Invesco Global Fixed Income Study 2018

This study is not intended for members of the public or retail investors.
Full audience information is available inside the front cover.

Important information
This document is intended only for Professional Clients and Financial Advisers in Continental Europe (as defined in the important information); for Qualified Investors in Switzerland; for Professional Clients in, Dubai, Jersey, Guernsey, Isle of Man, Ireland and the UK, for Institutional Investors in the United States and Australia, for Institutional Investors and/or Accredited Investors in Singapore, for Professional Investors only in Hong Kong, for Qualified Institutional Investors, pension funds and distributing companies in Japan; for Wholesale Investors (as defined in the Financial Markets Conduct Act) in New Zealand, for accredited investors as defined under National Instrument 45-106 in Canada, for certain specific Qualified Institutions/Sophisticated Investors only in Taiwan and for one-on-one use with Institutional Investors in Bermuda, Chile, Panama and Peru.

Contents

Nick Tolchard
Head of Invesco Fixed Income, EMEA
Nick.Tolchard@invesco.com
+44 20 7959 1606

Introduction

Welcome to the inaugural Invesco Global Fixed Income Study. This study adds a new element to our investor-focused thought leadership series, which we initiated over five years ago with our Global Sovereign Asset Management Study, the authoritative view of the global sovereign investor segment.

The Global Fixed Income Study is a first of its kind asset class study of global fixed income investors, which complements our other research.

For this first edition, we interviewed 79 fixed income specialists – typically Heads of Fixed Income but also with representation of CIOs and Heads of Investment Strategy. Our respondents work across pension funds, sovereign investors, insurers and private banks in North America, Europe, and Asia-Pacific. They are responsible for fixed income portfolios within asset owners collectively holding a total US$4.4 trillion AUM (as at 30 June 2017).

Our respondents are currently navigating a great calm in fixed income markets which has persisted since the turmoil of the financial crisis and its aftermath. In some senses this period has simply maintained the 30-year trend of declining interest rates in major nations since long-term yields peaked in the 1980s. However, for most respondents, the maintenance of both this 30-year trend, and the post-crisis period of calm – after all the financial crisis unfolded nine years ago – has been unexpected. Expectations of yields rising to what are considered as more typical levels have been continually postponed.

However, there is a sense amongst respondents that this prevailing period of calm is coming to an end as central bank intervention is withdrawn and investor behaviours subsequently change. There is no consensus of what comes next, but respondents are planning their fixed income strategies based on their individual views. Few are sitting on their hands. The majority view is that this is a period before different but still relatively benign conditions, with a subdued 'new normalisation' of economic and interest rate conditions, rather than the calm before the storm. However a minority do see a calm before the storm scenario, predominantly an end of cycle economic downturn caused by fragile economies unable to maintain growth without the degree of central bank support seen since the financial crisis. This is a deflationary storm of even lower fixed income yields.

It's notable that the scenario largely absent amongst respondent views is that of a calm before a storm consisting of an inflationary boom – the conditions often associated with the final leg of an economic cycle. The unfolding of these conditions – despite being implicit in the policy objectives of the new US administration under President Trump – would represent a significant surprise. While the potential for major turning points in fixed income clearly exists, there have equally been many other catalysts in the post-crisis period which markets have largely ignored. In this environment, fixed income investors have been forced to get on with the job of searching for returns in an environment which has typically become more difficult with each successive year, as yields in one sector after another become compressed.

