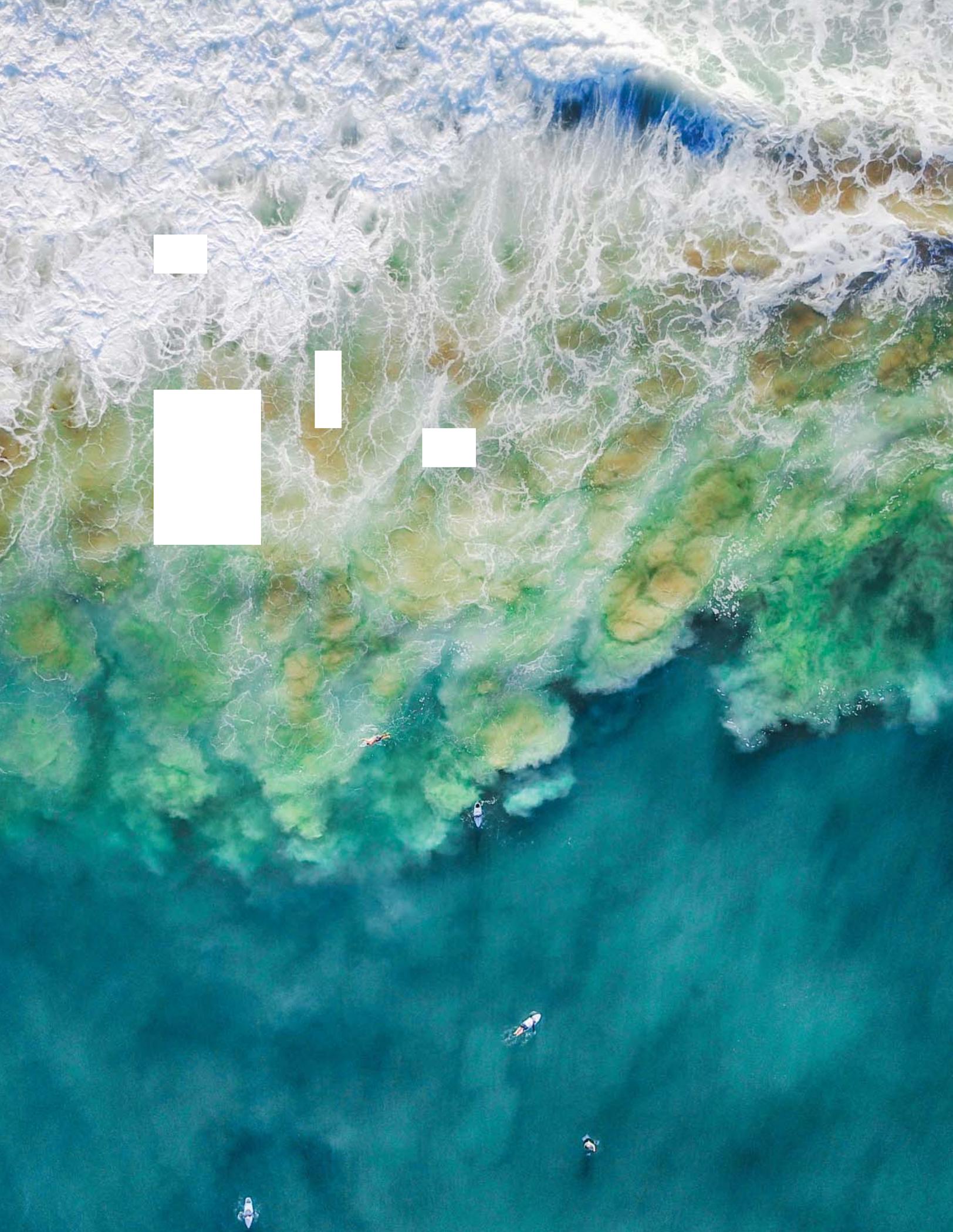


2018

Global Investment Matters





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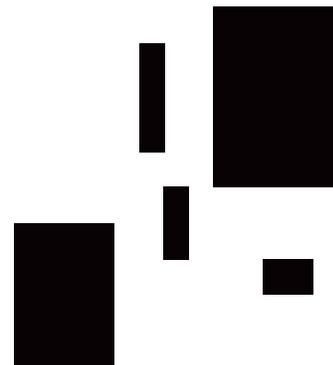
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Introduction

By Chris Ford





Willis Towers Watson's goal is to improve investment returns for savers. Together with our clients, we are responsible for trillions of dollars that these savers will rely on over the long term. While we and our clients spend much of our time dealing with the here and now of managing asset portfolios, we all know that it is the long term that matters the most. To help keep the focus on the long term in Global Investment Matters, we have created a series of short articles that address specific issues that we believe are important for long-term returns. In some areas we identify tangible steps that asset owners can take today for long-term benefit. In others the solutions require more work from us and asset owners, but the articles provide a contribution to the decisions that asset owners must make if they are to fulfill their fiduciary duty – to seek to provide strong long-term returns to savers. I hope you find the time to focus on the long term during 2018.



Sustainable investment – a call to action

By Adam Gillett



As investors and regulators now recognize the importance of sustainable investment, the key issue becomes translating thinking into action.



In recent years, many drivers have powered sustainable investment’s momentum, and the cumulative effect has elevated its importance on many asset owners’ agendas. Pressure has come from the end savers (such as pension fund beneficiaries) for institutions to consider sustainability topics that are important to them – think of the fossil-free campaigns at universities across the U.S. and U.K., for example. Regulators and industry bodies have also introduced new standards and guidance to improve investment practices (such as IORP 2 in Europe) and transparency.

It is not unusual to see mainstream media headlines highlight sustainable investment issues – corporate scandals such as Wells Fargo and Uber, as well as industry-wide topics such as executive compensation, board diversity and supply chain management. Indeed, many sustainability-related issues are very much in the

general public consciousness, perhaps none more so than climate change, which was recently described as “the single biggest urgency” for investors by Adrian Orr, CEO of the New Zealand Superannuation Fund, widely recognized as one of the leading global asset owners.

Investors often ask what evidence there is to support the financial value of sustainable investment, and we believe the increasing body of evidence for the risk/return benefits of this area is compelling. Asset owners across the world are taking note and making significant portfolio responses. The Government Pension Investment Fund – the world’s largest pension fund – has been a very vocal proponent over recent years, and is heavily contributing to the wave of stewardship and environmental, social and governance (ESG) activity in Japan and across Asia. NZ Super announced its climate change policy last year and, alongside many other institutions (primarily in Northern Europe), is making major portfolio changes especially around low-carbon investing.

Figure 1. Drivers of sustainable investment



The evidence

See our publication “Show me the evidence”¹ – where we present a range of academic studies and meta-studies that demonstrate the positive financial impact of ESG factors and stewardship on risk and return outcomes.

While individual asset owner actions will likely have significant positive impact, we believe there is also great power in collective action raising standards across the industry and improving outcomes.

Figure 2. Integrate sustainable investment into the investment process



With all this activity, other asset owners are looking to explore what sustainable investment can mean in practical terms for their portfolios. At Willis Towers Watson, we have long believed in the importance of sustainable investment in successful long-term outcomes. We also believe that integrating sustainable investment into the entire investment process from mission and objectives, through asset allocation and portfolio construction, to monitoring and reporting, is the best way to realize the full value available here.

Willis Towers Watson's beliefs

We believe that sustainability issues have a material impact on risk and outcomes, both financial and nonfinancial. Our full philosophy and approach to the subject is outlined in "Sustainable investment and stewardship – our position."²

We recognize that the interpretation and application of sustainable investment principles will vary according to the context of each organization. This context includes governance budgets, objectives and operating models, among others. Sustainable investment is sometimes dismissed as a topic only large asset owners can accommodate, but we believe there are minimum standards that all asset owners should adopt, which we outline below:

1. Undertake training and education to build your understanding of sustainable investment, including the regulatory and legal context
2. Determine your fund's position on sustainable investment and articulate it in key documents (such as the Statement of Investment Principles or equivalent)
3. Incorporate material sustainability-related themes into asset and liability assumptions, and your strategic asset allocation process
4. Factor sustainable investment and stewardship criteria into your manager selection, monitoring and reporting processes
5. Communicate your position and activities to relevant stakeholders (e.g., regulatory bodies, plan participants, sponsors, service providers and the market)

While individual asset owner actions will likely have significant positive impact, we believe there is also great power in collective action raising standards across the industry and improving outcomes. Many investors take a similar view, and multiple collaborative initiatives exist that drive important change and offer asset owners the opportunity to extend their sustainable investment actions and impact alongside like-minded investors. Among those initiatives which investors may want to join are the Principles for Responsible Investment (PRI), relevant local or global stewardship codes, or regional organizations such as EuroSIF in Europe and ACSI in Australia.

Collaborative initiatives

We believe in the importance and impact of collaborative initiatives to give the investment industry a stronger voice and drive change for the benefit of all participants.³

The breadth of the sustainable investment topic also means there are multiple other areas for asset owners to explore. Impact investing and megatrends are just two such examples that have received particular attention recently. Often though, embedding sustainable investment principles into an organization is a gradual process, and investors can therefore aim for the minimum standards above as a base line, with plans to do more further down the track as their organization progresses and the industry evolves.

Megatrends

Megatrends are large-scale, transformative developments that will impact our economies, businesses and communities. We have recently investigated the trends that are most important to global investors and the associated risks and opportunities in collaboration with the PRI.⁴ Also, see later article in this publication on page 20.

Impact investing

Impact investing refers to investments made with the specific intent to generate measurable, beneficial environmental and/or social impact alongside a financial return. Investors often align the topic with the UN Sustainable Development Goals (SDGs) framework.

The momentum behind sustainable investment is, in our view, both welcome and merited. However, it is vital to be able to harness this and translate it into affirmative investment actions that capture the potential of the subject. We believe all investors have a part to play here, and that inaction comes with significant risks. While it is often tempting to focus on best practice and what leading asset owners are doing, we believe it is equally, if not more important to highlight what all asset owners can and should be doing. The minimum standards outlined above represent a starting point and a call to action that we hope will drive real change.

¹"Sustainable Investment, show me the evidence," Willis Towers Watson, 2017. Available here: www.willistowerswatson.com/en/insights/2018/02/sustainable-investment-show-me-the-evidence

²"Sustainable investment and stewardship – our position," Willis Towers Watson, 2017. Available here: www.towerswatson.com/en-GB/Insights/IC-Types/Ad-hoc-Point-of-View/2014/02/Sustainable-investment-and-stewardship

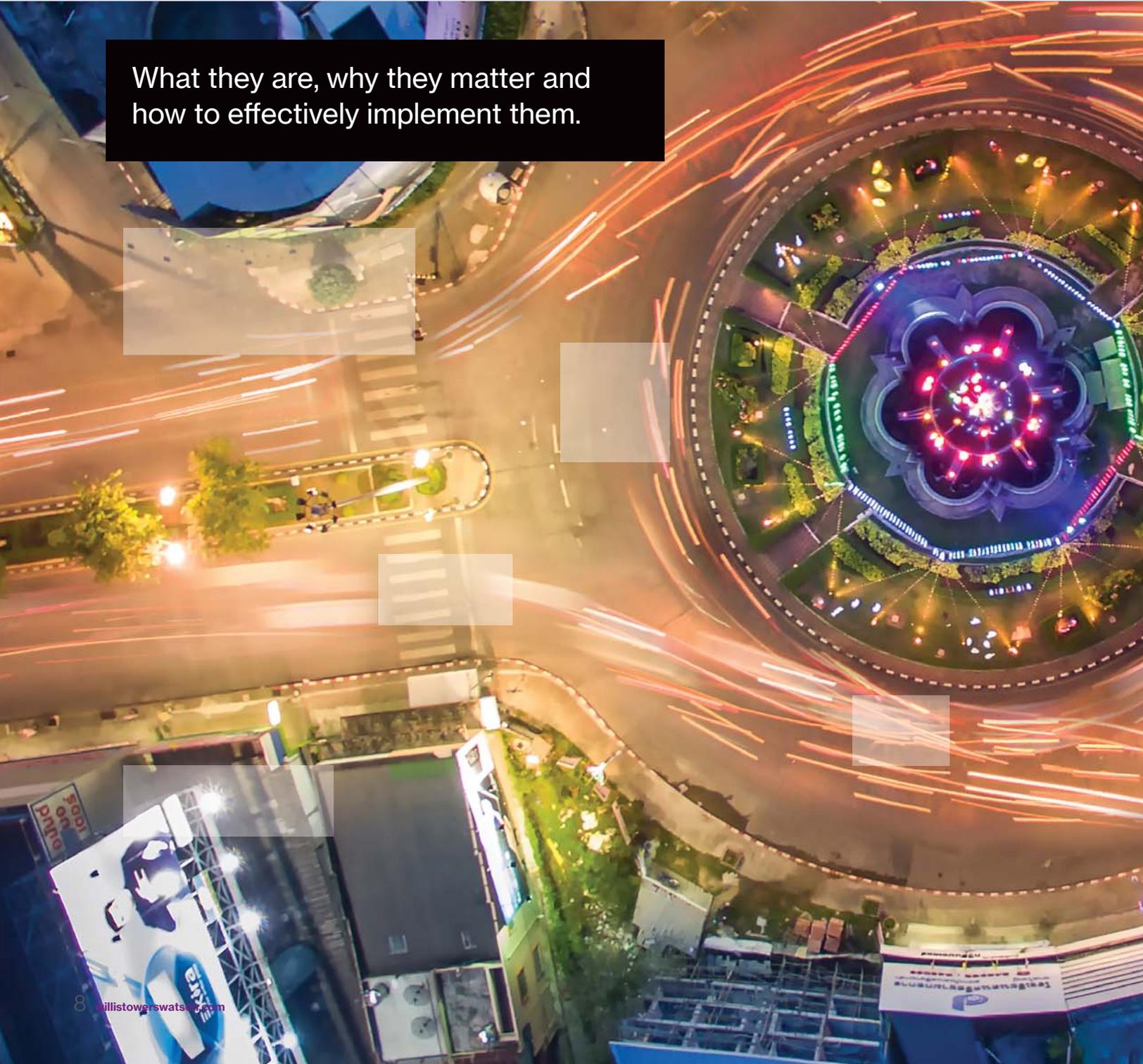
³Some recent highlights of our activity in this area can be found at www.towerswatson.com/en-GB/Services/Services/sustainable-investing

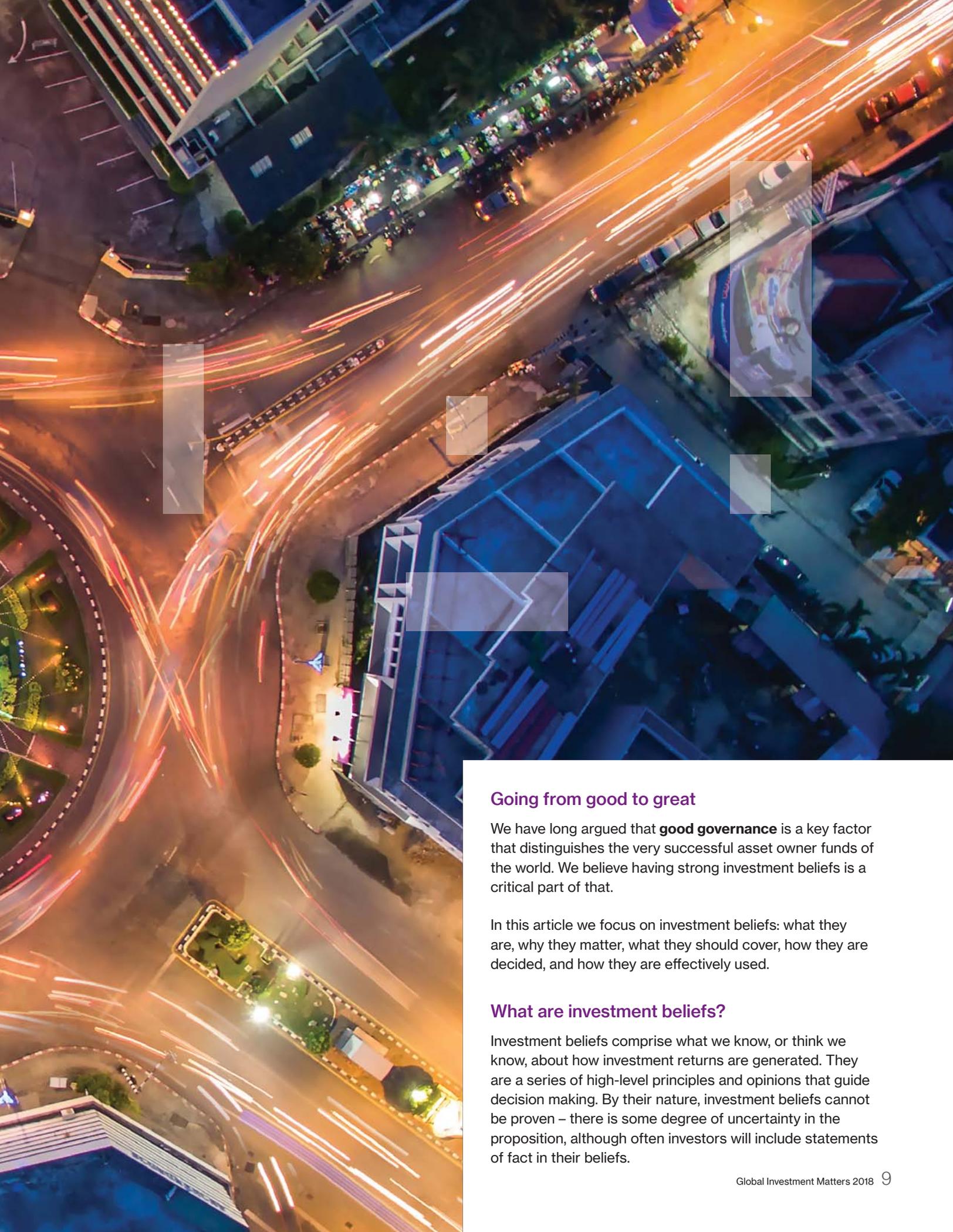
⁴www.willistowerswatson.com/en/insights/2017/12/2017-investment-institutions-trend-index

Investment beliefs

By Tim Mitchell

What they are, why they matter and how to effectively implement them.





