wealth funds were notable in this regard and were often looking to overseas markets such as Australia and the UK (and to a lesser extent, the US), whereas pension funds were looking to invest in their own domestic markets. Regardless of location, there was a noticeable trend in terms of asset owners seeking to increase exposure to alternatives, albeit coming from a relatively low base.

External factors drive management reporting needs

Driven by market volatility, increasingly sophisticated asset classes, and greater regulatory scrutiny, boards of directors, along with management teams, now require far more comprehensive information on exposures and risks to assist them in their decision-making. Over half of the respondents indicated that management reporting is one of their biggest challenges.

Traditionally, having a consolidated view of the portfolio performance was sufficient. Today, respondents indicated that management was looking for additional drill down and look through at the portfolio level, manager level and product level. This need was more pronounced partly because of the push into alternative investments. Respondents were under greater pressure to perform effective risk attribution analysis in order to better understand these unique risk exposures.

In Australia, the Australian Prudential Regulation Authority (APRA) requires superannuation funds to place a quantitative value on risk associated with pension products, known as the Standard Risk Measure (SRM), and report to investors the risk-return trade-offs of their investments. While other regulators in Asia Pacific have yet to formally issue similar guidance, respondents noted that as regulators in Asia Pacific countries tend to adopt global best practices, it should be expected that similar risk measurement techniques be introduced in other jurisdictions.

Asset owners to invest in analytics

As a result of the increased reporting needs, 74% of respondents planned to increase spending on risk and performance analytics.

While there was a range of needs, with some respondents focused on improving basic performance attribution capabilities and others focused on complex scenario analysis, the common theme among respondents was that the key to extracting the most value out of analytics is to invest in resources to interpret the data into meaningful investment strategies.

With the right people in place, spending can then focus on tools such as innovative reporting technology and more advanced risk models. While it was clear that spending on analytics is due for a marked increase, there were divergent views on the operating models to use for risk and performance analytics.

“The US and Europe have had complex analytics for a long time and spending will need to increase to catch up with this trend.”

Australian asset owner

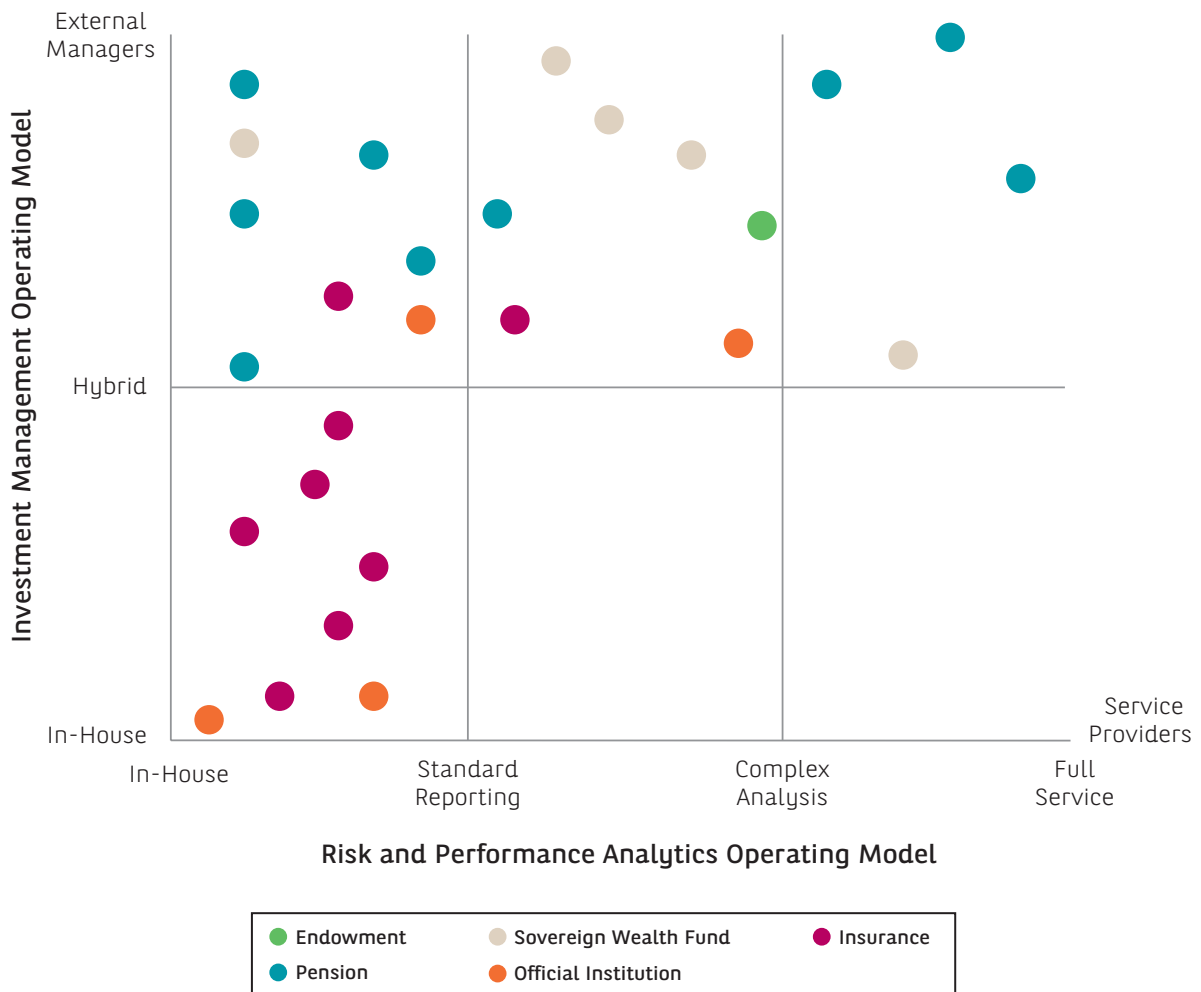
Spotlight: Australia standard risk measure

In July 2011, the APRA introduced the Australian Standard Risk Measure (SRM), a self-assessed risk measurement technique with the intention of helping retail investors better understand the risks associated with their investments. Unlike the European risk measurement technique, the Synthetic Risk Reward Indicator (SRRI) which focuses on volatility, the SRM focuses on the propensity for negative returns over a 20-year period.

From an operational perspective, respondents indicated that while generating historical risk measurements to meet the broad definition of the SRM may not be difficult, developing a forward-looking SRM often requires more advanced risk systems, large numbers of data sources, and risk expertise to model the assumptions and generate the measure.

Operating models

Figure 1: asset owner operating models



Operating models varied across the region

As indicated in Figure 1, operating models around investment management are relatively less complex, with the majority of respondents using external managers to support their own internal investment activities. However, operating models underpinning risk and performance analytics were more diverse. Generally, in addition to the in-house model, there were three prevalent service models provided by service providers, depending on the sophistication, asset complexity, and the size of the asset owner:

- Standard reporting (e.g. performance measurement, asset allocation)
- Complex analytics (e.g. peer group analysis, attribution, risk analytics)
- Full service models (e.g. in-house training, knowledge sharing, board/management presentations)

While there are some country-specific correlations between investment management and analytics needs among Asia Pacific asset owners, operating models were largely determined by the asset owner type¹:

- Insurers typically retain large internal teams for both investment management and analytics, not only to manage internal assets but also to operate wealth management arms to sell investment-linked products. They typically look to service providers for specific needs to fill internal gaps
- Endowments, pension funds, and sovereign wealth funds typically focus on issuing investment mandates in order to maintain a long-term approach, while using a range of operating models for risk and performance analytics. In some cases, these organisations use a full-service model to perform everything from data consolidation and analysis to board presentations

“We think that hiring external service providers to supplement in-house investment teams is the trend for insurers.”

Chinese asset owner

There is no prescriptive formula for determining operational models, however, respondents did indicate that as asset allocation strategies are becoming more complex and reporting requirements more onerous, the increased strain on their existing operational capability is increasing the pressure to evaluate external options to fill the gaps.

¹ The four official institutions interviewed did not draw strong correlations in terms of operating models, largely because they were very different from one another, with different investment objectives.

Operational challenges were pervasive

There were a number of common operational challenges identified across the industry. However, a few regional-specific issues were raised by some respondents:

- Lack of information transparency in certain emerging markets complicates collection and analysis of historical data, which leads to inaccuracies in risk calculations
- Increased possibility of government intervention (e.g. setting toll road rates, water pricing) in certain jurisdictions creates a level of unpredictability in long-term valuation estimates
- Talent shortages are more significant than in North America and Europe, particularly on the risk side, as more organisations are demanding risk professionals to support an enhanced risk culture

While some challenges resonated more than others depending on the asset owner, almost all respondents agreed that regulatory compliance, data management, reporting requirements, and talent management have and will continue to have some level of impact on their organisation, as illustrated in Figure 2.