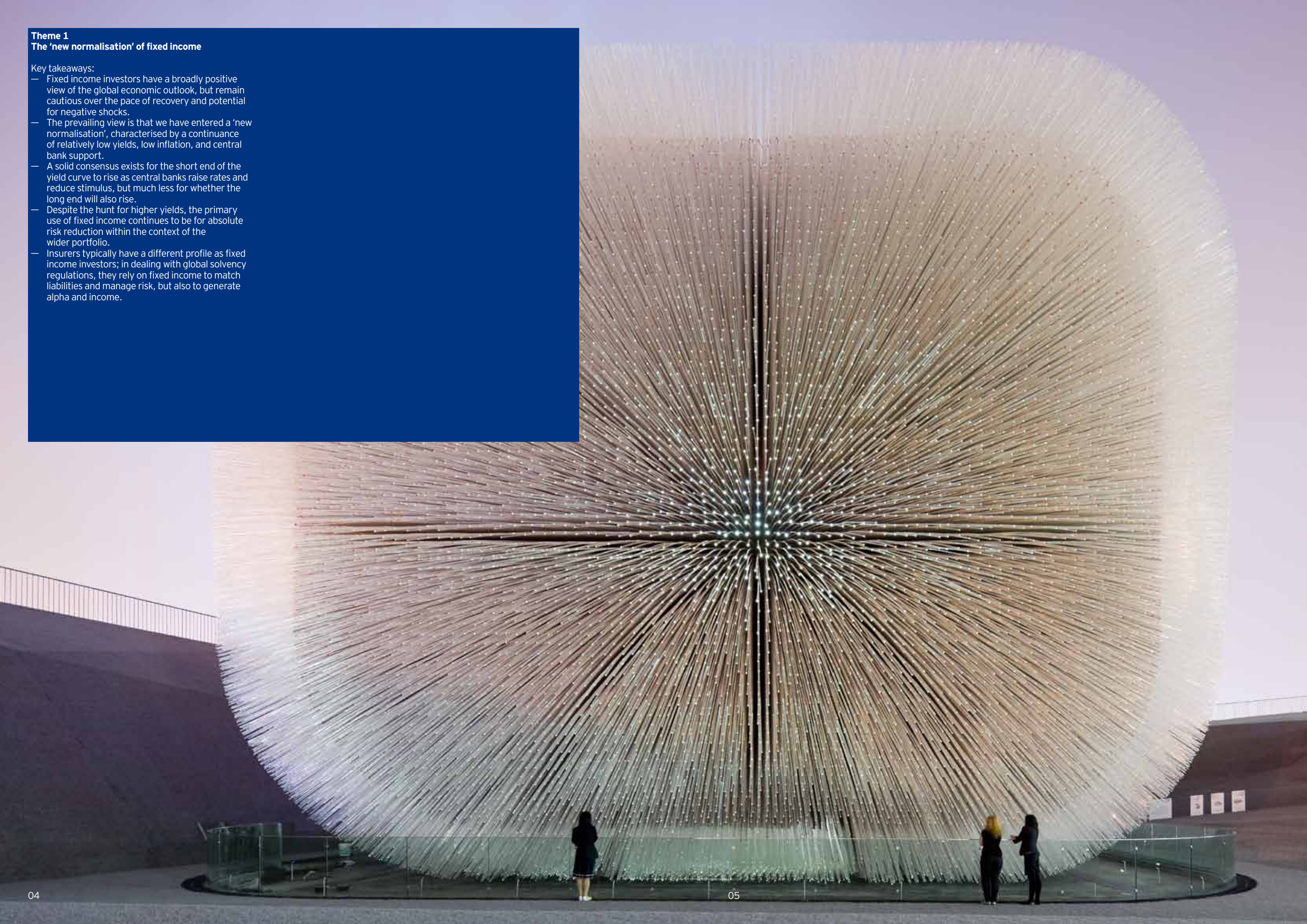
The 2018 Global Fixed Income Study baselines the challenge of fixed income investors to continue to make a key return contribution to the overall portfolio. It documents an adaptation to unprecedented conditions which for the most part were expected to have long concluded by now.

We believe that now is a perfect time to take a investor-focused view on fixed income portfolios. We hope the unique, evidence-based findings provide a valuable insight into a core part of investors' portfolios.

Theme 1
The 'new normalisation' of fixed income

Key takeaways:

— Fixed income investors have a broadly positive view of the global economic outlook, but remain cautious over the pace of recovery and potential for negative shocks.
— The prevailing view is that we have entered a 'new normalisation', characterised by a continuance of relatively low yields, low inflation, and central bank support.
— A solid consensus exists for the short end of the yield curve to rise as central banks raise rates and reduce stimulus, but much less for whether the long end will also rise.
— Despite the hunt for higher yields, the primary use of fixed income continues to be for absolute risk reduction within the context of the wider portfolio.
— Insurers typically have a different profile as fixed income investors; in dealing with global solvency regulations, they rely on fixed income to match liabilities and manage risk, but also to generate alpha and income.



The first edition of the Invesco Global Fixed Income Study reveals that fixed income investors are anticipating the global economy continuing on its recovery and central banks starting their journey towards more conventional policies.