Going from good to great

We have long argued that **good governance** is a key factor that distinguishes the very successful asset owner funds of the world. We believe having strong investment beliefs is a critical part of that.

In this article we focus on investment beliefs: what they are, why they matter, what they should cover, how they are decided, and how they are effectively used.

What are investment beliefs?

Investment beliefs comprise what we know, or think we know, about how investment returns are generated. They are a series of high-level principles and opinions that guide decision making. By their nature, investment beliefs cannot be proven – there is some degree of uncertainty in the proposition, although often investors will include statements of fact in their beliefs.



Why do beliefs matter?

We think there are six key reasons to have a well thought out set of explicit beliefs:

Figure 1. **Beliefs matter**

To save time	Beliefs can act as shortcuts in our decision making, saving large amount of time.
To enhance discipline and consistency	Human behavior and psychology can be detrimental to investment success. Investment beliefs provide a strong foundation to make good decisions, especially in times of stress.
To help fill gaps	Our knowledge of the world is incomplete and uncertain. We need beliefs to help us make decisions and avoid being “paralyzed” to inaction.
To help settle differences	A good beliefs process will surface sensitive issues, encourage constructive thinking, socialize the issues and settle the differences.
To improve transparency	Beliefs help decisions to be subject to greater transparency and greater institutional memory for the benefit of beneficiaries and stakeholders.
To promote insightful action	The best investors have beliefs that are smart, incorporate deep insights and are thoroughly socialized (i.e., widely understood and acted upon).

What should beliefs cover?

Beliefs should cover all the elements that impact on investment decision making. This will vary between investors given their respective purposes and context, but a reasonable set of beliefs might cover the following topics: governance and decision making; comparative advantages (i.e., what is the organization particularly good at); risk management (what matters and how it's measured); how markets work (what factors are most important, whether markets are efficient) and how portfolios are best constructed (e.g., concentrated or diversified); stewardship and sustainability; and cost management.

How are beliefs decided?

The challenge for an organization is how to bring the various implicit or explicit beliefs of its key decision makers to the surface and work through differences to arrive at a statement of beliefs that everyone involved can agree on.

Usually we start by putting a series of statements in front of the key decision makers and asking them to respond to those statements using a scale running from “I completely agree with this” to “I completely disagree with this.” We highlight those areas where members of the group are in complete or substantial agreement.

We focus discussion on those statements where there is not agreement, and we look to draw out the reasons for the disagreement. Sometimes this is to do with experiences. Sometimes it's how members of a group interpret the same words. By surfacing these issues we find that often members close the gaps between them. Where differences remain we focus on a process we call “settling.” Here we aim to see if we can arrive at a statement that allows all parties to say, “I wouldn't quite have expressed it like that, but I can agree with the sentiment.” This process often involves a lot of wordsmithing to arrive at statements that all involved can agree to.

Having reached a degree of agreement on the various statements we then distill these down into a shorter set of distinct statements that the whole organization can sign up to. Generally speaking, we think that organizations should have no more than 10, high-level, investment beliefs.

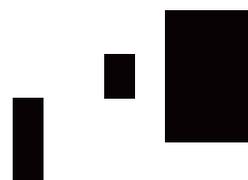
How are beliefs used effectively?

To be effective, beliefs should have three core characteristics:

Figure 2. **Effective beliefs**

Aligned	They should be signed up to by all decision makers and key stakeholders Beliefs don't work if key decision makers can opt out of them easily. That said, people's beliefs might change as they process new information, so there needs to be a mechanism where new ideas are carefully worked through. The most successful users of beliefs have an ongoing process to deepen them through internal debate and reference to new external thinking.
Actioned	Portfolio decisions should correspond to them Beliefs have little value if decisions are taken that are inconsistent with the beliefs. A critical question that decision makers should ask is, “how is this planned action consistent with our beliefs?” If the answer is that it isn't, then that action should be avoided. Taking a different angle, decision makers should ask, “what are we doing to leverage the beliefs we have?”
Accurate	Over time, outcomes should follow from them This is a tougher challenge, but over time investors should look back and ask how well adherence to a particular belief has played out in practice. The challenge here is that investment markets are inherently “noisy” – it is very hard to draw meaningful conclusions from outcomes in the absence of a lot of data.

For a more detailed look at our approach to investment beliefs see “Building strong foundations – Investment beliefs.”⁵



⁵www.willistowerswatson.com/en/insights/2017/05/Building-strong-foundations-Investment-beliefs

The case for delegation just got stronger

By Pieter Steyn



In the pensions investment industry, the quality of governance directly relates to the quality of outcomes. While governance is important to companies operating in all industries, we believe it is absolutely critical in the pensions investment environment where the inputs are complex and weak outcomes can put pensions at risk.



Pension committees, for historical reasons, do not generally operate at optimal levels of governance. Many schemes have muddled through with suboptimal structures, but this could increasingly result in poor outcomes for participants amid a number of changes in the pensions environment.

The base case for delegation

In simple terms, we believe the role of the board as it relates to investment is ideally one of strategic dialogue and disciplined oversight. We feel boards that are too involved in the execution of strategy may compromise their ability to effectively oversee their investments.

The largest funds can achieve a separation of functions by building in-house executive functions, but for most funds, separation can only be achieved through the delegation of investment activities. The so-called outsourced CIO (OCIO) model seeks to allow the board to stop spending all its time picking fund managers and to strengthen their oversight role instead. It also offers two great competitive advantages: scale and scope.

Scale may allow for the aggregation of plan assets and the creation of true buying power, while greater scope offers access to a wider range of strategies and skills. We believe traditional governance models only allow boards to achieve improvements sequentially, whereas the OCIO model allows for multiple improvements in the same time frames. The OCIO model is effectively the broadband to the traditional model's dial-up.

Changes to the operating environment

So the rationale for the OCIO model is strong. It has, in our opinion, got even stronger in recent times due numerous important changes to the pensions environment.

1. Market conditions have changed

Equities have delivered outstanding performance over the last decade, but for the next decade and beyond we believe most plans will require a more robust and dynamic portfolio with a greater variety of risk exposures. Diversity is an essential element of this, as is the implementation of extreme risk hedges, which are relevant to all long-term investors.

2. Competition for scarce assets has increased

First-mover advantage is real, and becoming increasingly important. It is now clear to most plans that they are in a competitive environment, particularly for de-risking and return-generating assets. By delegating investment activities, we feel plans become more dynamic and may be in a better position to buy the assets they require before their competitors – and at the prices they seek.

3. Plans are approaching the “end game”

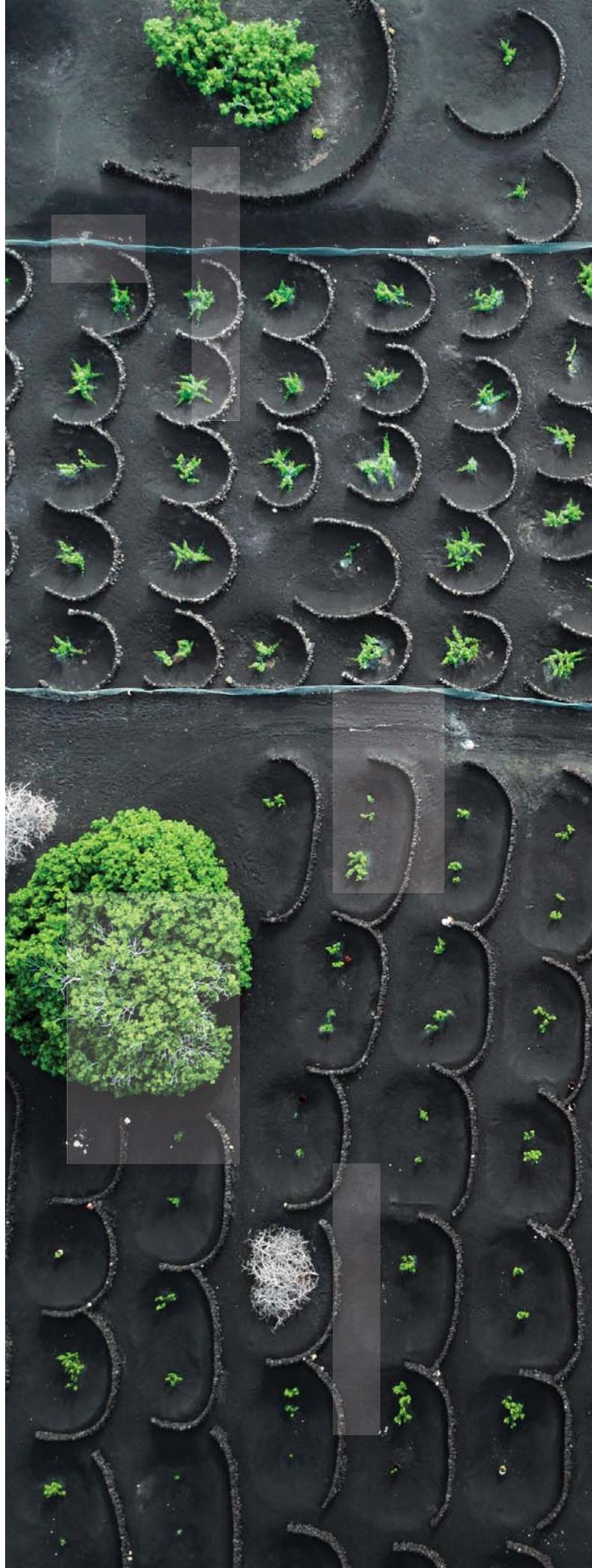
Many pension funds, notably in the U.K., are reaching the end of their life cycles. Many funds must go into insurance mode, converting assets into streams of income. This requires deep understanding and skilled execution of new liability hedging instruments and longevity hedging techniques, as well as the ability to source secure-income assets while continuing to generate some growth. Importantly, these complex activities must be undertaken at the lowest cost possible. We believe this requires a completely different set of skills and scale of operations than what exists in most pension plans today.

4. The search for sustainability

Plan liabilities can stretch deep into the future, whether or not they are in run off. Even mature plans may need to manage assets over the long term due to insufficient capacity in the insurance market to absorb all pension assets. Given the very long-term time horizons, sustainability becomes important both to add return and to reduce risk. But sustainability is neither easy to define or implement, and we believe many plans will benefit from implementing ESG under the OCIO umbrella.

5. Further legislation has increased the trustee burden

The constant drip-drip of regulation is taking its toll on plan resources. MIFID II, which took effect on January 3, is leading to an increased workload on boards. Economies of scope in the OCIO model look to ensure there is bandwidth to deal with the challenging regulatory environment.





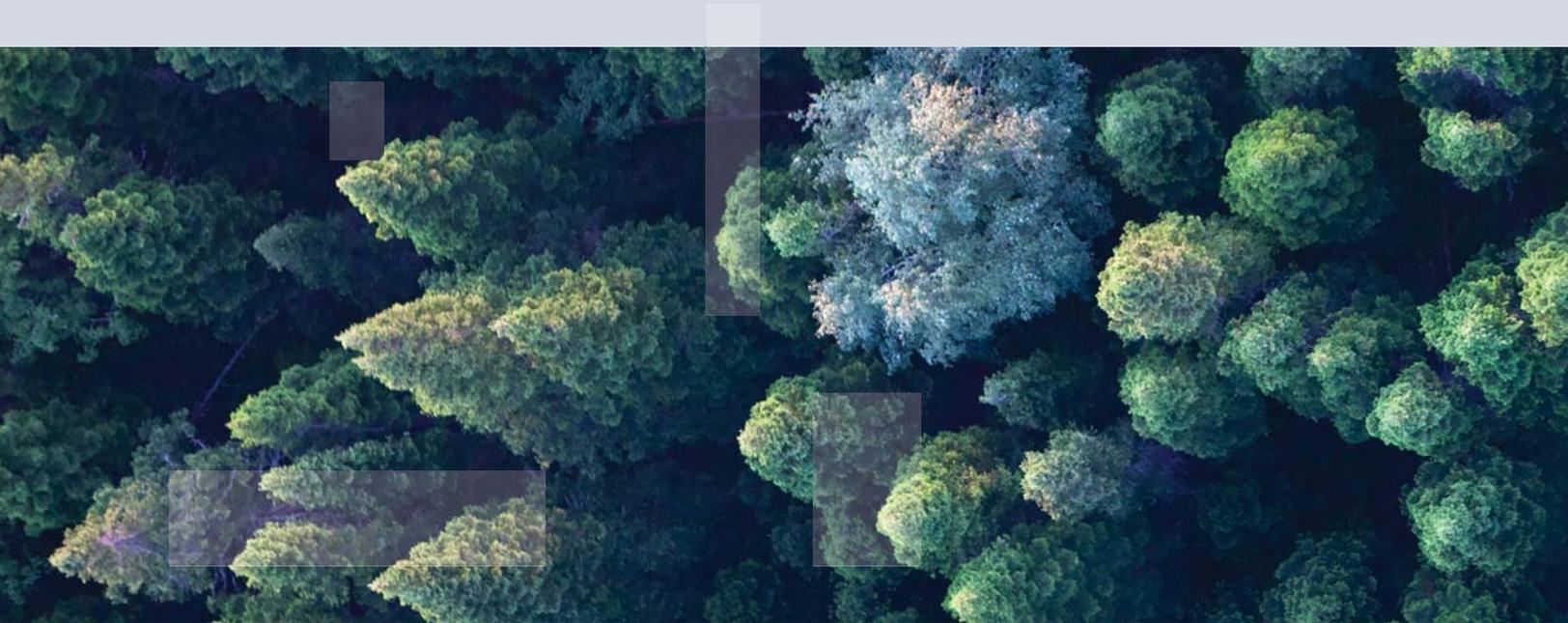
Whatever the level of delegation, we feel the advantages are clear both for plans seeking to manage risk/return and all manner of plan-specific challenges.

The shift toward delegation is gathering speed within the pensions space as boards recognize that it confers competitive advantages in an increasingly competitive marketplace. Of course, delegation need not mean the wholesale outsourcing of the investment function – although it often does. Based on our experience, some schemes choose to outsource just the most time-intensive or problematic parts of their decision making to start, and consider further delegation at a later stage.

Whatever the level of delegation, we believe the advantages are clear both for schemes seeking to manage risk/return and all manner of scheme-specific challenges. Doing it all under one roof no longer makes sense; if it ever did make sense, it certainly doesn't now with the ongoing changes in the environment. Thought and skill are absolutely critical, and even some of the largest plans with sizable in-house teams are no longer flying completely solo.

Incorporating megatrends into portfolio and business planning

By Tom Brooke-Smith



What is a megatrend? Broadly speaking, it's anything that has transformational impacts across society, technology, economies, environment and/or politics (a typical STEEP analysis framework). For us, megatrends also alter the structure of economies, industry and capital markets. Therefore, we believe investors and business leaders should incorporate a megatrend framework into their decision-making process, identifying areas of opportunity and key risks that require hedging.

Any list of megatrends is somewhat subjective in nature, but needs to be finite. Our taxonomy has been developed in concert with the Thinking Ahead Institute members and the PRI Association (PRI). We have tested it through a survey of the investment institutions that make the PRI's signatory list. The framework focuses on five key megatrends with 21 underlying impactful sub-trends. We outline this as follows:

1. Technological advances

Technology is everywhere. Despite fears that the “low hanging” advances are behind us, technological progress continues to drive productivity improvements and, at its best, enhances the world's ability to achieve sustainable and inclusive economic growth and development. In terms of sub-trends, we concentrate on five areas of progress: digitization and the Internet of Things; automation and artificial intelligence; fintech; biotechnology and personalized medicine; and cybersecurity and privacy risks.