A rise in regulatory pressure

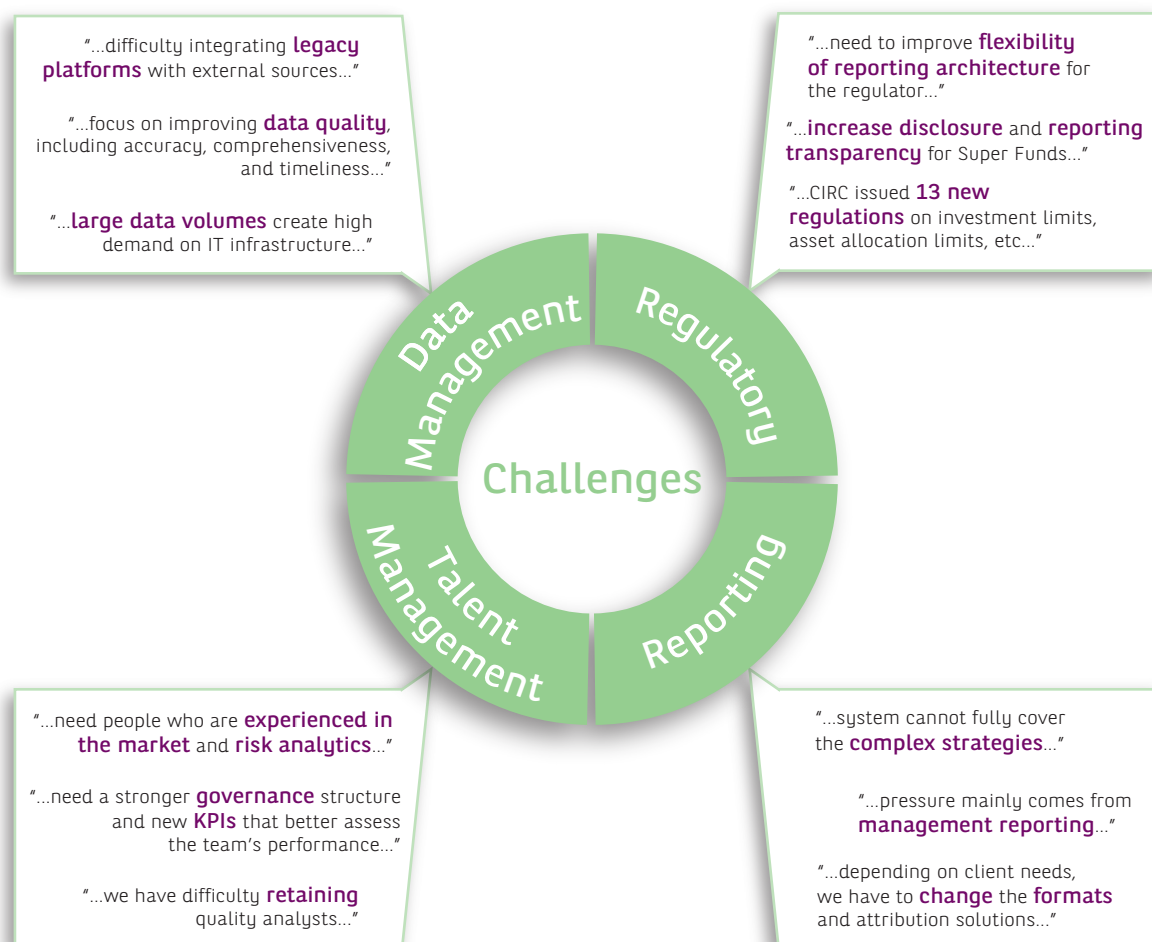
60% of respondents indicated that regulatory risk reporting had “some” to “significant” impact on their organisation. The most common response when asked what the biggest challenge was in meeting compliance requirements, was “understanding the regulations”.

While regulations differ across jurisdictions, there is a strong market sentiment that transparency and regulatory risk reporting will increase substantially over the coming years. In Japan, as a result of recent scandals involving pension fund assets, pension funds have been experiencing much closer scrutiny of their financial accounts by auditors and regulators.

In Australia, superannuation funds are preparing for the introduction of the “Stronger Super” regulations, which will introduce a number of measures that will not only impact risk and governance, but also set out standards around account consolidation strategies.

Even in jurisdictions without known changes in regulation, asset owners indicated that they are ramping up reporting capabilities with the expectation that regulatory requirements may change at any time.

Figure 2: common operational challenges identified by respondents



The way forward

Evolving the investment process

As regulatory and market pressures continue to mount, asset owners are looking to evolve their investment processes to meet global best practices and better integrate risk management into investment processes.

In addition to advancing risk analytics and increasing the use of stress testing, volatility, and other risk metrics in investment decision-making, asset owners are looking to re-evaluate their existing governance models to better embed risk management functions into their investment teams.

Furthermore, Asian asset owners are integrating Environmental, Social and Governance (ESG) policies into their investment processes as part of a drive towards sustainable investing. While there were divergent views on how the effectiveness of ESG strategies may be measured, the general perspective was that sustainable investing will have a positive impact on investment approaches.

Integrating interactive reporting

In terms of reporting technology, over 76% of respondents either currently use interactive reporting or wanted to develop this capability and incorporate it into their investment processes. Although “real-time” information, in terms of intraday, is not always relevant given their investment horizons, the immediacy of access to information, interactivity (e.g. ad-hoc stress tests, drill downs for issuer risk, aggregation for concentration risk), and the ability to act on the information is critical.

Respondents largely recognise the value of interactive reporting, but asset owners did raise the point that controls and data governance procedures (e.g. audit trails, data ownership models) need to be strengthened to minimise risks around interactive reporting.

“Political and social factors can affect asset prices. We have to consider national policy factors.”

Korean asset owner

Spotlight: Sustainable investing

Sustainable investing is an investment approach incorporating ESG factors in the screening and selection of investments. While sustainable investment is common practice in the European, US and Australian markets, it is a fairly new concept in a number of Asian markets.

Respondents noted that one of the key obstacles in the Asian market is the lack of credible ESG data; this, however, is changing. Exchanges in key markets, such as Hong Kong, require specific ESG disclosures for listed issuers, which should bridge the information gap currently facing Asian asset owners. Additionally, with large public pension funds beginning to consider sustainable investment strategies and ESG factors, the uptake of sustainable investing is projected to grow rapidly.

Operating models to change

Asset owners will increasingly look to re-evaluate their operating models to maximise operational capabilities and efficiency.

In terms of investment management, respondents indicated a clear preference over the next three to five years to move more investment management to external managers, citing that although internal investment teams have strong coverage over traditional and some alternative assets, as strategies approach an even wider range of asset classes, it is more commercially viable to outsource more.

In the case of analytics, while respondents were more inclined to maintain their existing operating models, most did recognise that **service providers** are able to complement in-house analytics teams with specific technologies and resources to **fill knowledge gaps**. In particular, it was interesting to note that there was a clear correlation between respondents who exclusively used in-house analytics teams and the identification of “knowledge gaps of internal staff” as a key operational challenge.

With a majority of respondents identifying capabilities as the key deciding factor in retaining operations in-house versus using external service providers, the increased **operational challenges and reporting requirements** will likely drive asset owners to leverage more from their service providers. In particular, the search for talent in risk and performance analytics capability could further prompt asset owners to look outside their organisation for support.

The right level of involvement from a service provider is seen as a key way to respond to this increasingly dynamic investment marketplace. When evaluating the exact balance between the use of in-house capability and leveraging service providers, it must be asked if these are core competencies within the asset owner, and if not, whether they should be developed in-house, or in partnership with a service provider. **Increasingly the question is not just a simple case of the analytical platform itself**. It should also take into account the technical expertise needed to understand, interpret and communicate the analytical results to various stakeholders. Furthermore, given the wide range of asset owner types, tailored service models are also critical to that effort.



Key findings



“The financial crisis didn’t precipitate a change in our strategy per se. But what it did do though was to confirm our conservative investment strategy while simultaneously reducing pressure from outside sources to increase returns.”

Australian asset owner

“Since the financial crisis, portfolio strategies have changed to tail risk management strategies. We’ve been more conservative due to the increasing volatility, and will only explore other strategies if volatility is somewhat eased.”

Korean asset owner

“Investment strategy has changed, but not directly due to the financial crisis in the US or Europe. We have always looked to capitalise on new opportunities as they arise.”

Indonesian asset owner

Drivers of change

Has the asset allocation/investment approach changed since the financial crisis in the US and Europe?

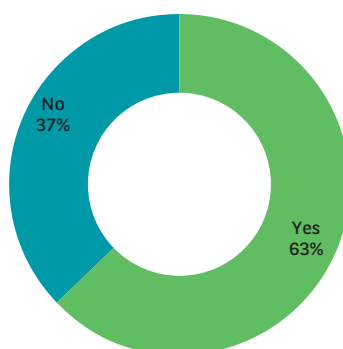
Although views were divergent, approaches were generally conservative

Among the 63% who felt there was a resulting change to asset allocation and investment strategy, the nature of the impact varied significantly among asset owners. Pension funds felt the need to refocus their investment strategy due to a sharp drop in fixed income yields, while several sovereign wealth funds saw a need to change their approaches to better mitigate the risks posed by market volatility. However, while the drop in yields has increased pressure to consider alternative asset classes, most asset owners commented that they still maintained a highly conservative approach in order to meet liquidity needs.

Several asset owners also commented that in addition to changes to their investment approach, they have increased scrutiny and mandate analysis over the fund managers they engage. To illustrate, one asset owner noted that they now require their asset managers to better explain why they choose certain exposures and they have increased checks on whether there is exposure to risky assets.

For the remaining 37% of asset owners who answered no, there was a view that historically their strategies had been conservative in nature, so asset allocation strategies remained largely consistent following the onset of the financial crisis. This was also supported by entities that placed a premium on liquidity and that could face the need to deploy assets quickly. Insurers reiterated that their strategies were long term and were less affected by economic cycles, and that their investment strategies would align with their Asset-Liability Management frameworks. Those pension funds that offer defined benefit plans also indicated that their strategies were long term and rather consistent.

Did investment approach change?



Based on responses from 27 asset owners

Has the approach become more conservative or is there a push for improved returns?

Strategies have generally trended towards being conservative

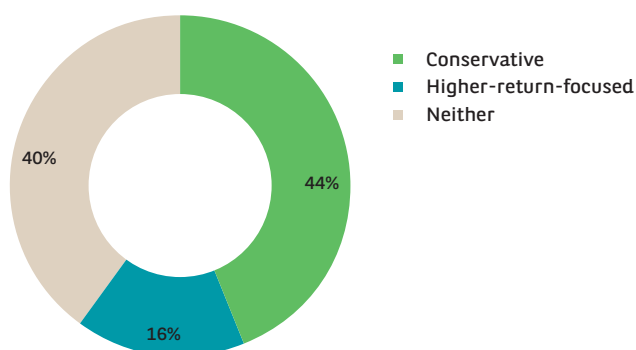
With the exception of Australian asset owners, who largely did not see their approaches becoming more conservative, there were no clear differences in views from a geographic perspective.

Respondents who felt that asset allocation had become more conservative linked this to the overall risk appetite of the organisation. While some attributed this to the financial crisis, others saw it as a part of a natural evolution of risk culture.

While asset owners with higher-return-focused strategies spoke largely about alternative asset classes and higher-yielding corporate bonds, they also indicated they were only doing so from a very low base.

For asset owners not committing themselves to either a “more conservative” or “higher-return-focused” investment strategy, the common perspective was that while a conservative approach was important, they place greater emphasis on flexibility and having the ability to adjust their strategies according to market dynamics.

Has asset allocation/investment approach become more conservative or higher-return-focused?