However, for the most part investors do not envisage the typical normalisation of growth, interest rates, and inflation which would be expected with a post-slump recovery. Rather, investors believe a secular shift has occurred, and many subscribe to a 'new normalisation', featuring:

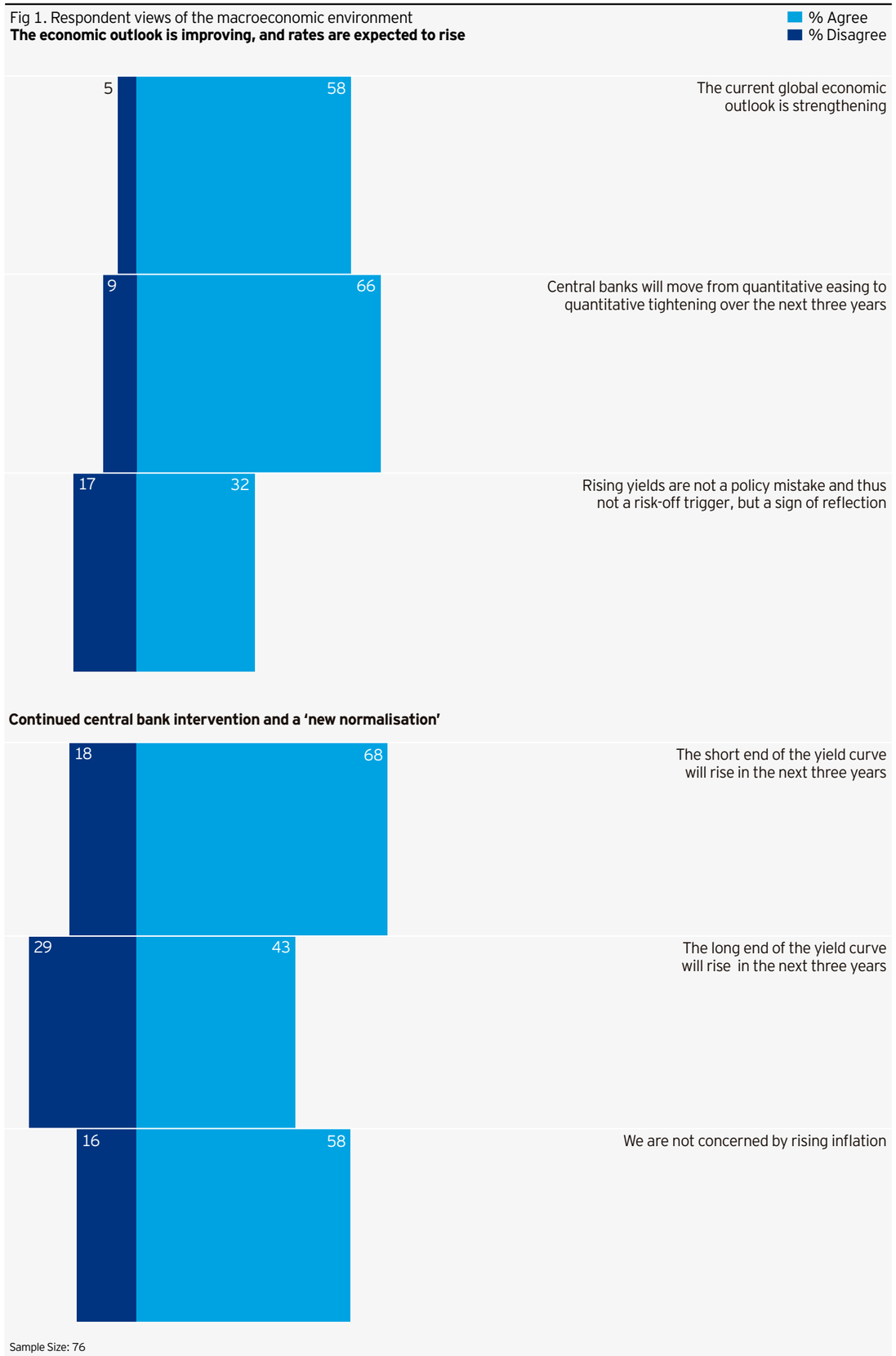
— Slow to moderate rates of economic growth.
— Gradual increases in interest rates by central banks, resulting in yield curves rising at the short end faster than at the long end (a flattening of yield curves).
— Little risk of global inflation and a breakdown of the traditional inflation-unemployment theory. This represents the majority view of respondents but there are divergences. While views are dispersed both positively and negatively, it's notable that divergent views were skewed to the downside, i.e. despite the central scenario being a relatively subdued outlook, the next most common view is more pessimistic. This has significant impacts for fixed income strategies, as explored in theme 3.

Overall, respondents have a broadly positive outlook, as shown in figure 1. Over half of respondents expect a strengthening global outlook and few disagree, highlighting positive sentiment driven by improving consumer confidence and spending, better GDP growth, and low unemployment.