2. Environmental challenges

Our environment impacts all aspects of our activity. We highlight three areas of change over the coming decade. First, the rise of acute environmental events such as hurricanes and typhoons: Data from the National Oceanic and Atmospheric Administration shows that the prevalence of billion-dollar insurance losses (on an inflation adjusted basis) increased by 3.5x from the 80s to the last decade. Secondly, the chronic impact of global warming – heat stress, water



We believe investors and business leaders should incorporate a megatrend framework into their decision-making process, identifying areas of opportunity and key risks that require hedging.

stress, extreme rainfall and sea-level rise. Finally, a large-scale transition to a low-carbon economy has the potential to mitigate some of the largest impacts of rising global temperatures.

3. Globalization and connectivity

Since 1950, global trade has grown at a faster rate than GDP growth, culminating with China's accession to membership of the World Trade Organization in 2001. We believe that this expansion has reached its peak and trade growth will slow.¹ However, we feel capital market integration and data flows are, and will continue to become more important. Global market integration and the floating of currencies led to an explosion in capital flows between 1990 and 2007. With the opening up of China's capital markets we expect this trend to continue. Finally, we also expect a third globalization/connectivity revolution in data flows.

4. Society and demographics

The material decline in fertility rates and increases in longevity over the past century are well known to investors. When

combined with accelerating societal trends, such as wealth and income inequality and rising public sector debt burdens, demographic shifts have the potential to drive material transformation. We highlight the likely slowing of economic growth, human capital pressures, rise of populism and conflict, changing consumption patterns, savings conundrum and public sector debt burdens as material sub-trends.

5. Emerging economy growth and dynamism

The recent slowing of economic growth could be taken as a sign that the dynamism of emerging market economies is waning. However, we believe concentrating on headline GDP numbers is a mistake. We are long past the point where emerging economy growth supports over half of global economic progress. Led by rapid urbanization, we feel emerging economies will continue to become more influential, with ever-increasing consumer power and expanding corporate competitiveness. Rising geopolitical power will be exerted via new institutions and governance, especially exemplified by China's One Belt, One Road policy.

¹World Bank national accounts data, and OECD National Accounts data files
<https://data.worldbank.org/indicator/NE.TRD.GNFS.ZS>



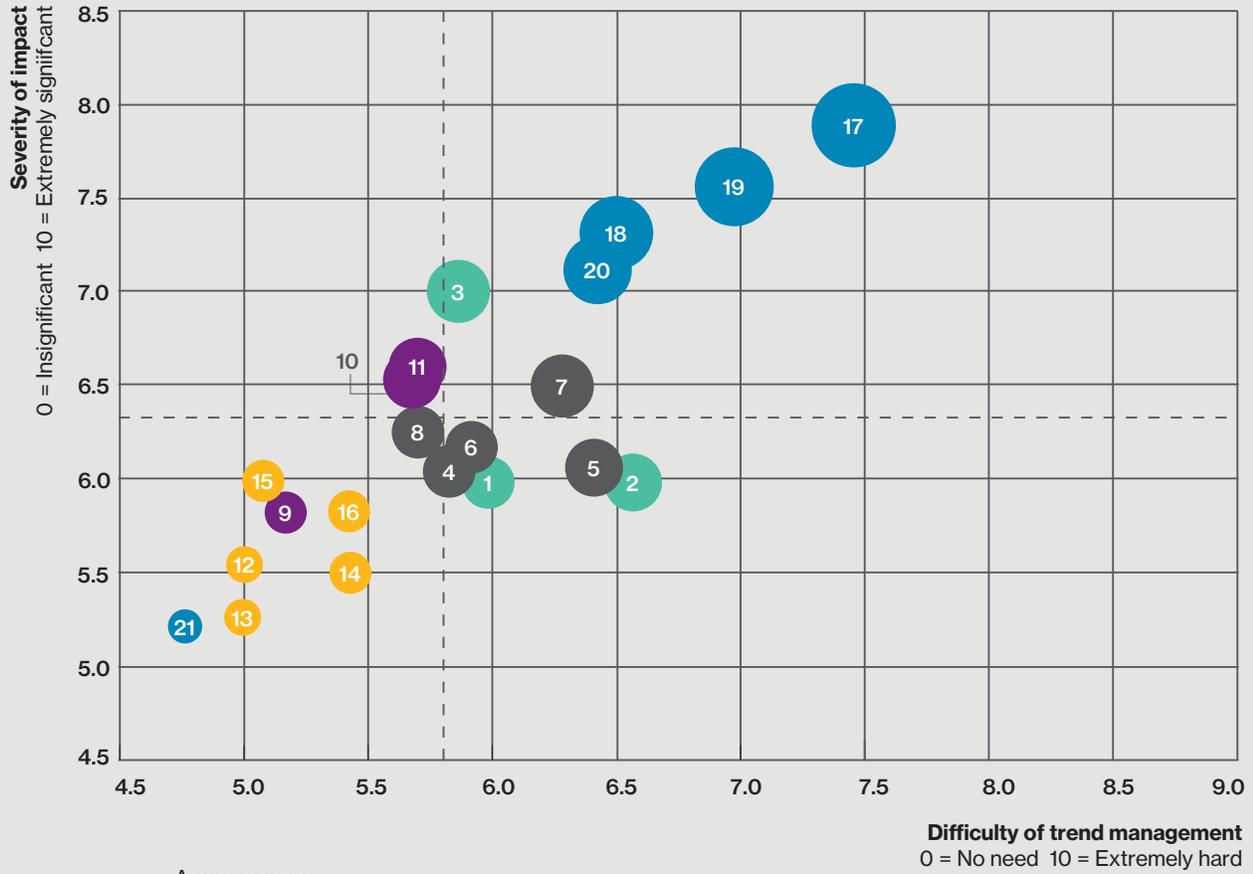
The difficulty of exploiting the likely premium from long-term investment was cited by survey participants as a critical barrier to megatrend integration.

Understanding the impact of megatrends

Megatrends matter. More than 80% of respondents to the Willis Towers Watson/PRI survey just released this year agreed that incorporating megatrends into their investment processes was consistent with their beliefs. Moreover, they expect megatrends to exert an accelerating influence on financial and social outcomes over the coming decade.

A good number of investment institutions have developed a set of sustainability beliefs, and some have excluded or selected securities based on their environmental, social and governance (ESG) characteristics. However, integrating megatrend thinking into portfolio management, right down the investment value chain is something we believe has eluded most institutions to date. The difficulty of exploiting the likely premium from long-term investment was cited by survey participants as a critical barrier to megatrend integration. This gets right to the heart of the problem: How can investment institutions create a truly sustainable portfolio, and how can they be sure they have succeeded?

Figure 1. Investment institutions trend index



-- Average score

Megatrend and composite trend score (/20)

Overall impact of trend: The relative size of the bubbles is representative of the sum of the severity of trend score and difficulty of trend management score.

Environmental challenges: (13.6)

1. Chronic
2. Acute
3. Transition to low-carbon economy

Society and demographics: (14.1)

4. Managing human capital
5. Inequality, populism and conflict
6. Savings deficits
7. Public sector finance pressures and policy responses
8. Changing consumption preferences

Globalization and connectivity: (12.8)

9. Trade in goods and services
10. Capital flows
11. Information and communication flows

Emerging economy growth and dynamism: (12.1)

12. Urbanization
13. One Belt, One Road
14. New EM business competitors
15. New consumers and middle class
16. New EM institutions, governance and strategic alliances

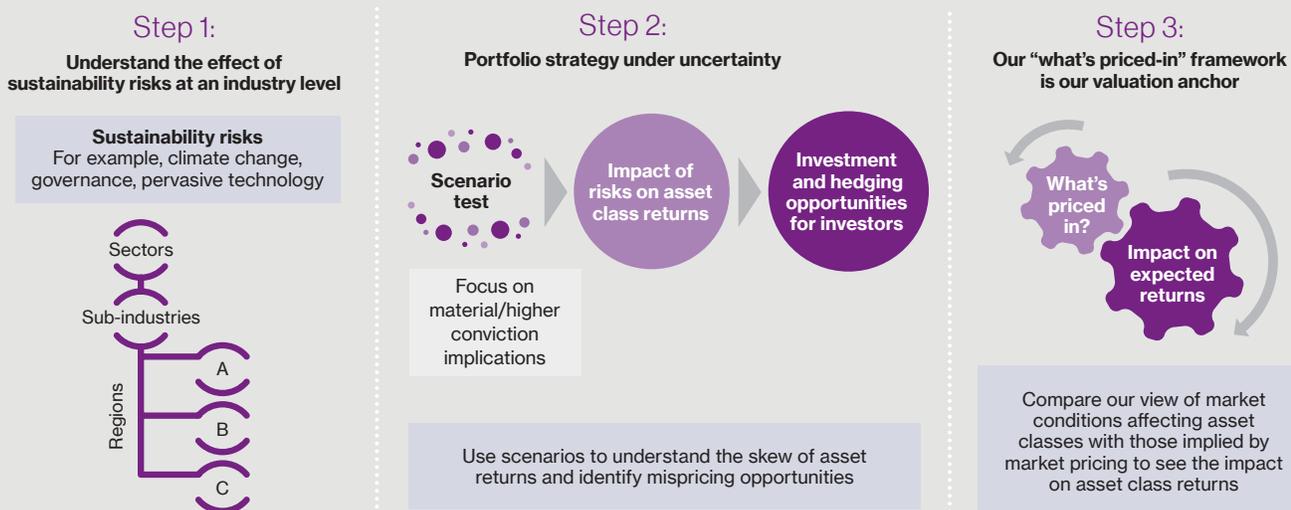
Technological advances: (14.5)

17. Cybersecurity and privacy
18. Digitization and Internet of Things
19. Automation and artificial intelligence
20. New fintech
21. Biotechnology and personalized medicine

Source: *Responding to megatrends*, PRI and Willis Towers Watson, 2017



Figure 2. Our framework: identify the impact of sustainability risks on asset class returns



Source: Willis Towers Watson, Thinking Ahead Institute

Outlining a framework for integrating megatrends

Our three-step framework, developed in concert with the Thinking Ahead Institute, helps investors quantify the impact of sustainability risks on asset returns and can be summarized as follows:

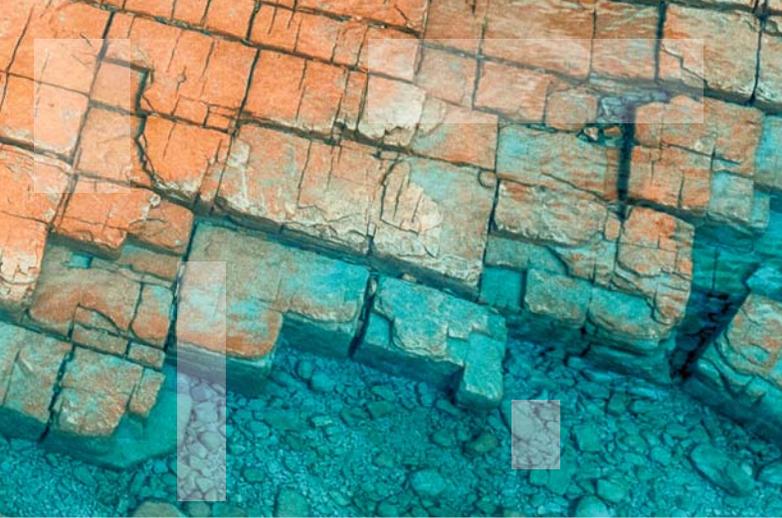
- **Step 1** – analyze megatrend impacts at the industry and/or asset level.
- **Step 2** – based on a given portfolio's exposure to a particular sub-trend, use scenarios to manage material uncertainty, sensitivity test the impact of assumed sustainability risks and build a picture of the likely skew of cash-flow generation outcomes.
- **Step 3** – compare this analysis to current market prices by making use of a “what's priced-in” framework to derive the fundamental conditions currently discounted in the prices of assets significantly exposed to the trend under examination. Take action where expectations differ materially from market prices.

Delving a little deeper into each step:

Step 1: understanding trend impacts at an industry/asset level reveals the most material changes in profit pools

Our framework breaks down the corporate world into key sectors and sub-industries. We choose an industry and regional breakdown that goes deep enough to understand the primary structural drivers of demand and economic added value, but stays sufficiently high level to provide useful signals from a top-down perspective. Where assets do not fit within this framework we seek to understand the exposure to the trends of the cash flows generated by similar groups of assets. For example, U.K. property is likely too broad as a category and the cash flows generated by a more granular sector/group are required.

We seek to understand the impacts of each trend on prospective industry value add and, in so doing, identify the industries most exposed to a particular sub-trend. For example, transitioning to a low-carbon economy could result in a material shift from hydrocarbon-based energy profit pools (and associated industries) to renewable/clean energy generation sources.



Almost all financial assets provide access to a stream of cash flows, which can be discounted back at some rate to give a present value or price. We can derive the stream of cash flow conditions currently discounted in the market price. By comparing these conditions with the distribution of outcomes generated in steps 1 and 2, we can make meaningful and quantifiable statements about how our view of the world materially differs from that implied by market pricing.

Step 2: outline uncertainty and optionality

We are less interested in the “most likely” impact of a trend. This will always struggle against a credibility/conviction problem given the uncertainties of the judgements at play. More important is sensitivity testing the impact of assumed shifts and building a picture of the potential distribution of outcomes. To do this, we use scenarios – either a small number of discrete scenarios or an assessment of the range of outcomes – to build up our information set.

For example, the shift of profits above should be tested for various different climate outcomes ranging from a “business as usual” scenario to one where global warming is mitigated and remains below the two-degrees Celsius threshold (by 2100 relative to preindustrial levels) outlined in the 2015 Paris Agreement on climate change.

Step 3: transform our scenarios to investment recommendations

In order to make an investment decision we need to incorporate a notion of value into our process. Our “what’s priced-in” framework, typically used to assess the cyclical economic conditions discounted by asset prices, allows us to do this.

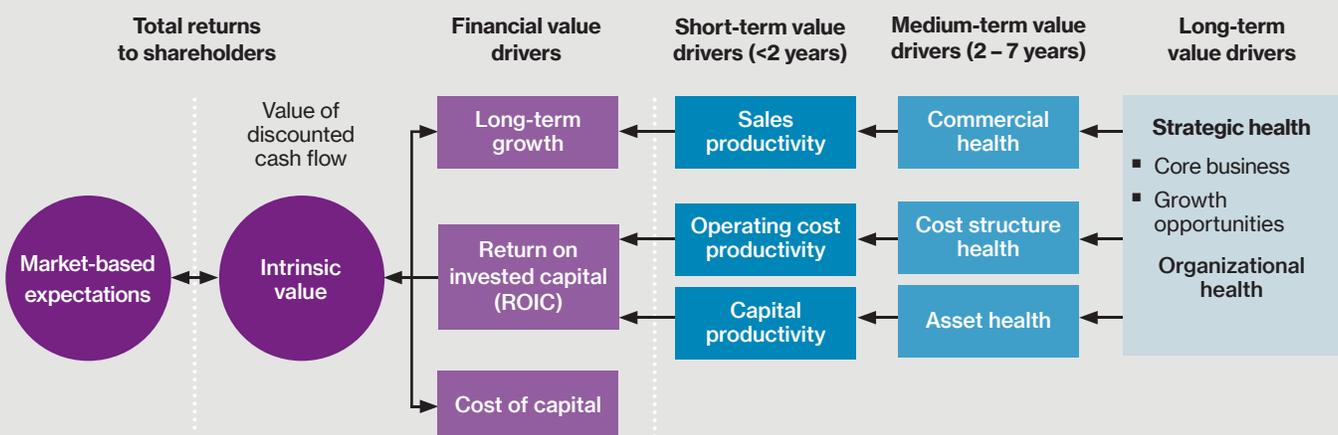
Conclusions

It is tempting to make sweeping conclusions when it comes to determining the impact of megatrends – such as climate change, inequality and pervasive technology – on expected returns. However, such conclusions lack credibility and objectivity and, therefore, struggle to support meaningful action.

Ultimately, we are seeking to identify the direction and size of the impact of megatrends on specific portfolio exposures. Once we find a significant mispricing and have clear understanding of why it exists, investors can determine the best implementation options to take advantage of an underexposed opportunity or hedge an overexposed risk. We seek to be approximately right rather than precisely wrong. This recognizes that our goal is to gain an understanding of the material opportunities and risks for portfolios from megatrend analysis, given starting market prices.

By using this framework, we believe investors will be able to dispassionately and repeatedly consider options available to them in terms of accessing megatrend-related opportunities or hedging risks.