Based on responses from 27 asset owners
(2 asset owners declined to respond)

“Our strategies have become more conservative because we are fortunate enough to have a large enough balance sheet and a strong market position. Our smaller competitors, though, are adopting more aggressive investment strategies to try to grow market share in a short time.”

Chinese asset owner

“I don’t think we could answer one way or the other. Initially, we responded by focusing on a more conservative approach because some asset owners were hurt pretty badly in the crisis. But currently with the low yields on fixed income products and government bonds, we are refocusing to higher-return strategies because of the low interest rate environment.”

Australian asset owner

“We’ve had pressure from our clients to switch to lower risk asset classes following the financial crisis.”

Japanese asset owner

“Risk budgeting is definitely our key priority. We are pushing for an investment approach that creates more risk-efficient outcomes while giving incremental improvements to risk transparency. We essentially view a risk budgeting approach as the building block to strategic allocation.”

Australian asset owner

“Every three years the board sets a return target for the firm to achieve, with investment strategies adjusted accordingly in the preceding years to achieve those investment targets. Thus macroeconomic factors really form the key consideration for us.”

Chinese asset owner

What factors are you considering in your investment approach/asset allocation as a result of the crisis?

Liquidity factors and risk budgeting were priorities

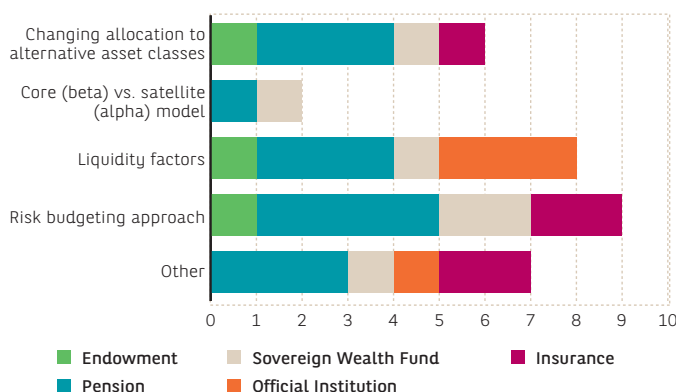
78% of all respondents who chose risk budgeting as the most important factor to consider in investment approach were asset owners from Australia, Japan and Hong Kong. These respondents viewed it as a natural direction as globally asset owners have been pushing beyond a pure performance focus for some time now. While there will be continual push for returns, the focus for management is creating a balance between risk and returns.

In terms of liquidity being a key factor, respondents were also mainly from Australia, Japan, and Hong Kong. For insurers, matching the timing of asset cash flows to expected liability cash flows is a key consideration and the increasing prevalence of Risk-Based Capital, for example Solvency II in Europe and various Solvency II-like requirements in regimes in the Asia Pacific (e.g. the Japan Financial Services Agency (JFSA) is instituting additional reporting around solvency capital requirements and China is introducing the China risk-oriented solvency system (CROSS) framework), increases the emphasis on the importance of appropriate matching.

Some other key findings included:

- Chinese asset owners indicated a top-down approach in investment strategies with macroeconomic factors playing a key role in developing strategies
- Respondents who selected “changing allocations to alternative asset classes” saw alternatives as a good way to hedge their portfolio, as their current exposures to alternatives were relatively low
- Passive vs. active approaches were factors but were largely complementary factors rather than the deciding factors
- Regulators in certain jurisdictions set asset allocation limits, which effectively limit strategies

Factors considered in investment/asset allocation



Based on responses from 27 asset owners; respondents were allowed to select more than one response (4 asset owners declined to respond)

Does your organisation plan to increase allocation to any of the following asset classes over the next year?

Fixed income or assets with fixed income-like qualities

Responses to this particular question were more decisive with infrastructure, real estate and fixed income all clearly appearing as an area for increased investment. Many respondents explained that these designations were essentially the same as they were seeking stable cash flows with fixed returns and that any asset offering fixed income-like qualities was going to be attractive, particularly among pension funds and insurers.

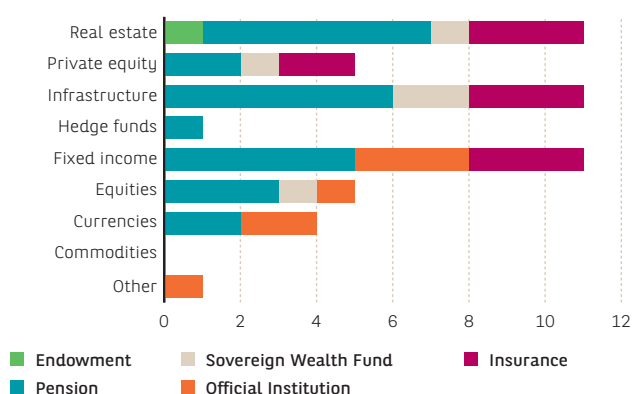
However, there were some concerns raised by respondents on the prospect of increasing competition for these assets, which potentially leads to overpricing. Respondents in China specifically identified that most infrastructure and real estate investments were via trust products¹. One Chinese respondent commented that they do have some concerns that a real estate bubble could be emerging in China. To mitigate the risk they only invest in high-end properties in first-tier cities and generate returns from rental income rather than through the resale of property.

Exposures in hedge funds avoided

Hedge funds were consistently avoided with only one pension fund expressing an interest in increasing exposure to this space. However, specific comments on this asset class from respondents were a bit more nuanced. The large proportion of family businesses and significant public market inefficiencies in Asia should theoretically make this a more suitable asset class.

"We do have hedge fund exposures but there are very divergent views within our organisation on whether to increase exposure to this space," explained one Australian asset owner. "I think the issue is that hedge funds have only been gradually rebuilding their credibility. Another issue is their expensive two and twenty fee structure²."

Asset classes with planned allocation increases



Based on responses from 27 asset owners; respondents were allowed to select more than one response (7 asset owners declined to respond)

¹ Trust products refer to the product offerings of trust companies, which are specialised hybrid non-bank lenders and asset managers unique to China. For more information on these institutions, please reference KPMG's 2013 Mainland China Trust Survey.

² The two and twenty fee structure is a type of compensation structure that hedge fund managers typically employ. More specifically, this phrase refers to how hedge fund managers charge a flat 2% of total asset value as a management fee and an additional 20% of any profits earned.

"No longer should you only focus on traditional assets; traditional assets are more volatile in nature, with high correlation with the economy. Alternative assets have weak correlation making it attractive."

Hong Kong asset owner

"We started to look into the Asia infrastructure strategy in the last year, but do not yet have a breakdown view of specific geographies. The focus now is more on the characteristics of the infrastructure rather than the countries."

Australian asset owner

“ We want to look into real estate but there currently is a huge disparity in real estate valuation between commercial and personal. For now, we’ll start looking into commercial before diving into personal real estate. ”

Indian asset owner

“ Fixed income, infrastructure, and real estate are the areas that we will strategically increase allocations to. We’ll also look into private equity to keep up with the market trend, but we don’t consider private equity to be a major tool to generate returns. ”

Chinese asset owner

Other respondents commented that the weak performance of hedge funds over the past few years and during the financial crisis was a disincentive to invest in this space.

Some other key findings included:

- Australian pension funds also noted they would consider investing in more alternative asset classes, but only in developed countries. In the long term though, further consideration for investment opportunities in developing countries is likely to increase
- Some Australian asset owners usually do not perform a breakdown analysis of countries in Asia Pacific. Their investment decisions are largely driven by the characteristics of the investment products, rather than geographic exposure considerations
- Some Japanese pension funds have “stop-loss orders” and set allocation limits on certain assets. Most Japanese pension funds plan to increase investments in currency over the next year
- Some respondents, particularly those in more regulated environments, commented that the selection of assets that they could choose to invest in is limited by the regulator and therefore does not necessarily reflect the range of assets that they would like to invest in

Given the market drivers, what challenges are you facing in your risk and performance analytics management?

Challenges were correlated to operating models

Meeting regulatory reporting requirements was the key challenge for respondents in Australia, Indonesia and India, largely due to the changing regulatory environment (regulatory challenges are discussed in further detail in a later question).

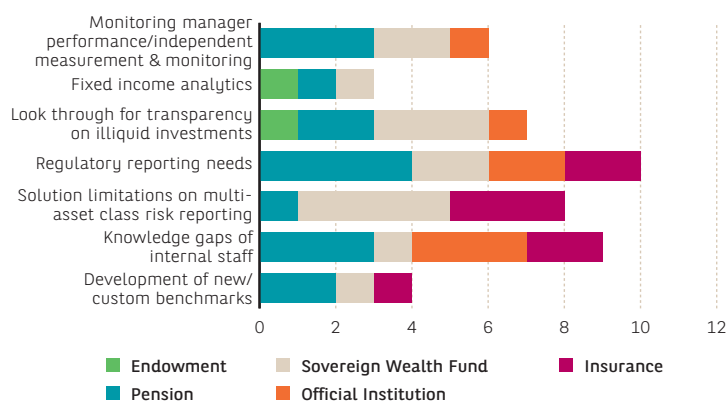
Solution limitations were identified by most of the sovereign wealth funds and several insurers with larger and relatively complex portfolios. Interestingly, about half of respondents who selected this answer exclusively operate risk and performance analytics in-house, with the remainder of the respondents using service providers only for standard reporting (e.g. performance measurement, asset allocations views, etc.). While the respondents were undecided on how to improve upon their capabilities, all unanimously agreed that spending will be increased in the next three to five years to resolve the key challenges.

From a knowledge gap perspective, there was again a correlation between this challenge and the use of in-house analytics teams, with about 90% respondents who selected this answer exclusively using in-house teams.

Some other key findings included:

- Within China, there is a strong push towards developing strong internal benchmarks and credit rating systems for investments
- Monitoring manager performance is a challenge exclusive to respondents who perform analytics in-house
- Respondents who selected "look through for transparency on illiquid investments" indicated that this was specific to only a few particular alternative asset classes

Challenges faced in risk and performance analytics management



Based on responses from 27 asset owners; respondents were allowed to select more than one response (3 asset owners declined to respond)

“We need to get people who are experienced in the market and risk analytics; knowledgeable risk personnel are more sought after than ever before in Asia Pacific.”