In such a scenario, most investors feel that central banks are right to raise rates and reduce balance sheets. Yet as the data implies, around one third of respondents see conditions essentially ticking along at the current tempo, and 17% see rising rates as a policy mistake.

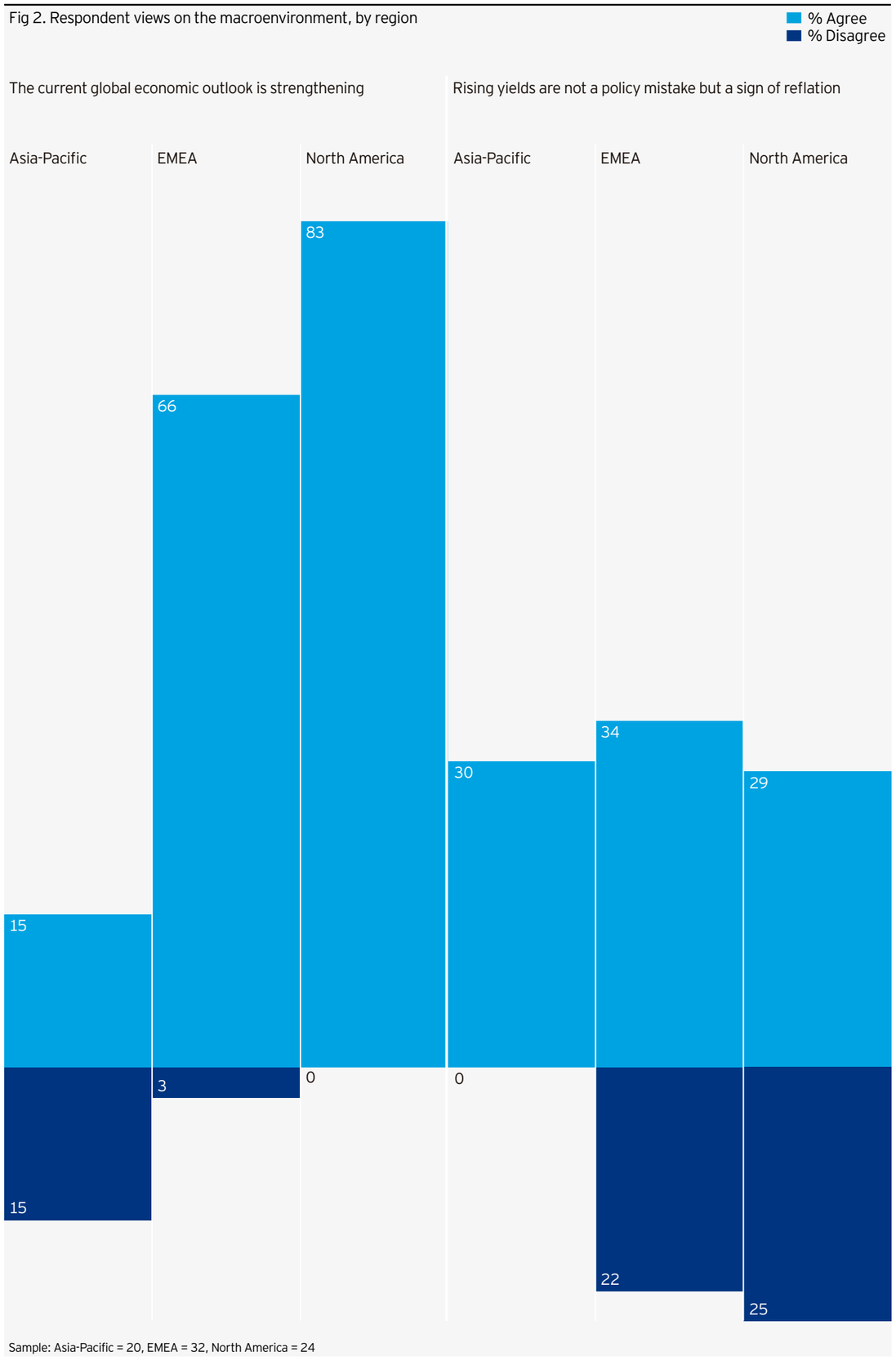
Investors do not envisage the typical normalisation which would be expected with a post-slump recovery

Fig 1. Respondent views of the macroeconomic environment
The economic outlook is improving, and rates are expected to rise



Sample Size: 76

Fig 2. Respondent views on the macroenvironment, by region



Sample: Asia-Pacific = 20, EMEA = 32, North America = 24

Despite a positive outlook, investors remain cautious

This demonstrates that while the outlook has become more positive, it is a tempered perspective. It is more positive relative to recent experience, but not relative to prior ingrained expectations of robust 3%-4% growth rates with cyclical booms. Amidst the more positive sentiment, respondents are mindful that the currently observed improvement in conditions has been supported by unprecedented monetary policy in the wake of the financial crisis, and point to two dynamics:

— A sense that companies, institutions and investors have become reliant on loose monetary policy and that withdrawing support quickly may see a repeat of the 2013 'taper tantrum'. The extent of central bank intervention is such that in late 2017, euro sub-investment grade bond yields were in some cases lower than US treasuries of the same maturity, a direct effect of the European Central Bank's (ECB) purchasing programme.