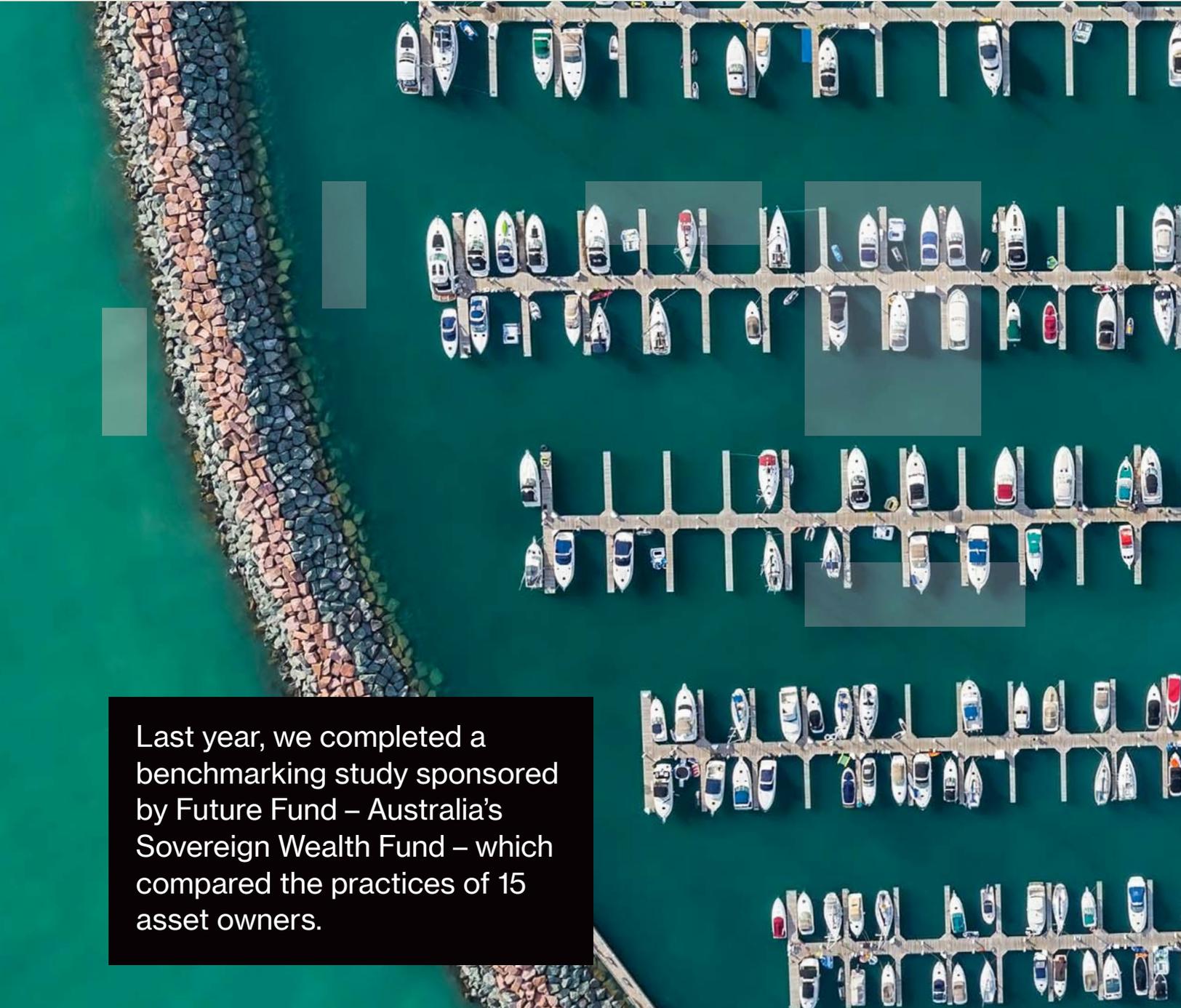
Figure 3. The linkages between sustainability trends, economies, industry economic value and total returns to shareholders



Source: McKinsey & Company, Willis Towers Watson

Smart leadership, sound followership – a global asset owners study

By Adam Gillett



Last year, we completed a benchmarking study sponsored by Future Fund – Australia's Sovereign Wealth Fund – which compared the practices of 15 asset owners.



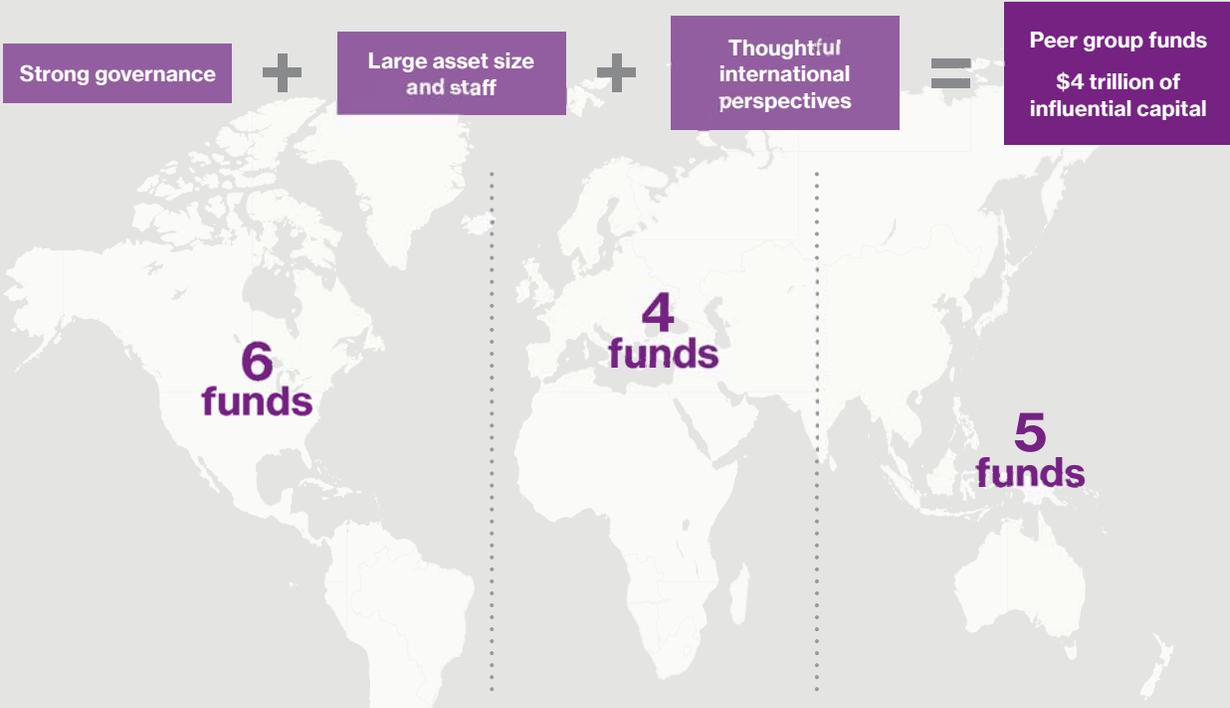
The peer group comprised 15 leading organizations, selected for their strong governance, significant size and thoughtful international perspectives. Of the selected peer group, 11 have pension liabilities to meet and four are sovereign wealth funds. Together the group represents around \$4 trillion of influential capital.

The findings of the study are drawn from a combination of interviews, a detailed online survey of the peer group, publicly available information, and opinions recorded at a symposium day held in London for the participants.

International best practice is a principle driving high standards at Future Fund and all the participants in this study. A comparison of practices across funds with reference to benchmarks can help validate the high standards targeted and achieved by these funds. It can also reveal opportunities for idea sharing, development and challenge. It became clear to us through this study that these funds were meeting their goals and accountabilities to stakeholders through stronger internal resources and smarter application.



Figure 1. The basis for selecting asset owner participants





The study participants view the challenges of meeting investment goals as greater than ever, given the volatile and uncertain outlook in capital markets. They are clear about the necessity to adapt to fast-changing, complex and often ambiguous landscapes. The qualities of self-awareness and adaptability are seen as critical.

The study produced a number of sound ideas to follow in support of international best practice, notably: improved cognitive diversity, better sustainability, improved board-executive engagement, strengthened risk management through better understanding of the ecosystem, and better balance in the mix of internal and external intellectual property (IP).

We believe these funds are emerging as smart leaders of the whole asset owner industry. We think they are creating followership opportunities in which other funds can develop sound practices consistent with these leadership exemplars. In essence, smart leadership; sound followership.

The investment challenge facing asset owners in the current environment is well-documented. The difficulty of achieving the requisite investment returns within acceptable risk bounds was readily recognized by the participants (*Figure 2*). In this context, the pursuit of best practice standards represents a realization that this level of dedication and skill is required to fulfill institutional missions and meet stakeholder expectations. It has led many funds to look for innovative solutions, and the areas described in this study represent some of the avenues that we suggest merit most attention. *Figure 3* provides a participant perspective on the areas of most potential value. Participants were also polled on the expected benefit of moving from current to best practice. The average response was of the order of 1% annually, which echoes our long-held belief that the potential value to be unlocked here is vast.

Figure 2. Taking a five-year view, the CPI + 4% annually typical peer fund goal is:

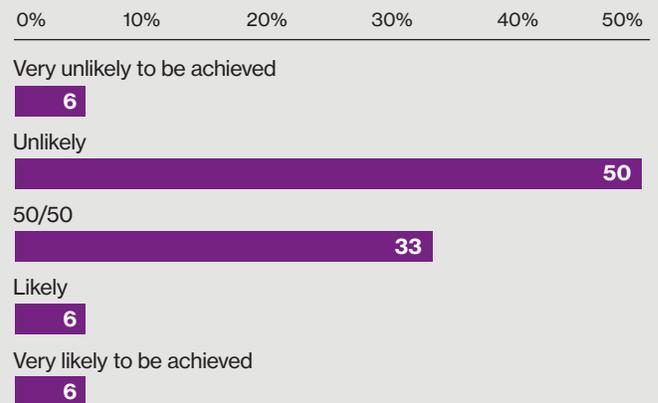
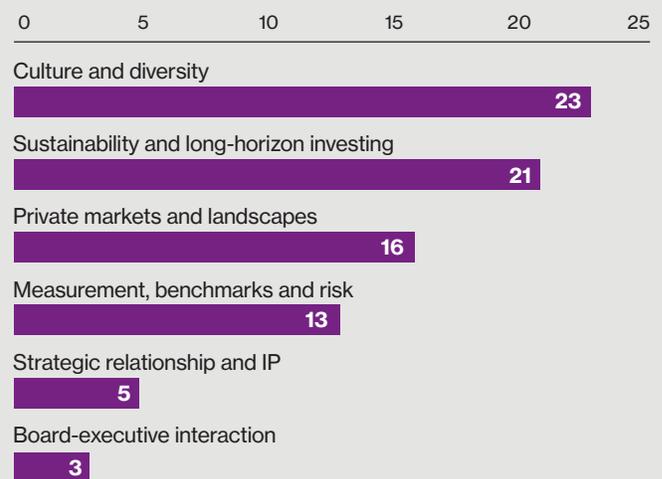


Figure 3. Moving from average to best practice would give the most value to:



Voters selected 3 in priority order
Weighted results: 1st choice = 3 points, 2nd choice = 2 points, 3rd choice = 1 point



Key commentary from the participants

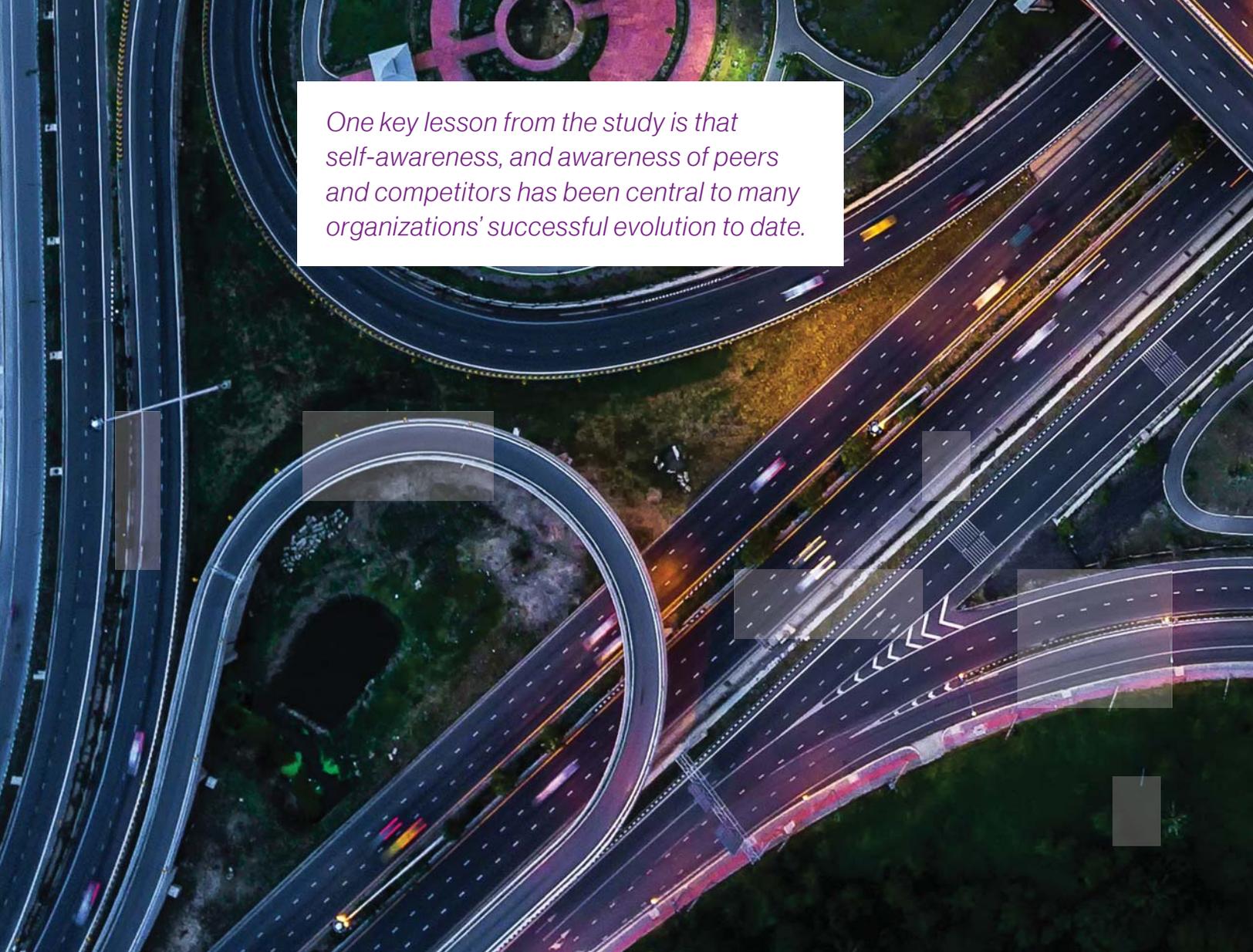
1. Cultural condition – The participant funds are struggling with the tension between staying in a flat and integrated structure (a “one organization” culture), the natural drift to multiple specialist teams, and pressures to keep to one integrated strategy at the total fund level (“one portfolio” thinking).

2. Long-horizon investing – The greatest success with long-term investing has come in situations where the link to mission is clear, and the draws of looking at short-term performance and volatility have been resisted. Sustainability is seen as a critical consideration to integrate into the long-horizon picture.

3. Stakeholders – The participant funds are very cognizant of their external profile, and greater success here is linked to a very deliberate and careful cultivation of this profile, often through a proactive and highly visible strategy. Transparency is highly significant, and board engagement is necessary too.

4. Strategy formulation – The discussion on strategy among many of the funds still starts with asset classes, even though more of the thinking is now about allocations to risk factors and return drivers.

5. Benefiting from strategic partnerships – Some participants have developed more engaged partnerships with outside firms and have seen clear benefits from the insights and know-how gathered. There is, however, potential for more value to come from such collaborations in future.



One key lesson from the study is that self-awareness, and awareness of peers and competitors has been central to many organizations' successful evolution to date.

Concluding thoughts – coping strategies are required in these challenging times

We have identified five key takeaways from the study, which we believe deserve serious consideration for all investors.

1. The importance of diversity
2. Sustainability and long-horizon investing is currently too shallow
3. Boards are having trouble being strategic
4. Risk management is key as the “business” landscape is changing in several new ways
5. Funds are evolving their mix of internal and external intellectual property

One key lesson from the study is that self-awareness, and awareness of peers and competitors has been central to many organizations' successful evolution to date. This will be more important in the future given the scarcity of investments that meet the current return and risk targets of many of the funds in our peer group.

We have described our peer group as smart leaders for the asset owner community. Their examples and the lessons from the study provide followership opportunities for all. In our view, funds that are able to show awareness, inquiry and adaptability will give themselves the best chance to succeed.