Australian asset owner

“The Chinese insurance market is undergoing rapid changes, and the insurance regulator has been trying to impose a series of new regulations and reporting requirements. Some insurers are struggling to adjust their strategies and organisational structures to meet these requirements.”

Chinese asset owner

“Risk assessment for equities/bonds is relatively standard, but as we plan to shift investment to trust products and corporate bonds, risk/credit rating of these investments will be complicated.”

Chinese asset owner

“Our challenges are around understanding currency exposures; we’re considering expanding investments in currency vehicles.”

Australian asset owner

Operational trends

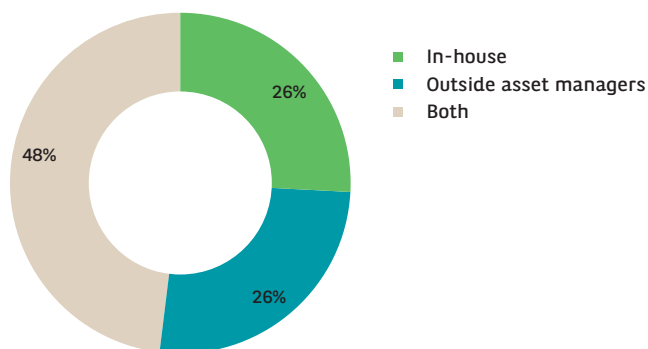
Do you currently have in-house investment management, use external asset managers, or use a combination of both? If you use external asset managers, how many?

Operating models depend on scalability and investment strategy

When asked about the use of internal or external fund managers, most respondents saw it as a commercial decision based on the complexity of their asset allocation strategies, expected volume, and internal operational scalability. Most insurance companies performed asset management in-house, as many insurers not only have the scalability to build large internal teams, but they also sometimes operate wealth management arms to sell investment-linked products.

At the other end of the spectrum, pension funds and sovereign wealth funds were more prone to relying on external asset managers, pointing out that they were in the business of setting long-term strategies, and that in-sourcing investment management would complicate this aim. In terms of managing large numbers of external managers, respondents noted that there has been increased emphasis on governance to ensure asset managers are well aligned with investment mandates and that exposures to risky assets are maintained in line with investment requirements.

Investment management operating models

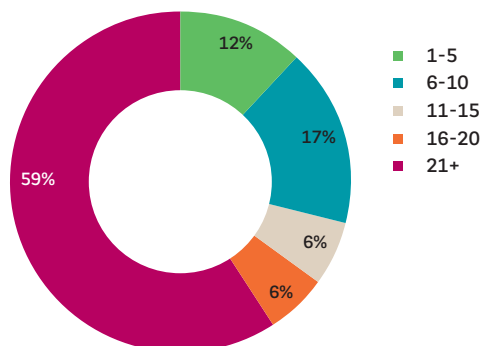


Based on responses from 27 asset owners

“Monitoring fund managers is resource intensive, so a limited number of asset managers is more ideal; at the same time, in-house fund managers are expensive, and analysts are not easy to attract or retain.”

Hong Kong asset owner

Number of external asset managers used



Based on responses from 20 asset owners who use external asset managers (3 asset owners declined to respond)

“Once the asset owner is large enough, they will be scalable enough to bring investment professionals in-house.”

Australian asset owner

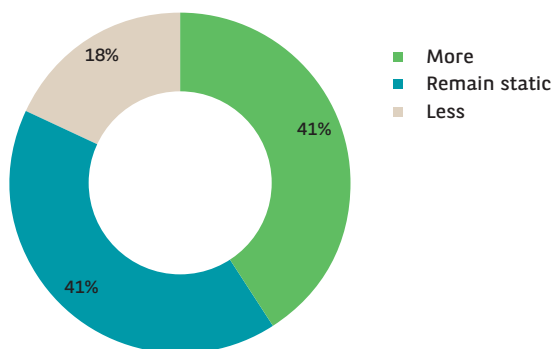
In the next three to five years, do you plan to outsource more or less investment management?

Insurers looking to use more external asset managers while some pension funds looking to internalise

Half of the insurers indicated they would outsource more of their investment management to better support their diversified strategies, although it should be noted that many currently operate under a fully in-house model. Internal investment teams have strong coverage over traditional and some alternative assets, but as strategies become more complex and encompass a larger variety of asset classes, it is seen as more commercially viable to use external managers.

Almost all pension funds interviewed for this report were heavily reliant on external asset managers, with some respondents expressing that their operations have reached a scale where they would like to develop in-house capabilities to internalise some asset management. While they would still expect to be predominantly reliant on external managers going forward, certain investment classes could be managed in-house. One Australian asset owner stated their intention was to initially internalise management of domestic investments, specifically, domestic equities, infrastructure and direct investment in real estate.

External asset manager outsourcing plans



Based on responses from 27 asset owners

“We strongly believe in the external asset manager model and will not be managing assets internally. While we don’t plan to increase the number of managers, we are consistently assessing the performance of each manager and may switch to more experienced managers.”

Australian asset owner

“We think that hiring external asset managers to supplement in-house investment teams is the trend for insurers.”

Chinese asset owner

“We don’t anticipate a large change in the number of service providers we use, but the mix of providers may change.”

Australian asset owner

“In China, one of the key factors in maintaining this function in-house is regulatory limitations around outsourcing analytics and data independence; however, there is an expectation these limitations will lessen with time.”

Chinese asset owner

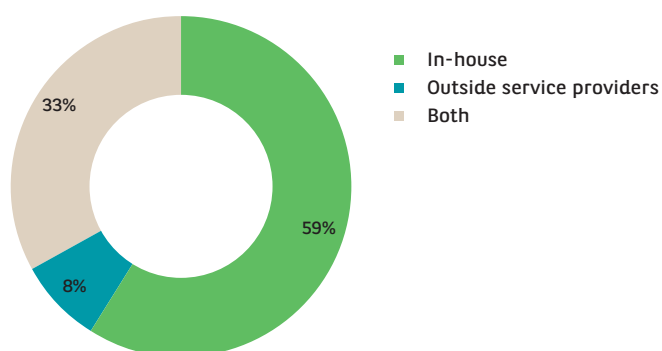
Do you rely mostly on in-house risk and performance analytics teams, use outside service providers, or use a combination of both?

In-house analytics teams streamline investment processes

The majority of respondents were performing risk and performance analytics in-house, with service providers providing only standard performance measurements, such as position reporting. One respondent noted that bringing analytics in-house offered a higher level of control and flexibility with a view that analytics would be better integrated with investment decisions, leading to increased value.

However, many agreed that they faced a growing number of operational challenges, largely around technology and talent management. One particular respondent from Hong Kong indicated that their in-house capabilities were being impacted by a loss of key analysts to asset managers.

Risk and performance analytics operating models

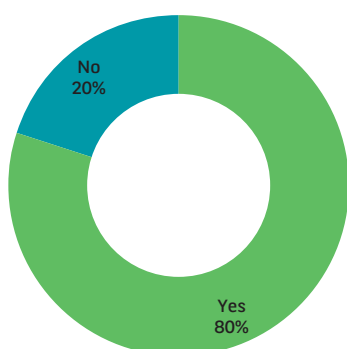


Based on responses from 27 asset owners

Does your organisation use multiple service providers?

Asset owners that hire service providers usually use more than one provider for analytics. The demand for multiple service providers is mainly driven by complicated asset class structures. However, even those asset owners who rely on multiple service providers still have in-house teams to perform some of the complicated analytics, such as that for alternative asset classes and derivatives. The major issue faced by these asset owners is the consolidation of analytics data and reports from different service providers.

Use of multiple service providers



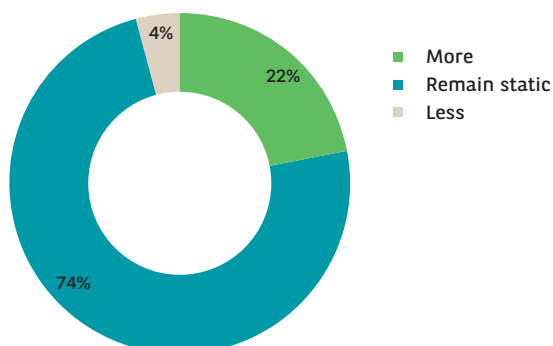
Based on responses from 11 asset owners who use external service providers (1 asset owner declined to respond)

In the next three to five years, do you plan to outsource more or less risk and performance analytics?

Service providers to complement internal capabilities

Respondents who intend to outsource more analytics are doing so largely on the basis that service providers can offer more advanced reporting tools, defined analytics models, a network of experts, and a better understanding of best practices. However, respondents also pointed out that although they intend to use more service providers, it will normally be used to complement internal capabilities as concerns were raised about over-reliance on service providers. One respondent noted that a hybrid model of using a service provider with superior technology and knowledge resources, complemented by in-house analytics teams, would be the most effective approach to maximise analytics while minimising counterparty dependency.

Risk and performance analytics outsourcing plans



Based on responses from 27 asset owners

“Currently it is sufficient to have all analytics done in-house, but we want to do more and be more efficient in the future. We are looking at solutions and outside providers to perform more complex analytics for us. In recent years we’ve seen our analysts moving to asset management houses, so it’s important for us to build an analytics model that utilises more external experts.”

Hong Kong asset owner

“Our investment exposures at the current time are relatively plain vanilla, so we have not engaged outside providers. If we were to expand into more complex asset exposures, then we will need to reconsider the way we manage analytics.”

Malaysian asset owner

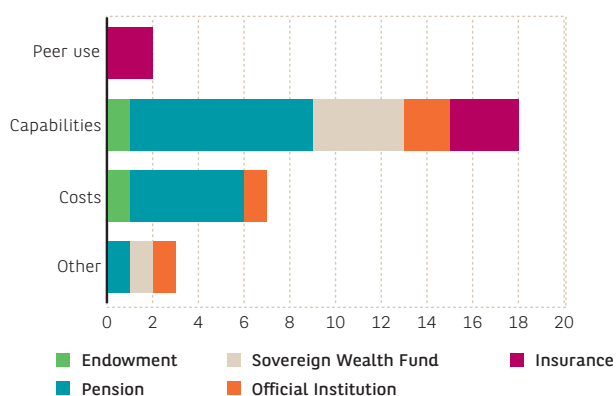
What are the key factors in retaining the operations in-house or using an external service provider?