— While many economies are now experiencing low unemployment and strong corporate earnings growth, there is little concern of rising inflation. Lower commodity prices, and a view that slack capacity is capping wage growth despite falling unemployment rates, are seen as possible explanations. The absence of inflation encourages a view that central banks can maintain loose monetary policy.

Figure 2 highlights the conundrum of strengthening growth failing to shake off caution and the desire for central bank support: despite North American investors being the most positive on the strengthening global outlook (83% relative to 66% of EMEA investors and just 15% of Asia-Pacific investors), over a quarter of North American investors believe that rising yields represents a policy mistake.

"The global economy has strengthened but it remains fragile especially now banks are reducing their support. We don't think it will take much to tip it into recession"
DB pen, EMEA

While the outlook has become more positive, it is a tempered perspective

Investors see North America and Asia-Pacific leading Europe in a global economic recovery

Looking at the regional outlook, considerable divergences persist, as highlighted in figure 3.

- China stands alone of the major economies in high levels of expected growth and a high interest rate forecast.
- North America and the Asia-Pacific economies form a cohort where GDP growth is expected to be in the 2.5%–3% p.a. range with short-term rates between 1%–2%.
- Most of Europe forms an adjacent cohort with GDP growth expectations of between 1.5%–2% and short-term interest rates ranging between 0.5%–1.5%.
- Looking at the UK, respondents believe the decision to leave the EU will negatively impact the UK economy, which prior to the referendum had been recovering at a pace more in line with the US and Canada. Over two thirds of respondents believe that Brexit is likely to have a negative impact via reduced consumer and business confidence as the impact and cost of Brexit become clearer.

Respondents expect the yield curve to flatten more than rise

As figure 1 suggests, there is confidence that yields at the short end of the curve will rise with central bank action, but much less agreement about the longer end of the curve following. Rather than a parallel shift up of the yield curve, the outlook is for a flattening with the short end rising towards the longer end. This is especially the case for the US, where only 24% of respondents see the long end of the yield curve rising, and 40% actively disagreeing.

Interviewees spoke of structural factors being increasingly important influences on lower long dated bond yields:

- Ageing populations are creating a demand-supply imbalance with investors seeking long dated securities to match long duration liabilities; respondents pointed to 10-year US treasury yields being on a downward trend well before the financial crisis.
- Risk and liquidity regulations being implemented in the banking (Basel III, Dodd Frank) and insurance sector (Solvency II, RBC, C-Ross) are forcing institutions to hold lower risk assets, often in the form of cash and highly rated sovereign debt.
- Investors chasing returns are buying higher yielding long dated bonds in countries such as the US and Canada, suppressing yields as demand outstrips supply.