The full report is available here:
www.willistowerswatson.com/en/insights/2017/06/future-fund-and-willis-towers-watson-2017-asset-owner-study

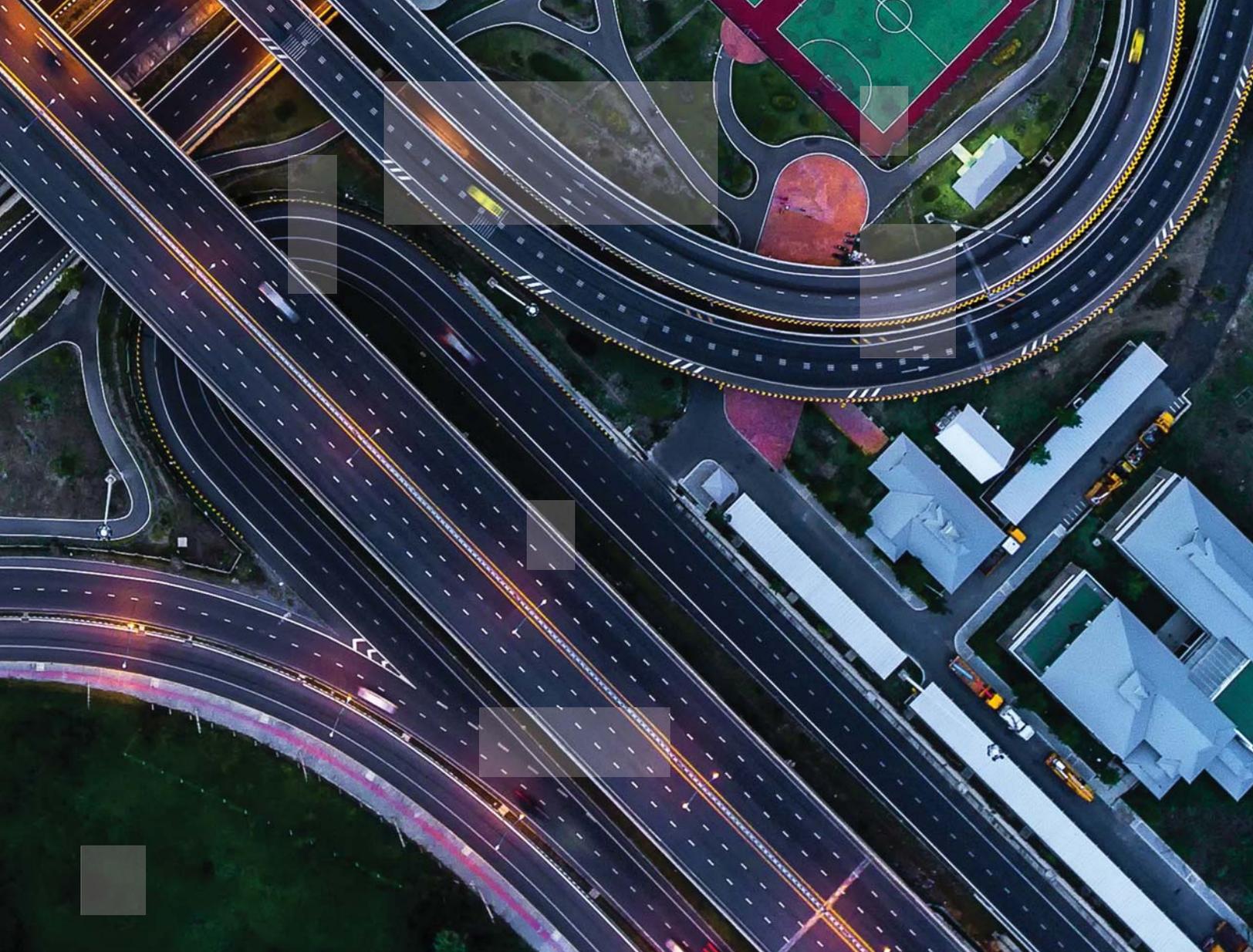
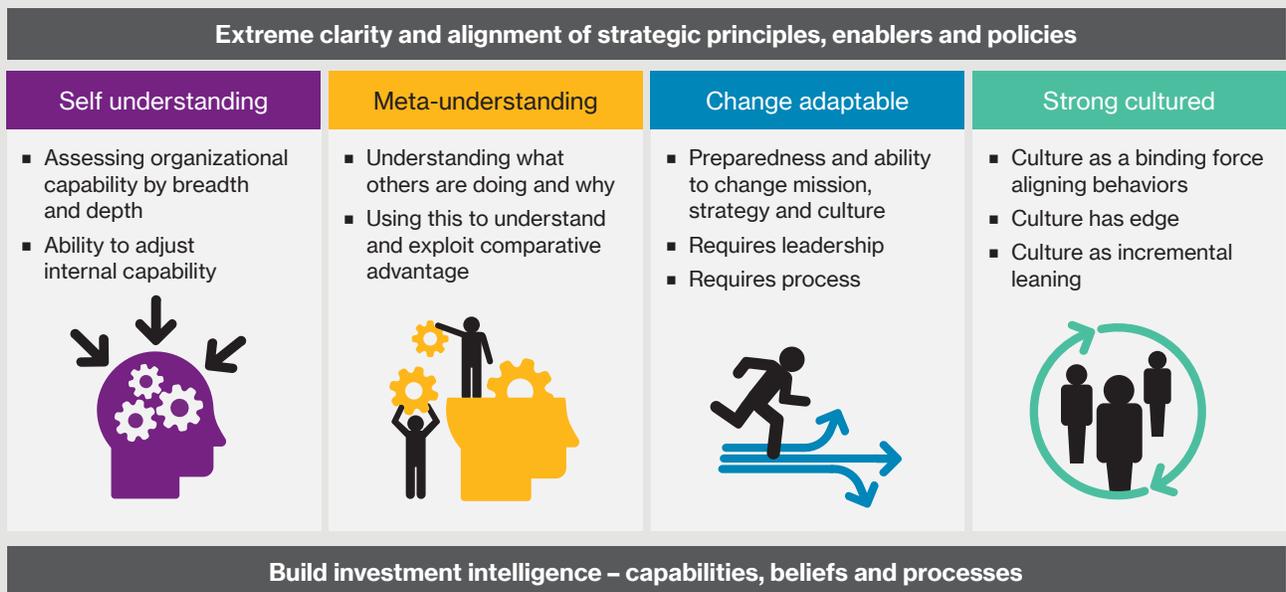


Figure 4. Characteristics needed for positioning asset owners successfully



The search for a long-term premium

By Liang Yin

Jaap van Dam, principal director of investment strategy at PGGM, one of the world's largest asset owners known for its commitment to long-horizon investing, once asked what he called the million-dollar question: "Can we be reasonably certain that we will be rewarded for being a long-horizon investor? Because, if we're not, then why bother?"



We have been grappling with this issue within the Thinking Ahead Institute for some time now, and at the start of 2017 formed a working group of members who shared our passion to make more definitive progress on the matter. The first fruit to emerge from this initiative is a paper called “The search for a long-term premium,”¹ with more recent papers focused on helping investors access this premium.

Its conclusion is that a sizable net long-term premium indeed exists.

The search

Quantification of the long-term premium is easier said than done. In an ideal world, we would have run a regression of net investment returns against investors’ time horizons. But the data simply doesn’t exist.

We therefore used an indirect approach, based on identifying return opportunities and ways to reduce the drag on returns that are only compatible with a long-horizon investing approach. This resulted in eight building blocks, each practical to implement, albeit with changes required to an investment process. Together, these provide evidence of a sizable premium available to genuine long-horizon investors; we discuss these building blocks later, split into opportunities to exploit and potential drags on return to avoid.

¹www.thinkingaheadinstitute.org/en/Library/Research-and-Ideas/The-search-for-a-long-term-premium



Capturing the benefits of long-horizon investing will require a major shift of mindset and significantly expanded skillsets by investors.

Long-horizon return opportunities

1. Active ownership

It has been shown² that engagements with investee companies generated, on average, excess returns of 2.3% in the year following the initial engagement. We believe this provides clear evidence of the benefits of being active owners encouraging investee companies to take long-term approaches.

2. Liquidity provision

When investors are willing to pay for liquidity – in other words, sell assets below “fair value” – the other side of the trade gets paid. One study³ suggested that long-horizon investors have the potential to earn additional returns of 1.0% pa by providing liquidity when it is most needed.

3. Illiquidity risk premium

When investors accept illiquidity, they accept greater uncertainty about the outcome because they are less able

to liquidate the asset. The longer the capital is tied up, the more return investors expect by way of compensation. Some academic studies⁴ pointed to a range of 0.5% to 2% pa for this particular premium.

4. Capturing systematic mispricing

The fourth return opportunity for long-horizon investors comes from exploiting various mispricing effects via factors or smart betas. Decades of data⁵ suggested that this can add more than 1.5% pa relative to the cap-weighted index.

5. Thematic investing

Investors have long been aware of thematic investing, and belief in its ability to create value appears to be strong. However, we feel the lack of consistency in implementation approach means we have been unable to find empirical evidence that categorically demonstrates the possibility of success of a thematic approach.



Avoid drags

6. Avoid buying high and selling low

A long-horizon mindset can usefully guide behaviors to avoid chasing past performance. A study⁶ estimated that by replacing their investment managers, a group of U.S. plan sponsors gave up, on average, a cumulative 1.0% in the three years following the change.

7. Avoid forced sales

We feel open-ended fund structures, despite the flexibility they provide, might not be fit-for-purpose for long-horizon investors. In such a structure, long-horizon shareholders effectively subsidize their short-horizon peers for their liquidity needs. It has been found⁷ that liquidity-driven trading in response to flows (in particular, redemptions) reduced returns in U.S. open-ended mutual funds by 1.5% to 2.0% pa.

8. Potentiality lower transaction costs

The last but not least building block, is the possibility of significant savings in transaction costs, which can be made by avoiding unnecessary turnover as a long-horizon investor.

It's all about governance

We believe capturing the benefit potential of long-horizon investing will require a major shift of mindset and significantly expanded skillsets by investors. We take two hypothetical funds to develop a reasonable estimate of the potential net long-term premium in practice:

- The smaller fund (c. \$1 billion) focuses on avoiding the drags. It seeks to reduce manager turnover, avoids chasing performance and moves part of its passive exposure into factor strategies. The rationale is: If you don't have the resources to win big, at least don't lose.
- The larger fund (c. \$100 billion) has the governance and financial resources to consider all available options. It introduces long-horizon return-seeking strategies while seeking to reduce any drags.

In the investment world where there are very few universal truths, it would be a little arrogant to conclude that we have proven the existence of the long-term premium. We are, however, "reasonably certain" that any costs of developing the mindset and acquiring the skillsets to address long-horizon investing challenges are substantially outweighed by the potential return enhancements.

²Active Ownership," Dimson et al, *Review of Financial Studies*, 2015, Vol. 28, Issue 12

³Long-term investing: An institutional investor perspective," Geoff Warren, 2014, CIFR

⁴Long-term investing: An institutional investor perspective," Geoff Warren, 2014, CIFR

⁵The Surprising Alpha from Malkiel's Monkey & Upside Down Strategies," Arnott et al, *The Journal of Portfolio Management*, 2013, Vol. 39, No. 4

⁶The Selection and Termination of Investment Management Firms by Plan Sponsors," Goyal and Wahal, *Journal of Finance*, 2008, Vol. 63, No. 4

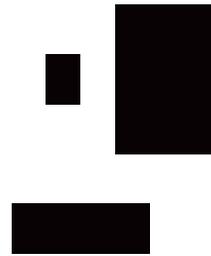
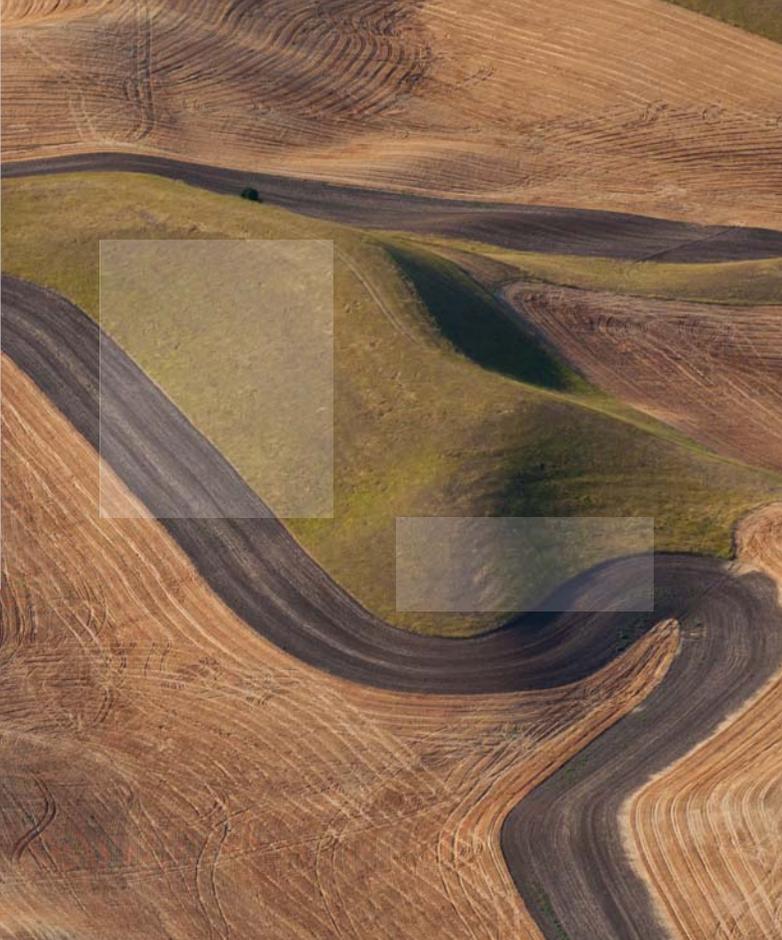
⁷Investor flows and the assessed performance of open-end mutual funds," Edelen, *Journal of Financial Economics*, 1999, 53(3)

How bespoke modeling can help answer the what-if questions

By Andy Siu and Paul Colwell

An aerial photograph of a winding river with a black text box overlay. The river flows through a landscape of brown and green fields, creating a series of curves and bends. The text box is positioned in the center of the image, containing a paragraph of text.

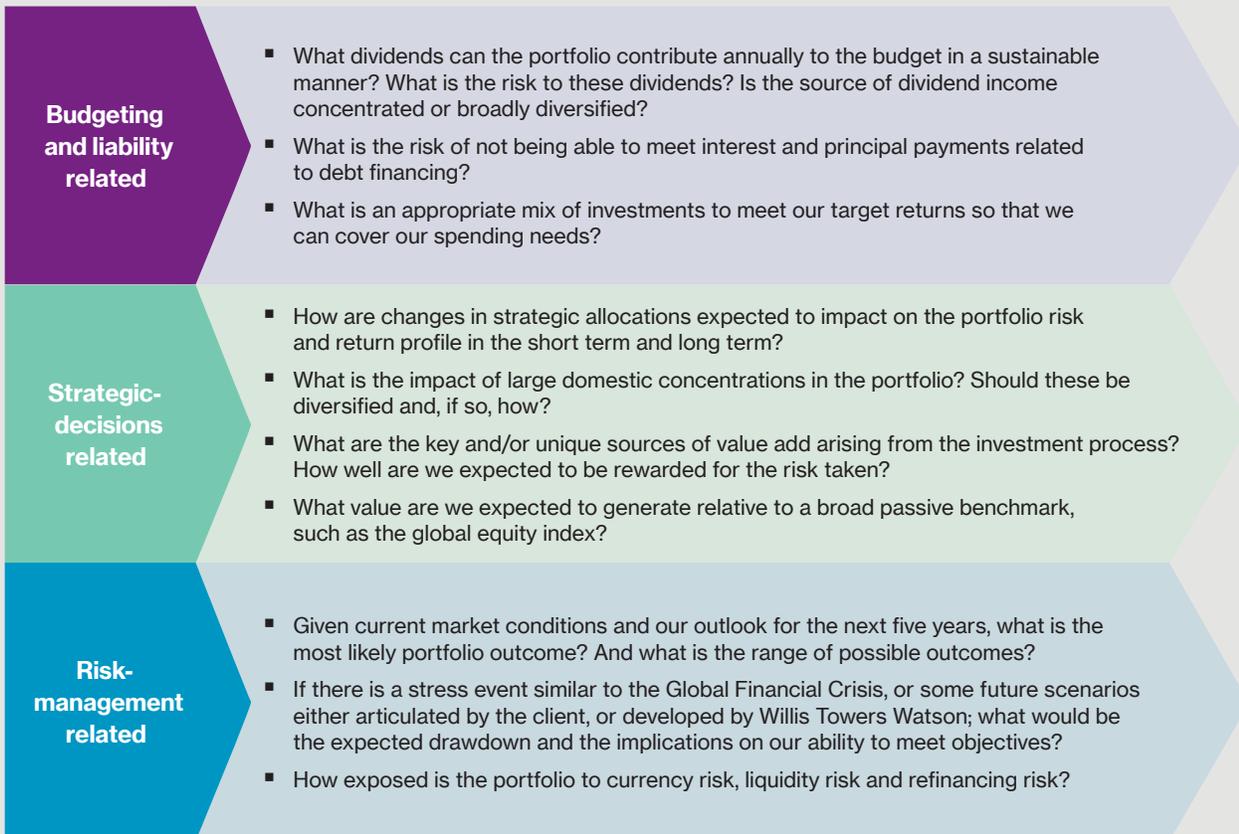
To act like large asset owners we have to think like large asset owners and ask the same sort of questions as large asset owners. Throughout the years working with sovereign wealth funds in Asia, we have established a good understanding of their concerns.