Technology capabilities outweigh costs

The majority of respondents noted that the technology behind the analytics is a determinant in outsourcing or retaining capabilities in-house.

Respondents also pointed out that while costs are a consideration, they are conscious of the fact that changing service models is typically a resource-intensive and costly process. From the perspective of sovereign wealth funds and official institutions, costs are typically not a key concern if capabilities can be well justified.

Key factors in retaining operations in-house versus engaging a service provider



Based on responses from 27 asset owners; respondents were allowed to select more than one response (6 asset owners declined to respond)

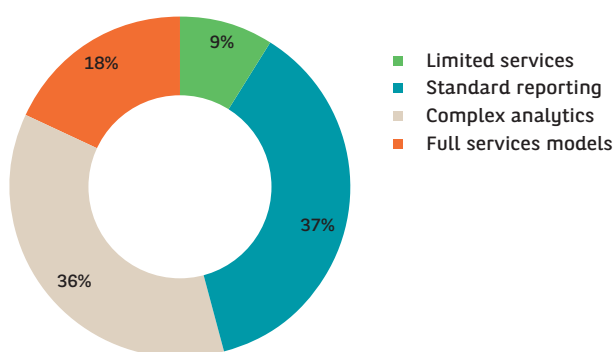
If you use a service provider for risk and performance analytics, what are the services typically provided?

Technological limitations drive need to expand services from providers

Respondents largely used a range of services from providers with one exception being an Australian superannuation fund that used service providers for end to end analytics. Hong Kong and Japanese respondents indicated that they have growing needs in terms of requesting complex analytics from their service providers. Basic performance measurement and analytics are done in-house, but for complex analytics (e.g. peer group analysis, attribution, and risk analytics) they normally rely on external service providers. In terms of drivers for this type of trend, the overwhelming response was that in-house technological capabilities were limited, forcing asset owners to look outwards for the capability.

On the other hand, Australian respondents indicated that they were more likely to request only standard reporting from their service providers and keep the more sophisticated analytics (e.g. attribution, risk exposure, scenario analysis) in-house.

Services consumed from service providers



Based on responses from 11 asset owners who use external service providers

“ Japanese language reporting capability is a must, so are the comprehensive after-sales service and support functions. ”

Japanese asset owner

“ Pricing, global expertise, support, and others factors are under consideration, but technological competence is the key factor. ”

Korean asset owner

“ We would like to leverage more from our service provider; we want the provider to tailor outcomes and provide a full view of risk transparency. ”

Australian asset owner

What are the key differentiators in selecting risk and performance analytics service providers?

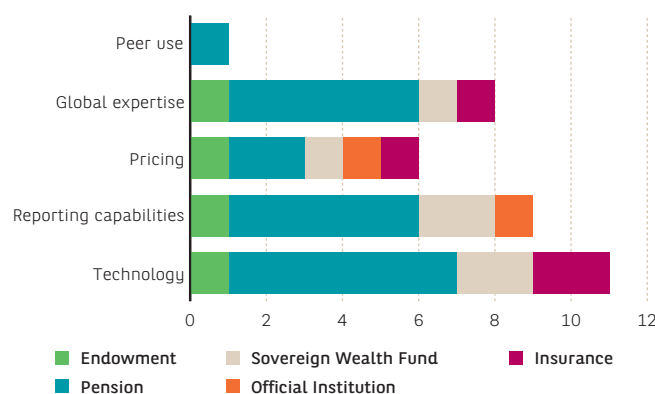
Pricing is only a secondary consideration

Respondents noted that inferior technological capabilities were the primary driver to turn to external service providers for support. While pricing was a consideration, it was seen as less significant than the vendor's capabilities. One respondent also noted that the significant size of their organisation gave them a high level of pricing power to manage fees.

Global expertise with local nuances

Respondents also noted that although they are interested in leveraging global best practices, the key is to ensure that local requirements and practices are understood and met. For example, in China, the link between private and government institutions changes the dynamics of risk valuations.

Key differentiators in selecting service providers



Based on responses from 27 asset owners; respondents were allowed to select more than one response (11 asset owners declined to respond)

Has spending increased, remained stagnant, or decreased for risk and performance analytics (for in-house and use of external service providers) in the last three years?

Increased spending due to external pressures on management

Respondents overwhelmingly saw an increase in spending on risk and analytics largely due to the:

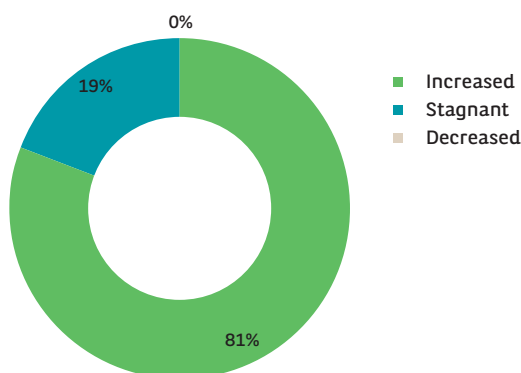
- Roll out of new or enhanced legacy technology solutions
- Expansion of services being offered by service providers
- Expansion of risk and performance teams

The overarching driver behind the increase raised by respondents is the growing emphasis and attention placed by management on analytics. Increased focus by management teams is reportedly driven by external pressures including increasing regulatory scrutiny, matching best practices of peers and increased decision-making authority at the board level.

Risk, not performance

One Australian respondent pointed out that spending on risk has increased predominantly due to a greater emphasis by management on risk measurement and risk control. While performance analytics are still important, the increasing role of risk in the investment decision-making process is seen as the key driving force behind spending increases.

Spending trends in the past 3 years



Based on responses from 27 asset owners

“The US and Europe have long had embedded risk teams. This is also the direction that Australia is going in due to a change in risk culture.”

Australian asset owner

“Spending will increase in the next few years, and we see this as a broad trend for the industry. More efforts will be put into performing attribution analysis and risk assessments of our investments.”

Chinese asset owner

“ Drivers for increased spending are primarily around additional attention on what is working and what is not. For strategies which don't work, management wants to understand why they are not working. ”

Australian asset owner

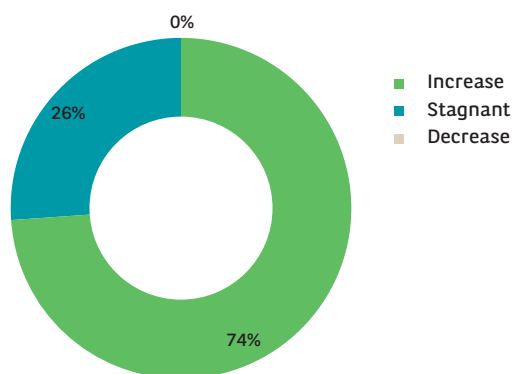
How do you anticipate spending to change in the next three to five years?

Tackling operational challenges while preparing for future requirements

Almost all respondents are planning to ramp up spending in risk and performance analytics to improve existing capabilities, including recruiting resources, building technology solutions, developing internal risk models, and/or looking to external providers to bridge capability gaps.

In Australia, respondents are anticipating spending on risk analytics to increase as new regulations around risk reporting are expected to be passed. In Hong Kong, one respondent noted that they planned to raise spending to ramp up capabilities for internal control purposes, while looking to stay ahead of the regulatory curve.

Spending trends in the next 3-5 years



Based on responses from 27 asset owners

Operational challenges

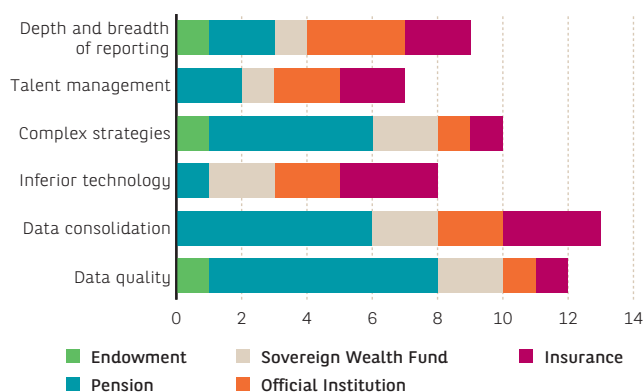
What is the greatest operational challenge that your risk and performance analytics teams currently encounter?

Complexities in data management are leading to rising costs and concerns over data quality

Respondents felt that the management and maintenance of data has proven to be one of the more difficult challenges to tackle, especially as investment strategies, associated indicators and benchmarks become more complex. For larger asset owners in particular, which invest through multiple fund managers and across many different asset classes, the challenge of managing a plethora of data sources was seen as overwhelming at times. They pointed out that maintenance of large volumes of data has placed tremendous pressure on their IT infrastructure, while contributing to spiralling maintenance costs. This was especially the case where asset owners used both external asset managers and internal investment management teams, and need to create an integrated platform compatible with the front, middle, and back office systems of external managers.

From a data quality perspective, in the case of alternative assets, information transparency has been flagged as a key concern for alternative asset classes, especially in markets where there are issues around transparency.

Greatest operational challenges



Based on responses from 27 asset owners; respondents were allowed to select more than one response

Some other key findings included:

- One respondent in China noted that the rapid development of China's financial services sector and the consequent maturation of accounting and reporting standards underpinning that process have meant that the quality of historical data is limited and often unreliable

“Risk assessment for equities and bond investment is relatively standard, but it is more complicated for other non-traditional asset classes such as infrastructure and real estate; that is where our challenges lay.”

Chinese asset owner

“We have concerns over data quality and stability; our current system cannot fully cover the complex strategies we employ.”

Korean asset owner

“Talent retention is always an issue; we need our staff to catch up with the latest market movements and regulatory changes.”

Hong Kong asset owner

“The large number of data sources is creating integration problems for our legacy platforms. It has been difficult to consolidate the large volumes of data.”