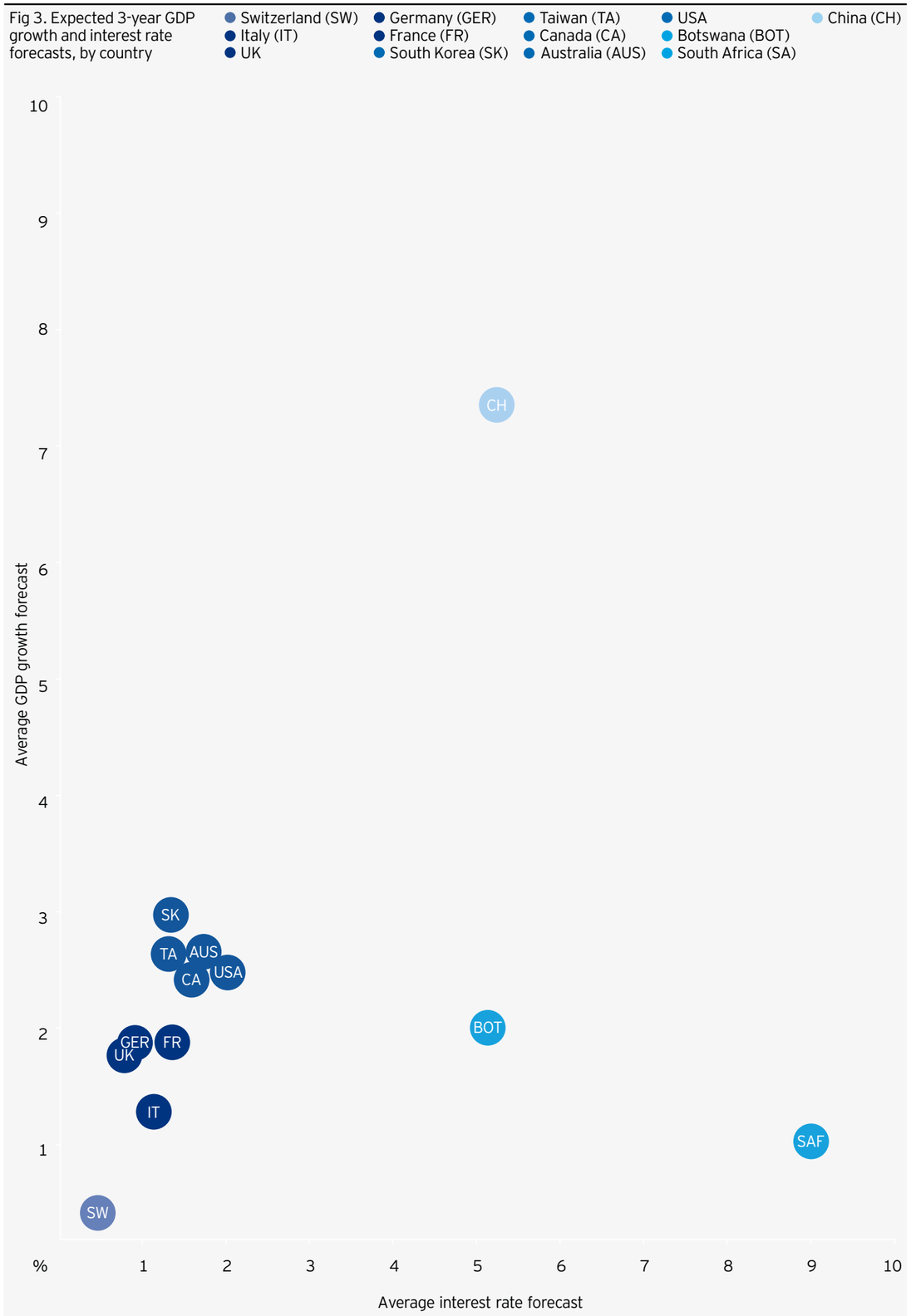
Further, respondents remain concerned about negative shocks to the economy, expressing the view that there is a greater probability of the economy underperforming expectations than outperforming. Risks include the possibility that we are approaching the end of an economic up-cycle (despite being a very subdued cycle), rising debt levels, and increasing geopolitical risks. Coupled with a very extended period of low volatility and high asset prices, respondents feel economies are susceptible to shocks.

Current interest rate settings would make it very difficult to provide conventional monetary support in a shock situation. Indeed, a small segment of respondents believe that central banks are lifting rates higher than current conditions actually warrant in order to create a monetary policy cushion in preparation for the next economic shock.

"Our view is that rates will rise but very gradually, mostly at the short end, and with significant divergence between regions"
SWF, North America