The questions they ask are very specific to their individual fund, reflecting their specific objectives, their own investment approach, their own views of the markets and investment exposure. These are questions only a bespoke modeling framework can answer, and that is what we have built.

We believe this framework is particularly helpful when making strategic decisions as well as understanding the concentration of risks in case of a stress event. A number of our sovereign wealth clients find the framework useful to evaluate if they are positioned suitably to make regular payments to the government or to fund social programs for a long period of time. Often these are critical elements of their mission. We feel the framework is also beneficial in weighing up the pros and cons of different portfolio mixes in each fund's individual specific context.

Figure 1. **Some of the questions we have encountered include:**





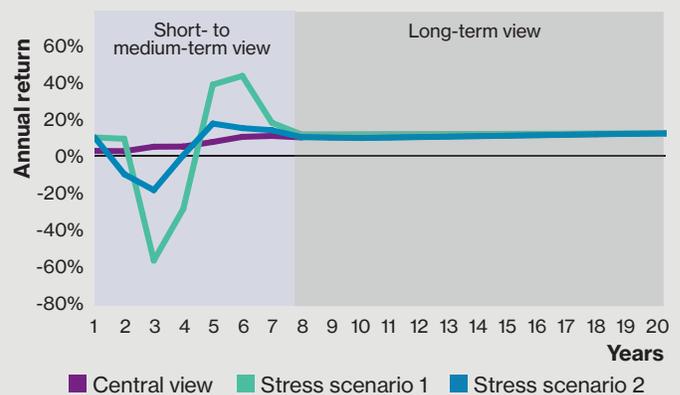
What are the key components of this bespoke framework?

Economic scenario forecasting

Different investors worry about different types of stress events, and these could be very specific like hard landing in China or global deflation. Hence we first work with them to understand their concerns, their views and the types of environments that will be most damaging to their portfolios and determine the stress scenarios to be considered. We then develop projections of economic and other variables that characterize each specific scenario, taking account of their input. From this we seek to model the impact on different asset classes factoring in economic and fundamental forecasts for various geographies, sectors and investment segments. For most Asian investors, the key focus is on understanding the possible drawdowns in the short term.

For illustrative purposes only

Figure 2. Economic scenario forecasting



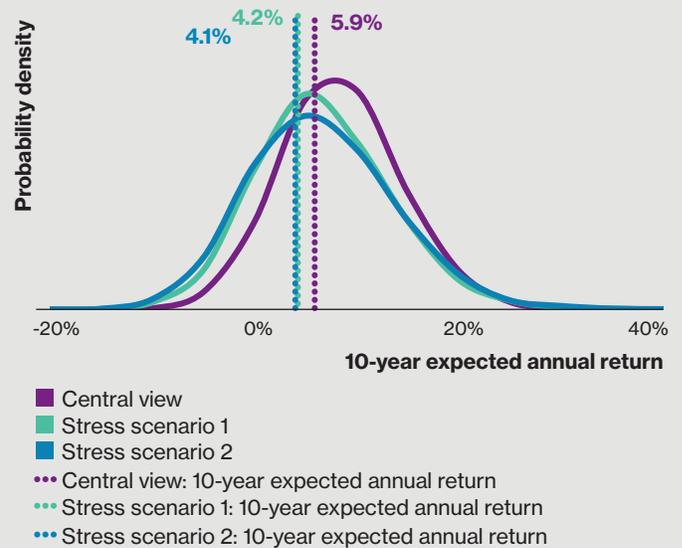


Stochastic return projections

Using our stochastic asset model we are able to translate the deterministic outputs from the economic scenarios work into a set of simulated returns for assets across different geographies and sectors. This is then put into our portfolio modeler, which seeks to enable investors to understand the likelihood of returns based on a range of possible outcomes. Our modeling factors in tail risks in accordance with historical return distributions as well as our forward-looking views, where appropriate. Through the use of likelihood measures, the investor understands how robust the portfolio is or if they are exposed to specific scenarios due to certain concentration of risks.

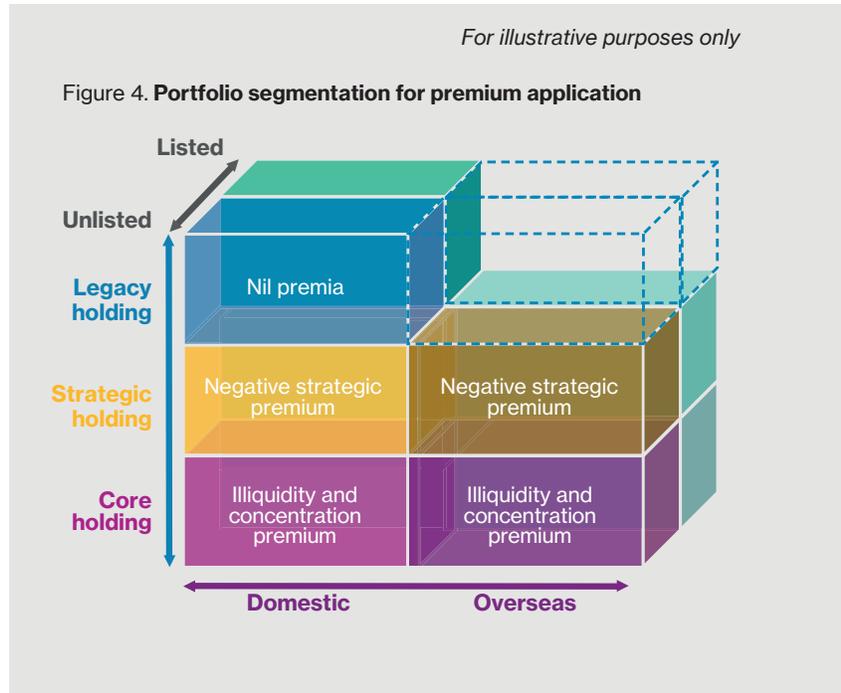
For illustrative purposes only

Figure 3. Asset class 10-year expected annual return



Portfolio modeler

Different investors have different ways to invest. To reflect this, we develop frameworks to reflect their specific investment approach. In particular, the models take into account different segments of their portfolio and characterize each line item in their portfolio in a way that is more granular than the standard asset model. This allows investors to estimate the forward-looking portfolio risk and return in a bottom-up manner and to better characterize the nature of their underlying investments. For example, we can model a private equity investment in the health care sector in Brazil where the investor holds a majority stake or a legacy-listed equity investment in the domestic technology sector. In addition, the portfolio model can also consider the use of leverage and different capital recycling approaches.

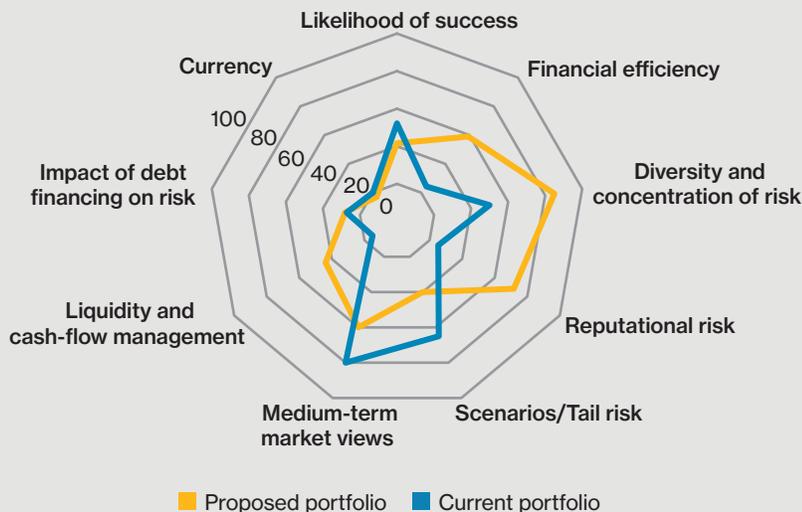


Portfolio scorecard

The final step is to help the investor compare the “what ifs” for different portfolios and help them assess the relative merits of each. To inform this discussion, a portfolio construction tool has been developed that seeks to enable investors to evaluate different portfolios in the context of portfolio efficiency, diversification, exposure to tail risk, medium-term market views, as well as other investor-specific risk and liability measures.

The “scorecard” is developed in conjunction with the investor based on a detailed understanding of both their stated and “soft” objectives. It provides a portfolio score and enables comparison across different portfolios against objectives and relevant criteria. In this way, new ideas can be supported and verified quantitatively when building the portfolio.

Figure 5. **Portfolio scorecard: proposed portfolio versus current portfolio**





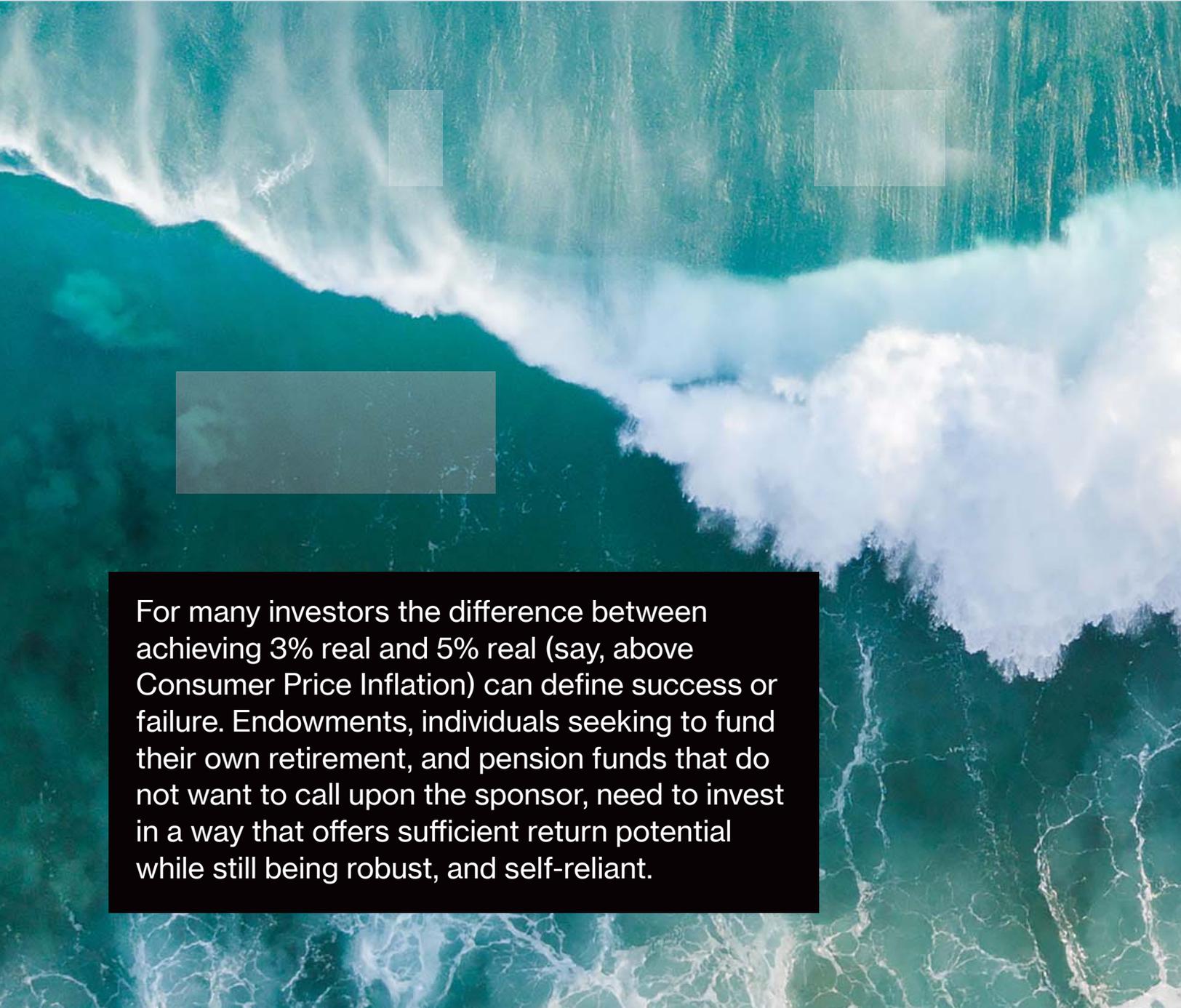
We believe the key key benefit is that this framework, while built on Willis Towers Watson intellectual capital, provides significant flexibility to tailor to each large asset owner's specific situation, reflecting their investment process, concerns and views.

Conclusion

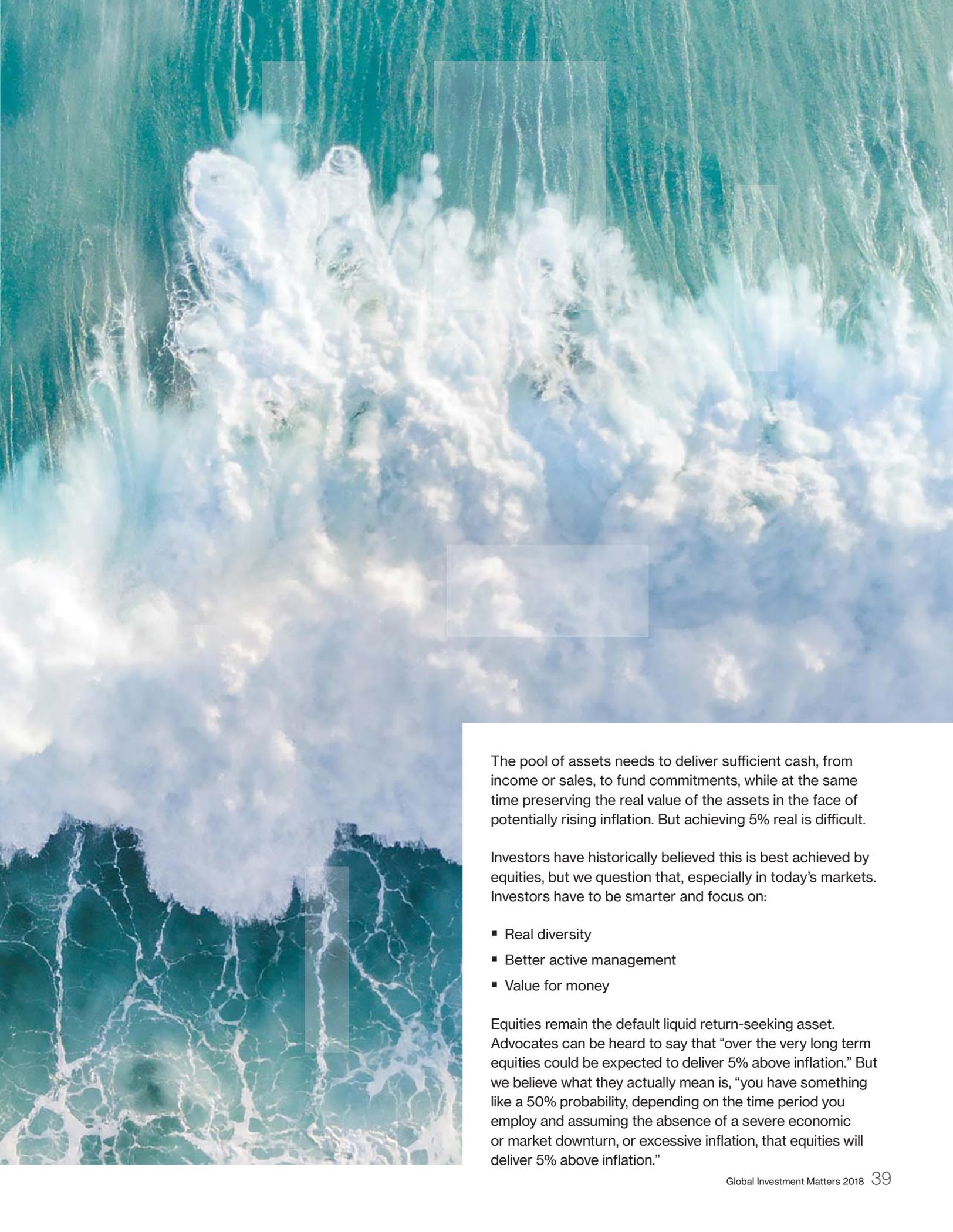
We believe the key benefit is that this framework, while built on Willis Towers Watson intellectual capital, provides significant flexibility to tailor to each large asset owner's specific situation, reflecting their investment process, concerns and views. It seeks to help them to map out their risk exposures more clearly, to understand the likelihood of meeting their objectives, and to answer their "what if" questions, thereby enabling more informed decision making. Because of this, a number of investors have subsequently repositioned their portfolios. In addition, we have seen our bespoke modeling framework being utilized by investors to communicate the overall risk and return profile of their investment strategy, as well as proposed portfolio changes to both internal and external stakeholders.