Japanese asset owner

- Greater emphasis on corporate governance is driving the need for depth and breadth in reporting with management teams increasingly demanding improved transparency and accuracy in reporting. Respondents noted that internal reporting requirements have compounded over the last three years, as management is looking for the ability to drill down and understand a number's composition
- Investment executives are looking to invest heavily in recruiting and retaining top talent in Asia Pacific. While most respondents regarded their internal risk and performance teams as strong, there was a perception that talent shortages were significant. However, the view on where shortages were occurring was more nuanced. "The process of incorporating risk into the investment process is giving rise to a need for changing skills around risk. So the issue is not that we have a shortage of people, it's more the changing nature of risk analytics that is creating new needs," explained one asset owner
- In China, one respondent pointed out that in addition to understanding global best practices in risk and performance management, it is important that the risk analytics staff can interpret data based on their understanding of the domestic market. Risk assessments for equities and bond investment were seen as relatively standardised in the Chinese market, but the process becomes more complicated for other non-traditional asset classes such as infrastructure and real estate where the possibility of government intervention (e.g. setting toll road rates, water pricing) creates a level of unpredictability in long-term valuation estimates

What are your organisation's most critical needs in terms of performance analytics?

Performance analytics needs vary across the segments

Unsurprisingly, the needs of asset owners from a performance perspective ranged widely depending on the size and type of the organisation and their respective investment approaches. While some respondents pointed out that they are still working to improve more basic functions (e.g. consolidated and mandate performance), others were working to build more complex attribution models to advance their investment strategies and portfolio construction approaches.

For respondents who selected "consolidated and mandate performance" and "total fund and mandate attribution analysis" as the key need, the main commonality was the extensive use of external asset managers (one pension fund noted they have over 400 external funds being managed). These entities expressed that consolidation of performance from asset managers and multiple custodians was a key challenge and that existing consolidated performance measurements were often insufficient to satisfy management needs. Moreover, there was significant pressure to improve attribution analysis at the portfolio level.

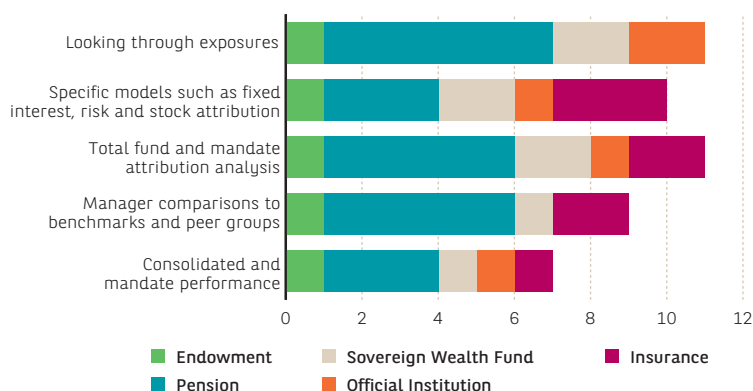
There was also a clear trend that asset owners in emerging markets placed a lot more value on peer group comparisons and benchmarks. Those respondents suggested that this was largely due to pressure from management and board members to outperform competitors.

Large pensions and insurers have a greater need for attribution models and look through exposures

When it came to look through exposures, needs ranged depending on asset class exposures. One pension fund suggested that investment option analytics and infrastructure analytics were a top priority given their increased emphasis on alternatives, whereas another pension fund looking to push into more fixed income allocations saw fixed income analytics as the key priority.

Large pension funds and insurers were particularly interested in the development of attribution models, especially around fixed income attribution and risk attribution. One insurer noted that asset owners in emerging markets have largely been pursuing investment returns with very limited risk attribution analysis. Therefore although the returns are high, it is unclear to what level this correlates to higher risk taking.

Most critical needs in terms of performance analytics



Based on responses from 27 asset owners; respondents were allowed to select more than one response (3 asset owners declined to respond)

“From the organisational structure perspective, we face the challenge of determining how to divide the investment management teams (e.g. by asset classes or by accounts) and how to develop new KPIs that better assess the team’s performance.”

Chinese asset owner

“As more insurers start to invest in alternative assets it is important to perform effective risk attribution analysis in order to fully understand the risks that the company is entering into.”

Chinese asset owner

“We’re currently more focused on measuring our performance against benchmarks and our peers; we are looking to develop additional capabilities on the risk side.”

Indonesian asset owner

“We would like to do more about investment option analytics and infrastructure analytics. The current system takes too long to post data, and needs further improvement.”

Australian asset owner

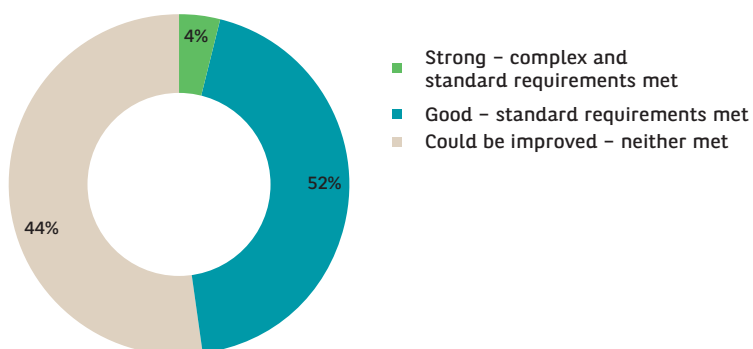
“We have a range of needs on the performance side depending on the asset class, with some needs more critical than the others.”

Japanese asset owner

Rank the effectiveness of your current solutions/ service models?

Room for improvement in performance analytics

In terms of their assessment of their current solutions, respondents were roughly evenly split between “good” and “could be improved”. The respondents who felt that standard requirements were met were larger asset owners with a more mature infrastructure in place. The remainder of the respondents were typically smaller in scale (the exception to this was a large sovereign wealth fund), who believed that their existing systems and processes were still relatively basic. They felt improvements could be made, although there was a lack of consistency on what denoted “industry standard practices”, especially in comparison to peers in Western economies.



Based on responses from 27 asset owners;
(4 asset owners declined to respond)

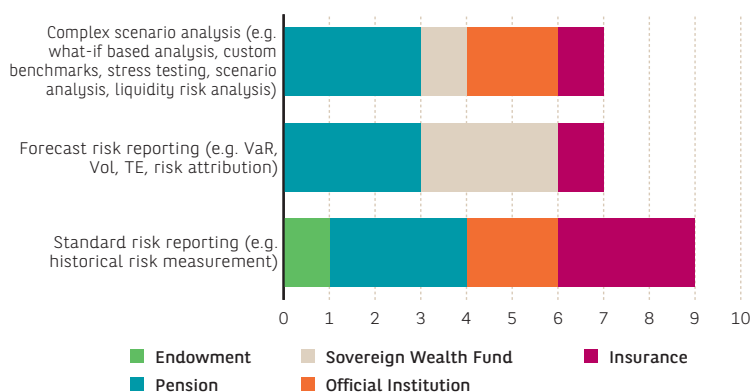
What are your organisation's most critical needs in terms of risk analytics?

Risk culture defines needs for risk analytics

Similar to performance analytics, the need for risk analytics varied across the region. However, the general trend largely centred around the risk culture of the organisation (with the exception of a Central Bank respondent who pointed out that its strategies were fairly straightforward and needed only basic risk reporting capabilities). For example, asset owners who placed more emphasis on performance metrics than risk metrics typically selected standard risk reporting as the most critical need. Conversely, respondents with a greater focus on risk metrics placed a stronger emphasis on forecast risk reporting and complex scenario analysis.

While most respondents expressed that they wanted to increase their risk analytics capabilities, one respondent indicated that while technology is a key factor behind risk analytics capabilities, having the knowledge to understand the results is more important. A few respondents from emerging markets commented that even if they have the technology or a service provider to develop complex risk analytics, they would not have the resources at the management level to interpret the results and apply them to investment approaches. As a result, it is more important to begin with basic analytics and build the risk culture and the knowledge base before seeking out more complex risk analytics.

Most critical needs in terms of risk analytics



Based on responses from 27 asset owners; respondents were allowed to select more than one response (4 asset owners declined to respond)

“Some investment teams view risk analytics simply as paper reports, but if they could use complex scenario analysis to see the worst possible cases, they would better appreciate the value of risk analytics.”

Australian asset owner

“In terms of risk analytics, we tend to use a more historical approach. While we have stress testing, volatility and tracking error analytics capability, we focus more on value-at-risk.”

Filipino asset owner

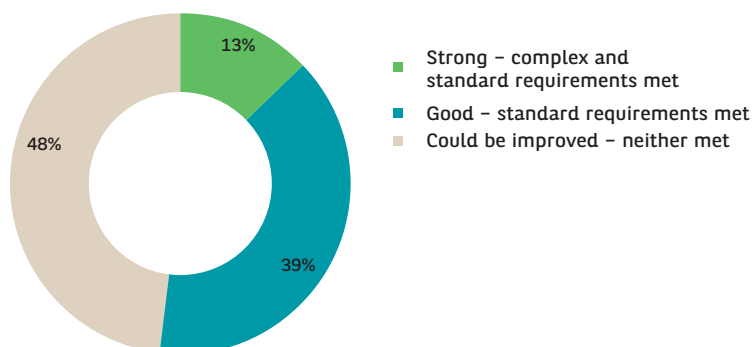
Rank the effectiveness of your current solutions/ service models?

Improving risk analytics begins with incorporating risk analytics into investment processes

Similar to the effectiveness of performance analytics, there was a roughly even split between “good” and “could be improved”, with smaller asset owners indicating that there was more room for improvement.

Although improving technology infrastructure, through internal development, external solution providers, or the use of custodians, was seen as of significant importance, respondents were keen to point out that the integration of risk analytics into investment processes was key.

One respondent from Australia noted that although risk management represented an increasingly large part of their business, a disconnect still existed between investment teams and risk teams, and that one of the key challenges was embedding risk management teams into the investment process. Some respondents noted that risk analytics was still seen as more of a reporting function and there would be a long way to go before the maximum value of risk analytics could be realised.



Based on responses from 27 asset owners;
(4 asset owners declined to respond)

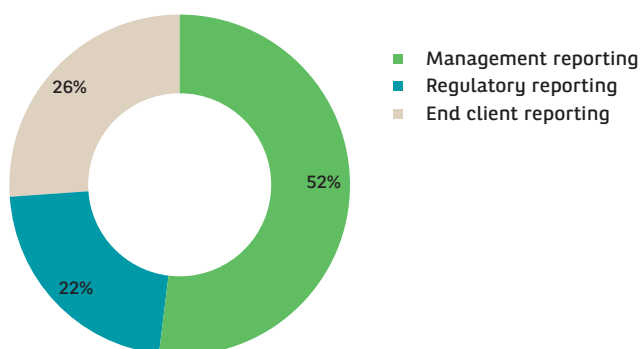
Where do you encounter the most challenges in terms of risk and performance reporting?