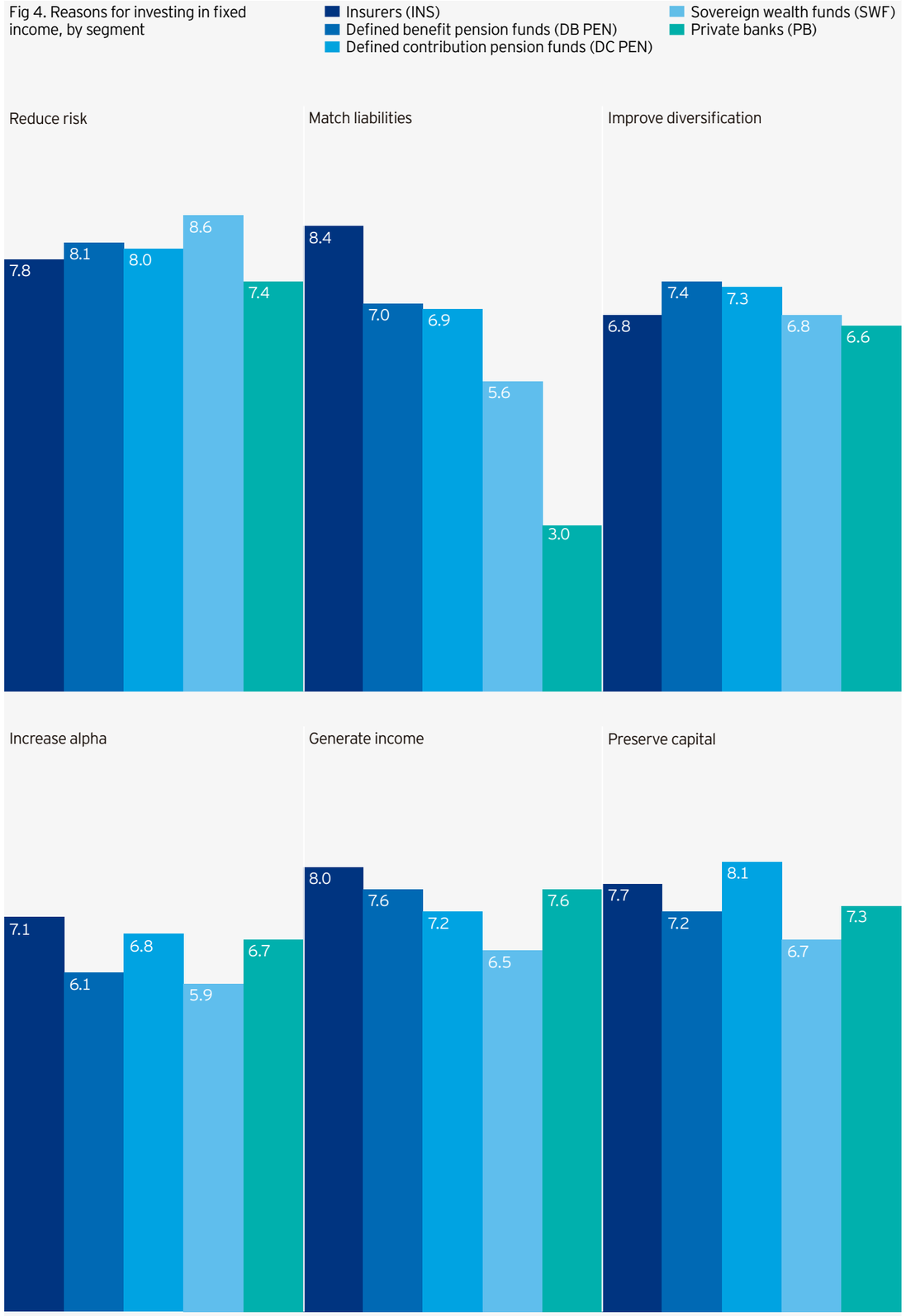
Respondents remain concerned about negative shocks to the economy, expressing the view that there is a greater probability of the economy underperforming expectations than outperforming

Fig 3. Expected 3-year GDP growth and interest rate forecasts, by country



Sample: 51. Sample sizes for individual countries shown in brackets. China= (4,4), USA = (9,8), South Korea = (1,1) Australia = (4,2), Canada = (4,4), Taiwan = (1,1), Germany = (4,4), France = (6,6), UK = (2,2), Italy = (5,5), Switzerland = (2,2), Botswana = (2,2), South Africa = (1,1) – LH number is for GDP forecast, RH number is for interest rate forecast.

Fig 4. Reasons for investing in fixed income, by segment



Sample: Insurers = 25, DB pension funds = 17, DC pension funds = 12, Sovereign wealth funds = 10, Private banks = 14. Rating on a scale of 1–10 where 10 is complete agreement with reason

Role of fixed income in the 'new normalisation' world

The objectives of fixed income in the 'new normalisation' remain fundamentally unchanged relative to more typical interest rate conditions.

Figure 4 highlights that investors seek:

— Portfolio risk (return volatility) reduction arising from perceived lower volatility of fixed income as an asset class, and negative correlation to equities.
— Absolute risk reduction (capital preservation).
— Income generation.

With the objectives of fixed income being little changed despite the unconventional fixed income environment, the task of achieving those objectives has become significantly more difficult. This has forced innovation in investor thinking, with examples including:

— From a risk perspective, some investors, particularly European sovereigns and larger pension funds, have adopted a risk parity approach to their portfolio. In this situation, the risk of the fixed income allocation is deliberately increased (for example by significantly increasing duration) so that the risk characteristics of their fixed income portfolio approaches those of equities.
— From an income perspective, the protracted and deepening low yield environment has forced a search for higher yielding fixed income assets, leading to an increase in use of alternative credit (explored in theme 4). This has pushed investors up the risk spectrum, potentially conflicting with their risk reduction objectives.