The quest for return: Difficult isn't it?

By Alastair Cuming



For many investors the difference between achieving 3% real and 5% real (say, above Consumer Price Inflation) can define success or failure. Endowments, individuals seeking to fund their own retirement, and pension funds that do not want to call upon the sponsor, need to invest in a way that offers sufficient return potential while still being robust, and self-reliant.



The pool of assets needs to deliver sufficient cash, from income or sales, to fund commitments, while at the same time preserving the real value of the assets in the face of potentially rising inflation. But achieving 5% real is difficult.

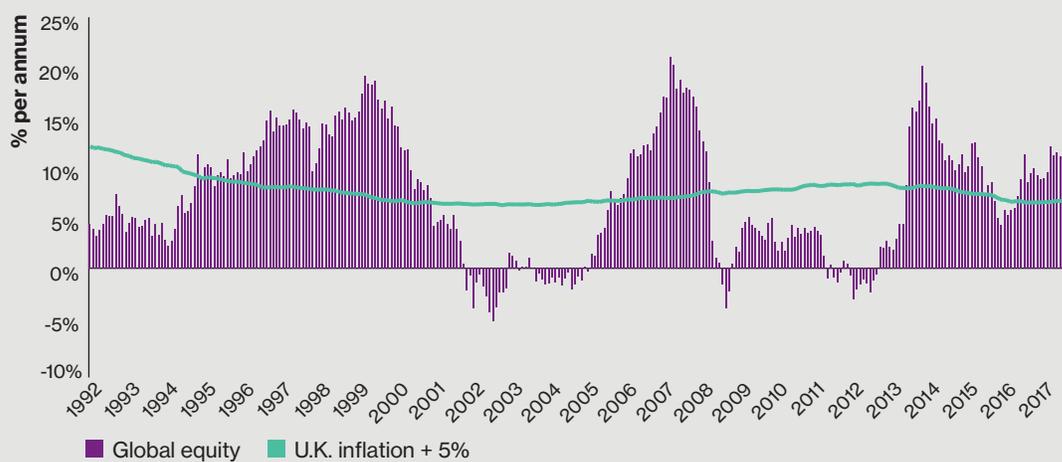
Investors have historically believed this is best achieved by equities, but we question that, especially in today's markets. Investors have to be smarter and focus on:

- Real diversity
- Better active management
- Value for money

Equities remain the default liquid return-seeking asset. Advocates can be heard to say that “over the very long term equities could be expected to deliver 5% above inflation.” But we believe what they actually mean is, “you have something like a 50% probability, depending on the time period you employ and assuming the absence of a severe economic or market downturn, or excessive inflation, that equities will deliver 5% above inflation.”



Figure 1. Over rolling five-year periods



Notes: Global Equities are MSCI ACWI. U.K. inflation is U.K. CPI All Items NSA back to February 29, 1996, U.K. RPI All Items NSA prior to that. All data as of October 31, 2017. Source: MSCI inc, Office for National Statistics (ONS).

Looking at *Figure 1*, comparing rolling five-year period returns for equities to 5% above CPI, suggests you should be cautious about relying solely on equities.

Volatility matters. It matters because it worries stakeholders (pension fund sponsors, endowment beneficiaries and family dependents), it creates an environment where making the right decisions becomes increasingly fraught, and, in extreme cases, the need to drawdown to meet cash obligations in a downturn can damage your funding plan beyond repair. And we believe equities will remain susceptible to volatility.

Of course, equities tend to rebound after downturns, so patience should be rewarded. Perhaps we're being too short term: five years is hardly "very" long term.

But the returns over seven-year periods (*Figure 2*) would have left investors pretty disappointed too.

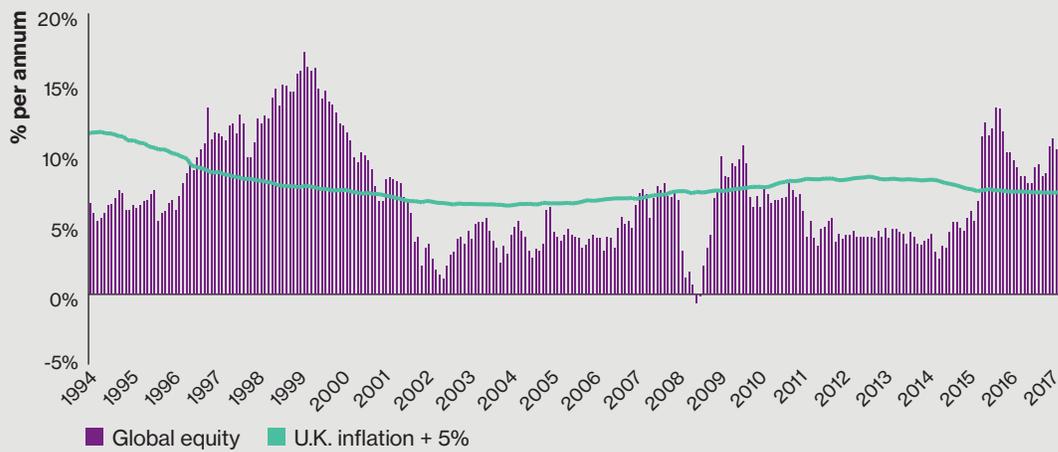
Even over 10-year periods (*Figure 3*), and after a major bull market, the damage from downturns has meant that equities have struggled to deliver 5% real 50% of the time.

Successful active management would have been a critical addition but evidence suggests this too is a low-probability activity with less than 20% of funds outperforming net of fees.¹

¹Percentage of U.S. Equity Funds outperforming the S&P Composite 1500 over 10 years. Source: S&P Dow Jones Indices LLC, CRSP. Data as of December 31, 2015. Outperformance is based upon equal-weighted fund counts. All index returns used are total returns.

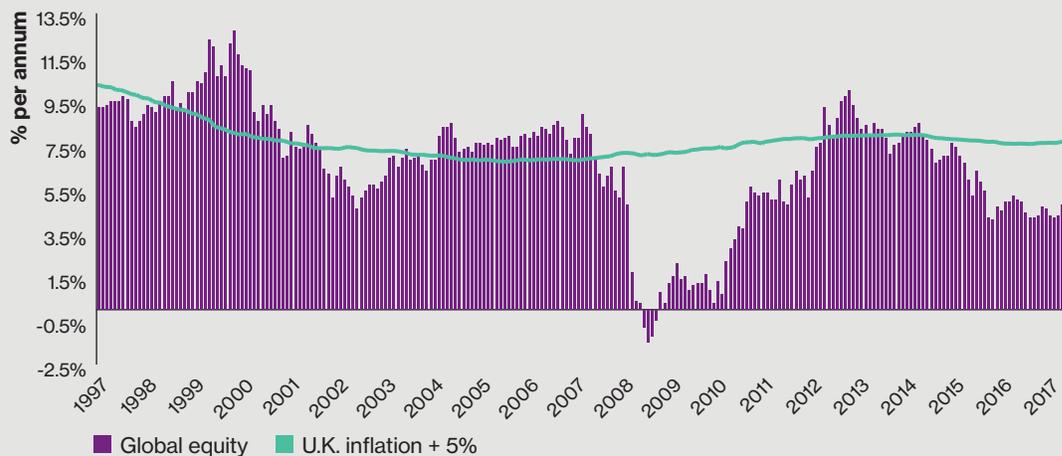


Figure 2. Over rolling seven-year periods



Notes: Global Equities are MSCI ACWI. U.K. inflation is U.K. CPI All Items NSA back to February 29, 1996, U.K. RPI All Items NSA prior to that. All data as of October 31, 2017. Source: MSCI inc, Office for National Statistics (ONS).

Figure 3. Over rolling 10-year periods



Notes: Global Equities are MSCI ACWI. U.K. inflation is U.K. CPI All Items NSA back to February 29, 1996, U.K. RPI All Items NSA prior to that. All data as of October 31, 2017. Source: MSCI inc, Office for National Statistics (ONS).

So what about the other assets groups?

Figure 4 supports the contention that these assets should indeed be considered. But each one has its own issues too, and we touch on these below:

Diversifiers

The returns from diversifiers, such as merger arbitrage, momentum and long/short credit, might be close to the target return over the longer term, with greater expectations from hedge funds than from alternative beta, with limited volatility and a low correlation to equities.

Diversifiers delivered excellent returns initially but much less so more recently. We believe better managers and strategies can be the solution if they reduce fees or complexity, or improve product structures.

Credit

The returns from credit may be close to the target return over the longer term, correlation to equities is generally low but volatility can compare to that of equities and credit can suffer from extremely poor returns (left-tail events). Mainstream credit has delivered excellent returns thus far, but can those returns be sustained? And going forward, will credit prove to be correlated with equities?

Private markets

The premium (or alpha) from activist long-term private market managers can be notable, and these assets, more than any other, have potential for higher than expected returns (right-tail events). Private market investments are difficult and expensive to access: With asset classes typically viewed in silos, it's easy to end up with inefficient, over-diversified private markets portfolios. However, with returns at a premium, we feel it's extraordinary that many otherwise long-term investors do not take advantage of this potential for exceptional returns.

Diversified Growth Funds

Many investors have switched to Diversified Growth Funds (DGFs), only to be disappointed. The role of a DGF is twofold: to deliver a reasonable, steady return and a higher return for every unit of risk (or Sharpe Ratio) than equities. Too many have failed both tests.

Why is this? We feel partly it is the unintended consequence of the defined contribution (DC) charge cap as DGFs tend to limit themselves to cheap liquid assets so they are suitable to daily-dealing DC investors with costs that fit within the charge cap for DC default funds. This has meant that real diversity is limited (exposure to private markets, for example, is minimal) and their active management constrained. And, notably, we feel their tactical decisions have by and large also detracted value.

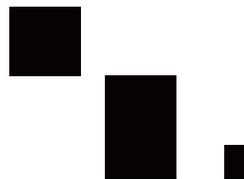
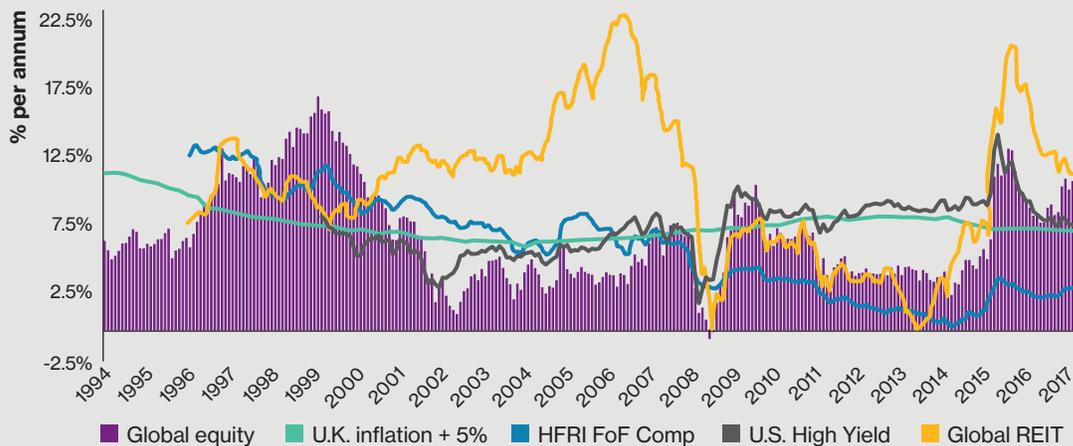


Figure 4. Over rolling seven-year periods



Notes: Global Equities are MSCI ACWI. U.K. inflation is U.K. CPI All Items NSA back to February 29, 1996, U.K. RPI All Items NSA prior to that. HFRI FoF Comp is the HFRI FoF Composite Index. U.S. High Yield is Bloomberg Barclays U.S. High Yield 2% Issuer Cap (\$ Unhedged). Global Reit is GPR REIT L.C. All data as of October 31, 2017. Source: MSCI inc, Office for National Statistics (ONS), Hedge Fund Research, Inc. (HFR), Bloomberg LLP, Global Property Research.



How should investors set about achieving their goals?

Our contention is that a robust and self-sufficient approach should consider all these asset classes but only if it can overcome the weaknesses in what is available in the market. We feel it should also consider, with a reduced exposure to equities, how to improve the probability of positive relative returns.

Leading investors (those who have lots of resources and talent and are capable of bringing all these diverse capabilities together in one solution, for example, Yale) have been able to achieve great results with such an approach in the past.

We currently believe there is a risk that we shall experience economic instability and limited growth; our concerns increase as the equity market continues to rise. We would advocate: greater diversity (true diversity from GDP sensitivity), better active management (as the environment is becoming more attractive) and an increased focus on value for money.

We wouldn't pretend that identifying genuine diversity, better active management and tangible value for money is easy. It requires:

- A major research effort to find the right managers
- Portfolio management resources to run a portfolio of managers
- The ability to negotiate costs down
- The capacity to create new strategies with managers rather than just making existing ones cheaper

The difference between achieving 3% real and 5% real can define success or failure. For an increasing number of investors, with no sponsor or a sponsor keen to minimize costs, the investment approach needs to offer sufficient return potential and be robust while self-sufficient.

If it was easy, everyone would be doing it. Done well, it's worth the effort – and that is why it's our primary focus.

Australia

In 2017, the themes that have preoccupied strategists and policymakers in Australia reflect those affecting the investment industry globally. The following have been a particular focus in Australia:

- **The impact of technology:** Most of the focus is on robo-advisers and other advances that will allow the industry to cater financial services to individuals as opposed to demographic averages. The prospect of tailoring post-retirement options for individuals remains the “holy grail” for a number superannuation funds.
- **Governance:** The focus on governance that we observed in 2016 has continued and is now deepening into a focus on two particular areas for larger clients: a total portfolio approach and developing a high-performance culture. There is an increasing awareness that an investment in both total portfolio management and an improved culture, although difficult, can be increasingly important sources of competitive advantage as we progress through the great acceleration.
- **Tail risk:** Portfolio construction discussions continue around the potential ways to diversify assets as investors get ready for the end of this very long economic cycle and the risk of a material fall in

equity prices and/or rise in bond yields. Clients are investigating a number of potentially diversifying strategies and, at the same time, are finessing their fixed-income portfolios to reduce the potential for defensive portfolios to deliver sustained negative returns; this finessing has generally involved reducing duration exposure and increasing credit, liquidity and/or complexity exposure (in various guises).

The Australian regulators have had an active year, with most notably:

- A Royal Commission into banking and financial services misconduct: There was some surprise that this yet-to-be-completed review will include conduct within superannuation funds.
- A consultation package from APRA aimed at bolstering governance of superannuation funds: Trustees that are identified under the proposed prudential framework as being unable to consistently deliver sustainable member outcomes will be encouraged to lift their game or “to gracefully exit the industry.” Other potential responses by funds would include merging with other funds, or seeking to outsource certain functions such as administration and/or investment management.

Canada

The subdued economic activity levels observed in 2017 in Canada combined with higher than expected inflation rates pose challenges to the outlook for 2018. In such an environment it is likely that the Bank of Canada will further increase interest rates throughout the year. Moreover, the potential review of NAFTA by the Trump Administration and its potential disastrous implications for Canada adds to these uncertainties.

Regulatory changes announced in 2017 in the Province of Ontario are likely to provide funding relief to some defined benefit pension plans, as funding will move for most plans from a solvency to a going concern basis. This change allows pension plans to focus on the long-term plan management strategy, as it will likely reduce contribution volatility and therefore remove short-term pressures from the system.

Given the high levels of uncertainty and change, the interest in outsourced CIO (OCIO) solutions in the Canadian market as well as the search for additional sources of portfolio diversification will likely remain strong and gain additional momentum in 2018, as plan administrators look for cost-effective ways to improve governance and risk management.

China

With large-cap companies outperforming small-caps by a distance, it would be fair to describe 2017 as divergent for Mainland China's stock market. The 19th National Congress that took place in October, with President Xi's position reinforced and top leadership reshuffled, ushers China into a new era. Under the President Xi's new vision and direction of developing a modernized economy, accelerating innovation and market-oriented reforms will steadily expand the opening of China's capital markets in coming years, allowing all types of investors access via various channels.