External pressures drive the need for management reporting

The majority of the respondents found management reporting to be the most challenging reporting item for them. Even those respondents that chose regulatory reporting or end client reporting as their first answer also indicated that management reporting came a close second.

Given external pressures from rapid improvements in corporate governance and increased regulatory scrutiny across the region, boards of directors are wielding increasing authority and, along with management teams, expect much more comprehensive information to assist them in their decision-making. Not only is breadth and depth of reporting vital, but management teams are also looking for more detailed breakdowns of data. As a result, risk and analytics teams are producing many more ad-hoc, customised reports, which are complicated by the fact that a large number of respondents are still relying on spreadsheets and emails to track and manage reporting.

Challenges in risk and performance reporting



Based on responses from 27 asset owners;
(4 asset owners declined to respond)

“As the management teams become more sophisticated, management reporting is becoming challenging for asset owners across Asia Pacific.”

Australian asset owner

“The amount of resources that get consumed on ad-hoc queries is tremendous.”

Australian asset owner

“Technology is currently poor; in the future, we need to develop self-service capabilities as end users typically have many ad-hoc requests.”

Australian asset owner

“We are driving to improve consistency of reporting formats, making it easier to understand, easier to pinpoint problems, and easier to compare with peers.”

Hong Kong asset owner

Is there a need for custom reporting for risk and performance?

Custom reporting set to evolve

A majority of respondents saw a strong need for custom reporting largely due to the different consumers of information they are beholden to, i.e. both internal (investment teams, operations, CEO, etc) and external (regulators) parties.

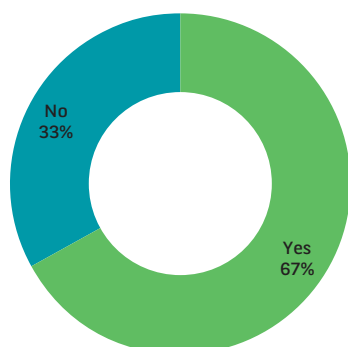
The key difference now, compared to previous years, is the medium through which this customisation is provided, and the empowerment of the end user to effectively manage the information to meet ad-hoc needs.

Challenges with custom reporting

Some respondents indicated that custom reporting was not needed largely based on the premise that internal resources did not have the breadth and depth of knowledge to consume anything beyond standard formats.

Another respondent noted that custom reporting was a need and was something they wanted to source from service providers. However, strict data privacy rules limit the amount of information being transferred, allowing custodians to provide only standard data sets as opposed to detailed analysis.

Need for custom reporting



Based on responses from 27 asset owners;
(3 asset owners declined to respond)

Which reporting formats are typically used within your organisation?

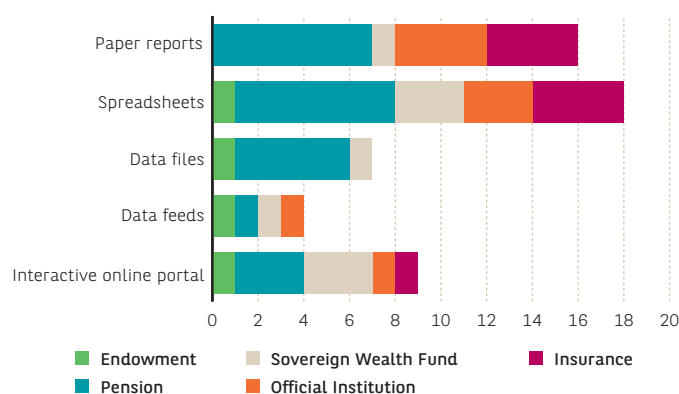
Audit trails are the key focus for asset owners

The majority of respondents indicated that spreadsheets and paper reports were most popular due to their ability to be retained as audit trails, with spreadsheets largely used for reporting and hard copies used for paper sign-offs.

Data files and data feeds were commonly sourced from custodians, but the respondents who selected those choices also indicated a need to convert the formats into consolidated reports.

In terms of an interactive online portal, respondents indicated that they were used when it was offered by their custodians, but it was complementary rather than a medium to replace spreadsheets and paper reports.

Reporting formats



Based on responses from 27 asset owners; respondents were allowed to select more than one response (3 asset owners declined to respond)

“Interactive reporting will help achieve better transparency, which is fundamental to all investment decisions.”

Australian asset owner

“In Japan, not a lot of asset owners are using interactive reporting. Although it is not much of a trend, it could become a key differentiator at some point.”

Japanese asset owner

“Institutional customers are becoming savvier and want information in a more timely manner; we see interactive reporting and detailed analytics to be a value-add for our customers.”

Hong Kong asset owner

“Interactive reporting is a great idea if you can incorporate controls and audit trails into the system. Internal audit is currently exploring how to best incorporate governance into this type of reporting.”

Australian asset owner

Does your organisation use interactive reporting for risk and performance?

Interactive reporting to enhance portfolio construction and monitoring

With increases in market volatility, more sophisticated asset classes, greater correlation between asset classes, and the need to improve the effective discharge of fiduciary duties, over 76% of respondents either already have interactive reporting capabilities or are looking to develop them. For asset owners, “real-time” in terms of intraday information is not relevant given their investment horizons, but immediacy of access to information, interactivity (e.g. ad-hoc stress tests, drill downs for issuer risk, aggregation for concentration risk), and the ability to act on the information is critical.

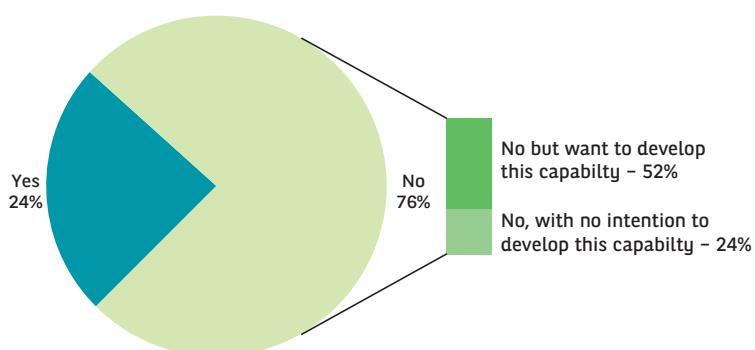
Reporting governance needs to be developed when it comes to interactive reporting

One of the key concerns raised about interactive reporting is the need to incorporate sufficient controls and governance over the data. When it comes to management reporting, senior executives are always looking to have appropriate sign-offs and reviews in place. In order to operationalise interactive reporting for investment management, policies and procedures are needed to ensure there is clear oversight over data quality.

Four of the five Japanese respondents not looking to develop the capability in the near term

When taking costs (both upfront and ongoing) and implementation challenges into consideration, most Japanese respondents suggest that interactive reporting is seen as a “nice-to-have” option rather than a core necessity. There was also a view that resources would be better invested in other operational areas rather than in the development of interactive reporting.

Respondents with interactive reporting capability



Based on responses from 27 asset owners;
(3 asset owners declined to respond)

What impact have regulatory risk reporting requirements had on your organisation?

Increasing regulation to pose operational challenges

Most respondents, with the exception of official institutions, felt that regulatory reporting requirements have risen. In particular, Australian and Indonesian respondents found that regulatory risk reporting requirements have significantly impacted their organisations, whereas survey respondents from other countries felt there was only 'limited' or 'some' impact. In Australia, given the upcoming issuance of the "Stronger Super" reforms by the Australian government this year, respondents have indicated that they are gearing up for additional regulatory requirements.

In Japan, the focus was also on increasing reporting, especially for pension funds, which have been experiencing greater scrutiny of their financial accounts by auditors who are coming under regulatory pressure to strengthen audits of pension funds. This was due in large part to a series of recent scandals, which have eroded public confidence in Japanese pensions.

Chinese asset owners also operate under a robust regulatory environment and have struggled with data quality issues for reporting purposes as well as in gaining a solid grasp of the regulations themselves. In 2013, the China Insurance Regulatory Commission issued 13 new regulations on areas such as investment limits and asset allocation limits. However, as regulations are often more qualitative than quantitative, there is often a time lag for insurers to comply while they await more detailed explanations.

In Hong Kong, respondents noted that while current regulatory reporting was not too stringent, they were beginning to develop this capability as there is an expectation that this requirement will expand in the future, in line with reforms that are being rolled out across North America and Europe.

In general, respondents have indicated that changes in the regulatory environment have created a certain level of unpredictability around reporting requirements, which leads to operational issues such as data management challenges and inadequate reporting architecture.

“APRA regulations on superannuation funds are quite onerous. There is a sense at times that superannuation industry resources are being spent complying with regulations that are more pertinent to other financial institutions than themselves.”

Australian asset owner

“We dedicated significant resources to not only interpreting the regulations but also working with the regulator to confirm applicability of policies to our organisation.”

Indonesian asset owner

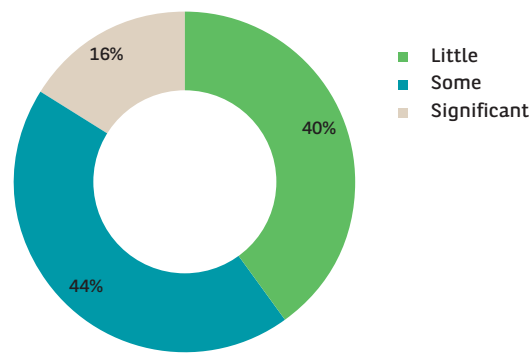
“Alternative assets have fallen under particularly strict scrutiny and overall there is strong market sentiment that transparency and regulatory risk reporting will increase substantially in coming years.”

Japanese asset owner

“Regulations change very often in China and are sometimes stated in a vague manner. We find that understanding regulations is a common issue in China.”

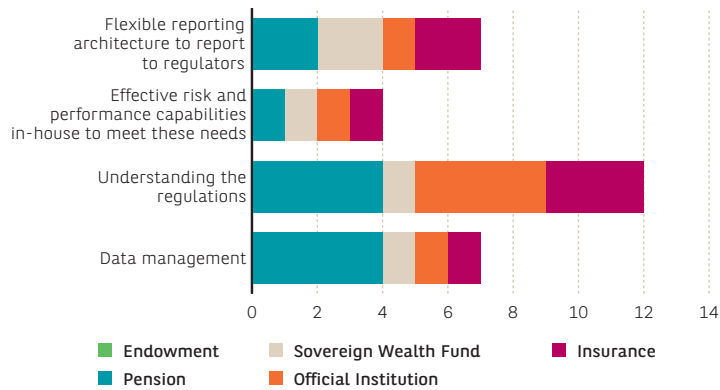
Chinese asset owner

Impact of regulatory risk reporting requirements



Based on responses from 27 asset owners; (2 asset owners declined to respond)

Challenges faced when complying with these requirements



Based on responses from 27 asset owners; respondents were allowed to select more than one response (8 asset owners declined to respond)

How does your organisation currently manage investment compliance?

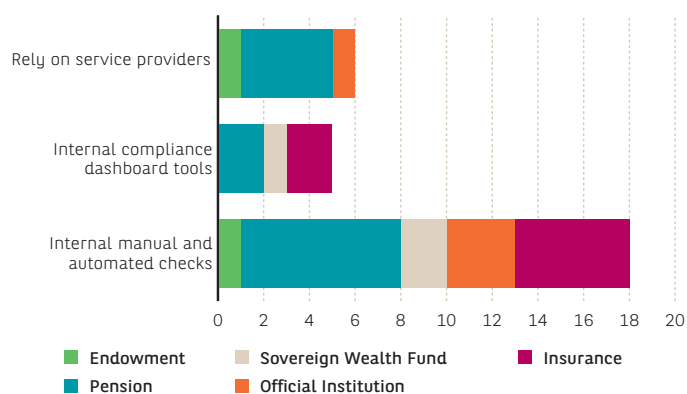
Investment compliance to improve

While some respondents just use service providers and compliance tools, the majority of respondents use a combination of manual and automated checks.

For Australian and Japanese respondents, many of the compliance limits were inherently configured on trading and investment systems, which would then be complemented by internal manual checks (e.g. exception handling). Some Chinese respondents, in particular, noted that they did want to automate more of investment compliance, especially as regulators are looking for more reporting around particular limits. Overall, respondents were keen to explore automation opportunities where possible.

According to one Malaysian asset owner, investment compliance was mainly driven more by commercial considerations rather than regulatory concerns. "The nature of our business requires long term investments with returns often many years out. So our treasury needs to be very cognizant of duration risk when making investments. We place a lot of value on being able to respond rapidly should CAPEX (capital expenditure) or working capital needs suddenly arise."

Investment compliance management



Based on responses from 27 asset owners; respondents were allowed to select more than one response (4 asset owners declined to respond)



Conclusion



Asia Pacific represents a significant proportion of the global asset owner segment and continues to grow at a significant pace. While a number of studies have set out to explore investment strategies and asset allocation trends adopted by European or North American asset owners, there is still a gap in terms of coverage for Asia Pacific, particularly from a risk and performance analytics perspective. However, it is important to understand that Asia is a remarkably dynamic region with significant variances. This survey on asset owners across Asia Pacific demonstrates that overall, the region is moving in multiple directions as asset owners face different challenges and pressures with few clear common trajectories in their respective jurisdictions.

For example, emerging economies are more focused on themselves with less of a willingness to undertake more progressive investment strategies, while also facing more regulatory and management obstacles. On the other hand, mature markets, while clearly stating their objectives being very conservative in nature, show more of a willingness to invest in a broader range of asset classes and to adopt operating models more complex to meet their investment needs. Nonetheless, while there is a distinction between developed Asian economies versus emerging markets, certain trends are discernible across the region, e.g., the move towards creating risk-efficient outcomes in investment strategy and the impact of increasing regulatory oversight over investment operations.

The key to an efficient and effective operating model is to focus on core competencies in-house and to find a tailored service model that closely aligns with investment priorities and risk preferences.

It is also clear that in terms of risk and performance analytics, most asset owners see value in strengthening their relationships with their respective custodian banks and service providers to better face these challenges. It is widely recognised that as asset owners expand their investment scope in terms of asset class and geography, they require support to achieve this. However, the support needed varies significantly; from developing more basic infrastructure through to developing highly complex analytics and interactive reporting models. The key to an efficient and effective operating model is to focus on core competencies in-house and to find a tailored service model that closely aligns with investment priorities and risk preferences.

Questions around the influence of the current economic situation in the West elicit a diverse range of responses although respondents generally indicate that it has had a limited direct impact on the investment activities and strategies of asset owners in the region. While it is seen as giving rise to certain conditions that have indirectly precipitated changes in investment strategies (lowered interest rates on central bank bonds, bank deposits and corporate bonds is putting downward pressure on all fixed income instruments while volatility in equities markets has increased), many asset owners view their strategies as equally conservative before and after the crisis.

There are also a number of very interesting findings around what analytics means to participants. While they are virtually unanimous in noting a changing risk culture within their organisation (a significant influence behind increased management and regulatory oversight), there are differing views about what this meant from an organisational perspective. Some feel a risk budgeting approach is the most effective solution while for certain respondents in emerging economies, performance is still their priority.

Survey results also indicate that alternative asset classes, particularly real estate and infrastructure, which offer stable and fixed returns, would be key beneficiaries going forward as asset owners are becoming more open to increasing their exposure in this space. This stands in stark contrast to hedge fund products, which still have a stigma attached to their performance over recent years. Increasing caution around Asia Pacific economic growth is also giving rise to a growing emphasis on geographical diversification, in many cases in markets that are far removed from the region. While the global financial crisis has reshaped many asset owners' perception of risk and investment strategy, North America and Europe look surprisingly well-positioned to be a key beneficiary of this reorientation of investment allocation.

Risk and performance analytics is no longer a value-add to improve investment strategies, but a cornerstone requirement in all investment decision-making.

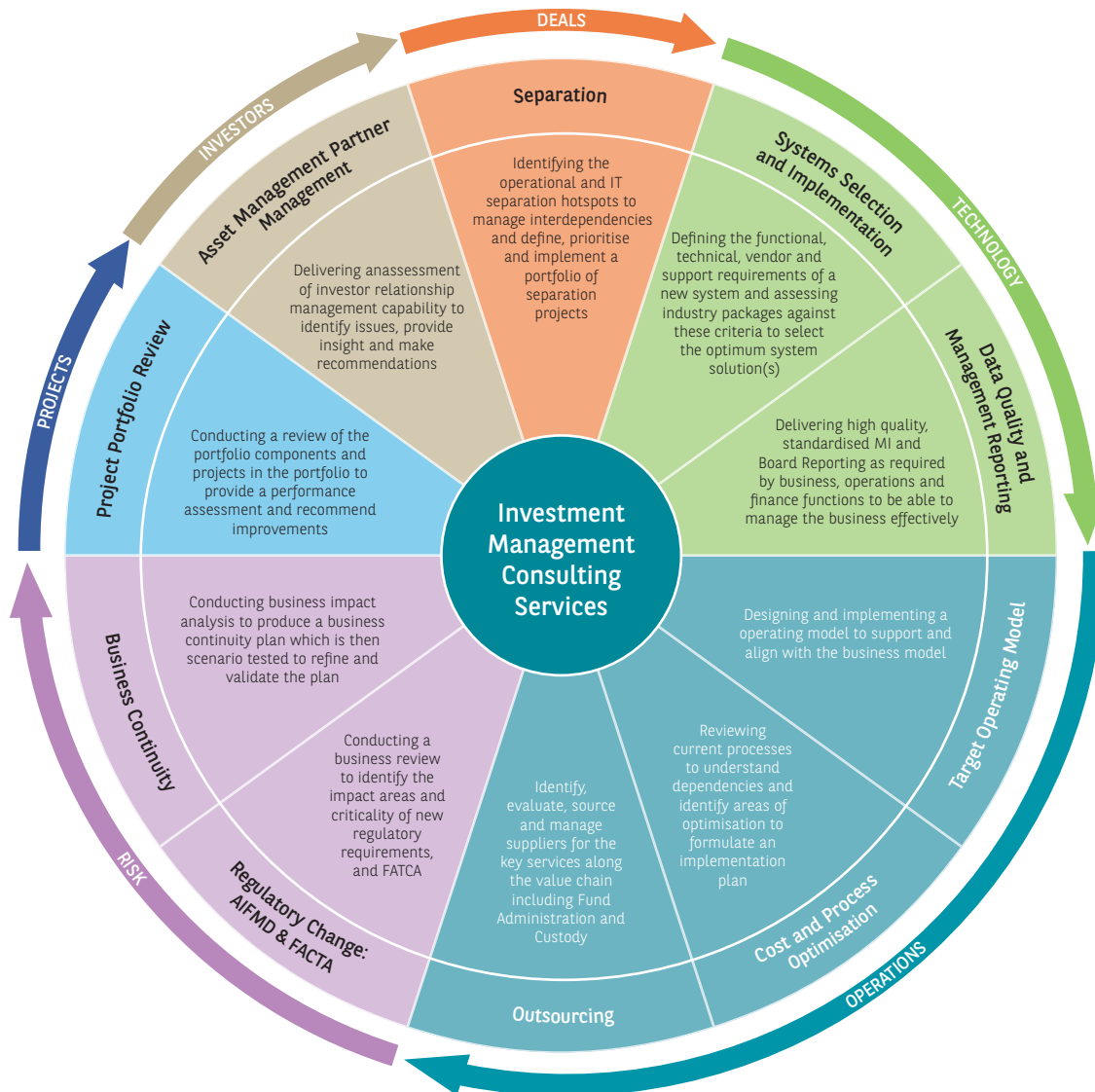
Other notable findings include the growing interest around the development of interactive reporting capabilities, a stronger focus to incorporate ESG into the investment decision-making process, and a desire to move towards global best practices. Generally, it is clear that this space is undergoing significant change in the face of a rapidly growing asset base and an evolving economic environment.

Risk and performance analytics is no longer a value-add to improve investment strategies, but a cornerstone requirement in all investment decision-making. While a number of Asia Pacific asset owners are making big strides in enhancing their capabilities, a lot remains to be done before the maximum value of analytics can be realised.

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