For example, the continuous rise in trading volume through the Shanghai-Hong Kong and Shenzhen-Hong Kong stock connect is believed to be indicative of a further and wider rollout. According to Carlson Tong, the chairman of Securities and Futures Commissions, the next step is for both stock connects to incorporate exchange-traded funds (ETFs) by the end of 2018. At the initial stage, only plain vanilla style ETF products will be included.

We believe China's pension industry has had its ongoing problem of uneven distribution in the long term; this is primarily due to inconsistent pension contributions across the country. Contribution rates can vary as much as 10% in different provinces, thus even with a balance of 4 trillion yuan, some provinces still struggle to achieve equilibrium. National coordination is ready to be carried out in 2018 as an attempt to resolve this issue. Their strategy is to transfer state-owned assets into pension funds in order to help tackle the pension gap nationwide, central and local state-owned enterprises as well as government-supervised financial institutions.

Germany

The German economy displayed strong momentum in 2017, and GDP growth for the year is likely to reach 2.5%. Broadly synchronized global growth has been supportive, while Germany's Euro-area partners are also experiencing a solid recovery. Unemployment in the Euro-area fell from 6.8% to 6.3%; in Germany it reached a new low of 5.5% in December, down from 6% in January. German inflation stabilized at around 1.7%, after moving along the zero-line for most of 2014 to 2016. The Bund curve has steepened somewhat over the course of the year, although 10-year yields fell back to below 0.5% in the last quarter. Yields on government bonds with maturities of up to four years are negative and have even been dragged lower over the year as a result of the ECB's bond-buying activities. The European central banks have to observe the (roughly GDP-weighted) "country key" when buying sovereign bonds, which has made shorter-term Bundesanleihen scarce and extremely expensive. Concerns that extremely low rates will create distortions in the financial sector have given rise to demands that the ECB phase out its bond-buying program. It looks likely that this will now happen in the second half of 2018, with an end to negative money-market rates possibly in the following year.

The German stock market outperformed most European peers a second year in a row, gaining 12.5%, ahead of the Euro Stoxx, which rose 8.2% year-on-year in 2017. Already low Euro corporate credit spreads compressed somewhat further, meaning total return exceeded current yields, achieving 2.4% over the year (Barclays Index). The effect was amplified in the lower-rated Euro high-yield sector, where the total return reached 6.7%. Euro-denominated corporate bonds benefitted from the economic recovery of the Euro area, which triggered a spread rally among Southern European issuers.

The new Investment Tax Law passed in 2016 came into effect beginning of 2018, giving investors a choice between transparent and in-transparent fund vehicles. The application of a one-off tax rate for in-transparent vehicles rather than a penalty taxation is a significant simplification and should broaden the range of investment choices being offered to German institutional investors.

Hong Kong

A 10 billion Hong Kong dollar or \$1.28 billion public annuity scheme to be provided by the government-owned Hong Kong Mortgage Corporation (HKMC) will be launched in mid-2018. The scheme could be expanded if popular. Under the new scheme, citizens aged 65 and above will receive monthly payouts for the rest of their lives immediately after making a lump-sum premium payment.

Tentatively, a cap and a floor on the premium amount are set at \$1 million and \$50,000, respectively. Based on an internal return rate of 4% per annum, the expected monthly payout for males at the entry age of 65 would be around 580 Hong Kong dollars per 100,000 Hong Kong dollars premium paid, while for females, the monthly payout would be around 530 Hong Kong dollars due to longer life expectancy.

This new annuity scheme would complement the existing Mandatory Provident Fund (MPF), Hong Kong's compulsory DC scheme that requires monthly contributions to fund for one's retirement. Under the MPF scheme, retirees can withdraw their accrued benefits in one lump sum or in installments once they reach age 65. Retirees might consider investing all or a certain portion of their MPF-accrued benefits into this lifetime-guaranteed annuity scheme in order to receive a stable stream of monthly income.



Japan

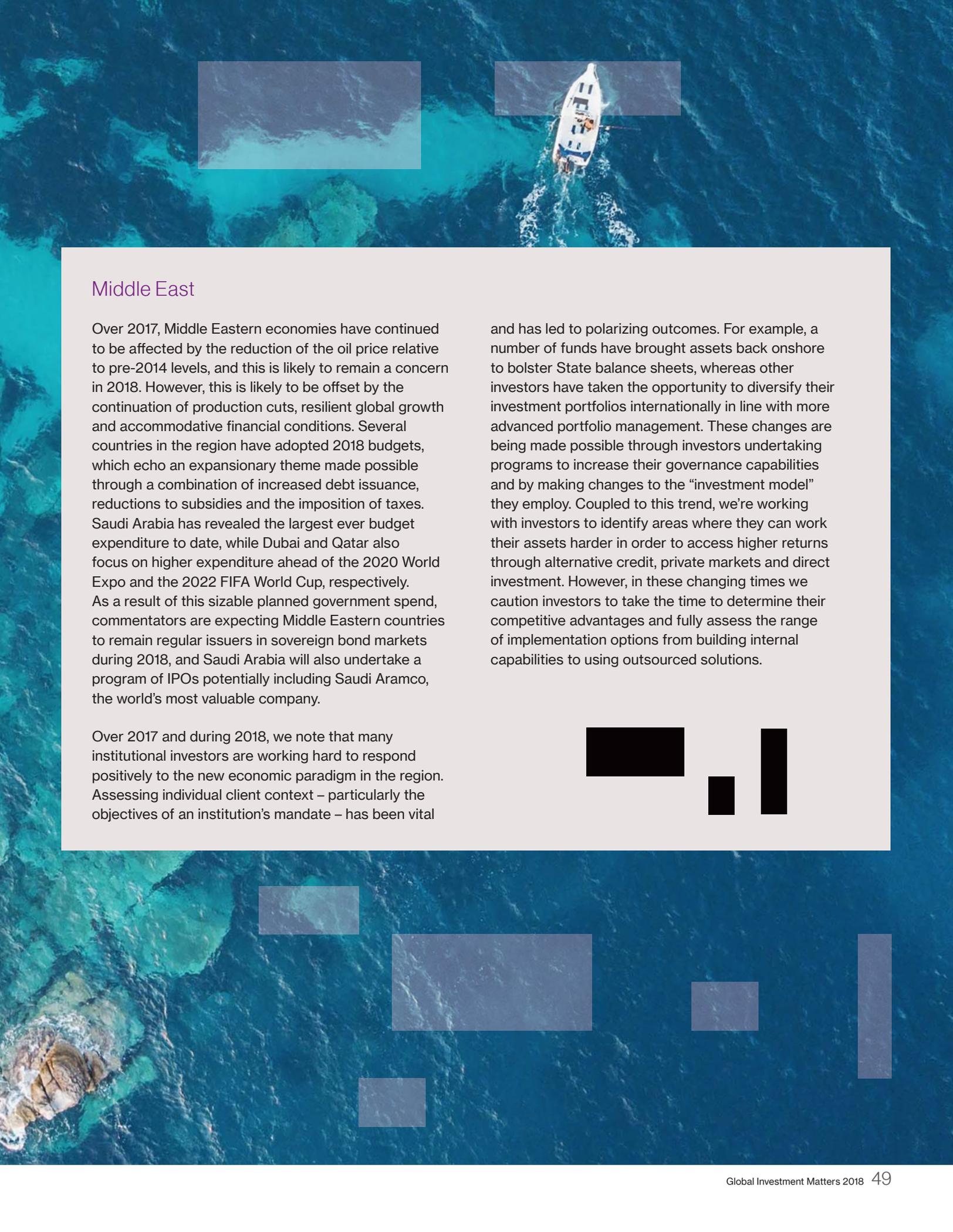
Japan continues to concentrate its efforts on corporate governance reform, and enhancing stewardship attitudes in the investment chain remains a key focus of these efforts.

In 2017, the Financial Services Agency released the revised version of Japan's Stewardship Code since the original version was formulated in 2014. There are some amendments from the original version to polish the effectiveness of the code, including i) improvement of investment managers' governance structure to appropriately control conflict of interest, ii) increase in transparency of proxy voting disclosure by investment managers, iii) clarification of the concept of collective engagement and iv) enhancement of effective investment manager monitoring by asset owners.

Along with the revision of the Stewardship Code, there has been significant progress in the attitudes of investment managers over recent periods, such as the widely spread launch of independent committees to monitor proxy voting and to review disclosure policy on proxy voting to start publicly revealing individual votes by many investment managers, some of which further disclose rationales behind those individual votes. Another development that drew the industry's

attention is the establishment of an organization for collective engagement by some of the largest domestic investment managers including the Pension Fund Association, an owner of assets valued at 12 trillion yen. From the asset owners' perspective, it is also recognized that public pension funds are starting to make an effort on strengthening their monitoring of stewardship activities by investment managers.

However, in contrast, among pension funds sponsored by the private sector, there is a persistent hesitance toward the burden of engaging with stewardship activities. In fact, there has virtually been no increase in the number of signatories of the code in corporate pension funds since a handful of them signed at the beginning. As a countermeasure, the Ministry of Health, Labour and Welfare recently revised its guidelines on fiduciary duty of pension funds as a way of officially encouraging corporate pension funds to consider evaluating stewardship activities of investment managers in their investment decisions. It is currently one of the most controversial topics in the industry and could be either a touchstone of success or failure of corporate governance reform in Japan; how can the wave of stewardship mentality be effectively extended to those conservative corporate pension funds?



Middle East

Over 2017, Middle Eastern economies have continued to be affected by the reduction of the oil price relative to pre-2014 levels, and this is likely to remain a concern in 2018. However, this is likely to be offset by the continuation of production cuts, resilient global growth and accommodative financial conditions. Several countries in the region have adopted 2018 budgets, which echo an expansionary theme made possible through a combination of increased debt issuance, reductions to subsidies and the imposition of taxes. Saudi Arabia has revealed the largest ever budget expenditure to date, while Dubai and Qatar also focus on higher expenditure ahead of the 2020 World Expo and the 2022 FIFA World Cup, respectively. As a result of this sizable planned government spend, commentators are expecting Middle Eastern countries to remain regular issuers in sovereign bond markets during 2018, and Saudi Arabia will also undertake a program of IPOs potentially including Saudi Aramco, the world's most valuable company.

Over 2017 and during 2018, we note that many institutional investors are working hard to respond positively to the new economic paradigm in the region. Assessing individual client context – particularly the objectives of an institution's mandate – has been vital

and has led to polarizing outcomes. For example, a number of funds have brought assets back onshore to bolster State balance sheets, whereas other investors have taken the opportunity to diversify their investment portfolios internationally in line with more advanced portfolio management. These changes are being made possible through investors undertaking programs to increase their governance capabilities and by making changes to the “investment model” they employ. Coupled to this trend, we’re working with investors to identify areas where they can work their assets harder in order to access higher returns through alternative credit, private markets and direct investment. However, in these changing times we caution investors to take the time to determine their competitive advantages and fully assess the range of implementation options from building internal capabilities to using outsourced solutions.



Global news

Netherlands

In 2018, we foresee a continuation of the trends that emerged over recent years. An important one is the ongoing investment in governance of the Dutch pension sector, driven by both the regulator and pension funds themselves. The number of pension funds is ever decreasing, and the funds that are here to stay have become bigger and invest heavily in their in-house investment capabilities. Starting with more than 1,000 pension funds 20 years ago, it is very likely that by the end of 2018 that number is less than 200. This consolidation is happening through mergers with larger pension funds, the introduction of the so-called “General Pension Fund,” an active insurance market and the rise of DC solutions. At the same time, the larger pension funds are looking to unbundle their activities with specialized, internal or external, solutions to optimize their governance and investment portfolios.

Part of this optimization is an increased focus on diversification and effective management of their investment portfolios (i.e., more dynamism). Over recent years, very loose central bank policy and the subsequent search for yield has driven spreads down and practically

all asset prices up. Despite continuing momentum across most markets, Dutch investors are increasingly risk aware. To mitigate downside risks, diversification across risk and return drivers is key. This will be illustrated in 2018 by ongoing research into the unlisted alternative credit space, growing attention for secure income assets and reconsideration of both interest rate and inflation hedging. Given market dynamics and increasing complexity, we believe pension funds agree on the importance of efficient implementation and managing the different return drivers underlying these assets more dynamically.

Finally, Dutch pension funds will continue to take pride in their efforts on sustainable investing. Progression on ESG in The Netherlands, by pension funds and Dutch asset managers, has been substantial over the recent years and inspired discussions globally. As more and more implementable solutions are being offered, Dutch pension funds are able to execute on their policies. Overall, 2018 will be a year of increased focus and professionalization to further optimize portfolios in this complex and dynamic environment.

U.K.

For DB investors, 2017 was similar to 2016 in that investors continued to worry about economic uncertainty and the potential for equity market falls, or further reductions in gilt yields to blow them off course as they seek to achieve their long-term objectives. This means there is a continued desire for diversification within growth assets and, as schemes look to de-risk, for a range of low-risk assets that help manage the risks associated with DB liabilities.

With liabilities maturing, there is an increasing focus on nailing down the long-term goals for DB schemes and constructing strategies aligned with these goals. DB investors are choosing between two long-term paths depending on their funding position, the ongoing strength of their covenant and the maturity of their liabilities; the two paths are either buying out the liabilities with an insurance company or long-term “runoff” (effectively planning to continue to pay benefits as they fall due). This focus on the long-term path means DB pension trustees are starting to think more like an insurance company and structure strategies that aim to reduce the cash flow burden. There is increasing demand for assets that provide very long-term, inflation-linked cash flows that have very strong counterparties and/or are well-collateralized

(and, preferably, over-collateralized); these types of assets include property-based strategies such as long lease and ground rent as well as social infrastructure and renewable energy. Additionally, buy-and-hold credit strategies are gaining popularity.

Pension scheme trustees are recognizing the need for good governance to ensure they are getting their fair share of the right assets, and that they are in a position to react quickly to market conditions and changing funding positions to capture opportunities. This is leading to trustees spending the bulk of their time determining the direction of travel but outsourcing a lot of the operational matters (such as manager selection and implementation). This trend is likely to continue into 2018 and beyond.

Outsourcing is becoming more prevalent for DC benefit provision, and there has been significant growth in assets moving to Master Trusts, which is expected to continue into 2018. For DC plans that are continuing to be run under the traditional Trust structure, there is more interest in Target Date Funds which, up until now, have been widely used in the U.S. but uncommon in the U.K.

U.S.

The past year surprised to the upside. Positive market sentiments following the election of President Trump received further support from continued GDP and corporate earnings growth. Inflation remained muted despite tightening labor markets and long bond yields ground lower despite the Federal Open Market Committee (FOMC) continuing its tightening cycle with three additional rate hikes. Monetary policy in Europe and Japan remained largely accommodative, and the populist specter looming over Europe appeared to recede with the election of establishment favorites in Germany and France.

However, it's worth pausing and considering where this leaves us. Equity valuations are at or nearing historic highs across a variety of metrics. Credit spreads are similarly nearing historic lows. Investors are receiving very little compensation for bearing risk as the U.S. moves into the latter stages of the economic cycle: inflation pressures build, China's credit expansion remains unresolved, and significant geopolitical risks loom over the Korean peninsula, Eastern Europe and the Middle East. Low risk premia and major central banks limited in their ability to provide any new large scale stimulus leave little buffer against future market shocks.

While accommodative monetary policy and other cyclical trends may result in continued positive market surprises in the near-term, looking forward, we continue to maintain our "new world" outlook of historically low growth with growing downside risks over time. In this environment, it's prudent for institutional investors to reflect on their current positioning and consider how much and what types of risk are worth bearing.

Market movements over the past year, which have allowed many institutional investors to make progress on their objectives and policy changes over the coming year, including the recently passed Tax Cuts and Jobs Act of 2017 and FASB accounting changes concerning the recording of pension expense, provide incentives to reduce risk and diversify.

The above, taken together, we feel points toward the continued need for U.S. institutional investors to:

- Assess critical resources and fiduciary risk. All investment committees must prioritize their activities. But not all investment committees are created the same; plans, staff, budgets and expertise vary drastically. Consider how your governance structure affects your ability to focus on high-impact decisions, and identify areas where you may require additional support.
- For DB plan sponsors, have a purposeful approach to liability hedging, subject to your context.
- Explore diversity and other risk management strategies (e.g., options, dynamic hedging) in portfolios seeking returns over bonds to potentially reduce the impact of the downside market event on portfolios.
- Use dynamic portfolio views where possible and appropriate, subject to your governance.
- Keep a sharp focus on external costs and value for money, with expected returns and yields likely to stay historically low for years, recent and expected FOMC rate hikes notwithstanding.





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