This is relatively consistent across segments with the exception of insurers (figure 4). Due to regulation (explored in theme 2), insurers rank matching liabilities as the most important objective followed by generating income. As risky assets incur higher capital charges, insurers are more focused on using fixed income portfolios to match liabilities, but given that fixed income makes up a large proportion of insurer portfolios, generating income and alpha are also important criteria.

While most other segments see the primary objective of their fixed income portfolio to reduce portfolio level risk, there are some material differences.

The most obvious difference relates to matching of liabilities, which is typically not an objective for private banks and only relevant for some sovereign investors.

DB and DC pension funds have similar objectives for their fixed income portfolios, perhaps more similar than might be expected given the different nature of their liabilities. That said, DC pension funds place significantly more emphasis than DB funds on using fixed income for alpha generation as well as for preservation of capital.

Sovereign wealth funds typically do not have liabilities to match, often have fewer portfolio constraints, and can typically utilise a wider range of assets to achieve their objectives. The role of fixed income tends to be narrower with sovereigns relying on their fixed income portfolios principally to reduce the overall volatility in the portfolio.

Private banks are not just an outlier in terms of liability matching. It is the only segment where reducing risk is not the most important objective of fixed income portfolios. Important as that objective is, it is outranked by income generation, reflecting the different needs of their high-net-worth individual and small institutional clients.

The 'new normalisation' is anything but a return to previous conceptions of normality for fixed income investors. Yet the fixed income asset class is expected to continue delivering its traditional objectives and benefits in a portfolio context. With conditions failing to meet expectations, investors are instead adapting to the conditions.

"Although we are chasing yield the fundamental role of fixed income remains the same as always. Preserve capital and generate income for our clients"
Private bank, EMEA

The 'new normalisation' is anything but a return to previous conceptions of normality for fixed income investors. Yet the fixed income asset class is expected to continue delivering its traditional objectives and benefits in a portfolio context

Theme 2
Low yields remain the dominant challenge; but ageing, regulation, and geopolitics are seeping into investor thinking

Key takeaways:

— Low and falling yields have been the primary challenge facing investors since the financial crisis, but on a forward 3-year view this is expected to ease marginally.
— A host of new challenges are starting to make claims on the thinking of investors. Pension funds are affected by ageing member populations, insurers by a myriad of new regulations, and both are increasingly watchful of geopolitical risks.
— Underfunded DB pension funds are seeing increasing gaps between target and expected returns. Where deficits are expanding, funds are turning to riskier assets (including within fixed income portfolios) to bridge the gap.
— Insurers are balancing a need to improve returns with an increasing regulatory burden which demands greater focus on liability matching, causing them to turn to higher yielding fixed income assets in an effort to generate income and increase alpha.
— Geopoliticals and other left-tail event risks are of increasing concern, with those who expect them to unfold looking to increase their core fixed income allocations.

The financial crisis severely disrupted fixed income markets, resulting in large losses in some fixed income categories, but subsequently some exceptional opportunities to buy higher yielding fixed income securities cheaply in the aftermath.

In the longer term, the single biggest challenge facing fixed income investors has been the low yield environment. This has deepened, extending from treasuries to most fixed income categories (as central bank policy has forced investors to move into riskier assets), and has persisted much longer than many investors expected. The reduction in available yields has increasingly resulted in fixed income returns achieved falling short of targeted returns, particularly where being used to fund liabilities such as those of DB pension funds.

Investors remain focused on adapting to the low yield environment. However, figure 5 also indicates that investors expect to make progress in doing so and that the impact of the low yield environment is expected to abate somewhat. This will create some space to address a series of emerging challenges which are having an increasing impact, notably ageing populations, regulatory change, and geopolitical risk.

These future challenges vary with segments (figure 6):

— All segments continue to be impacted by the low yield environment. Pension funds are most concerned, while sovereign wealth funds and private banks are less so.

— Looking beyond the low yield challenge: Pension funds are most concerned with ageing populations given the longevity of their liabilities (DB pension funds) or their retirement income objectives (DC pension funds).

For insurers, regulation is the focus; the segment is experiencing a tightening phase of the regulatory cycle, with tougher Risk-Based Capital (RBC), asset and liability management (ALM) and accounting regimes expected.

ESG is growing in importance, albeit from a low base, particularly for pension funds with active stakeholders.

Ageing populations

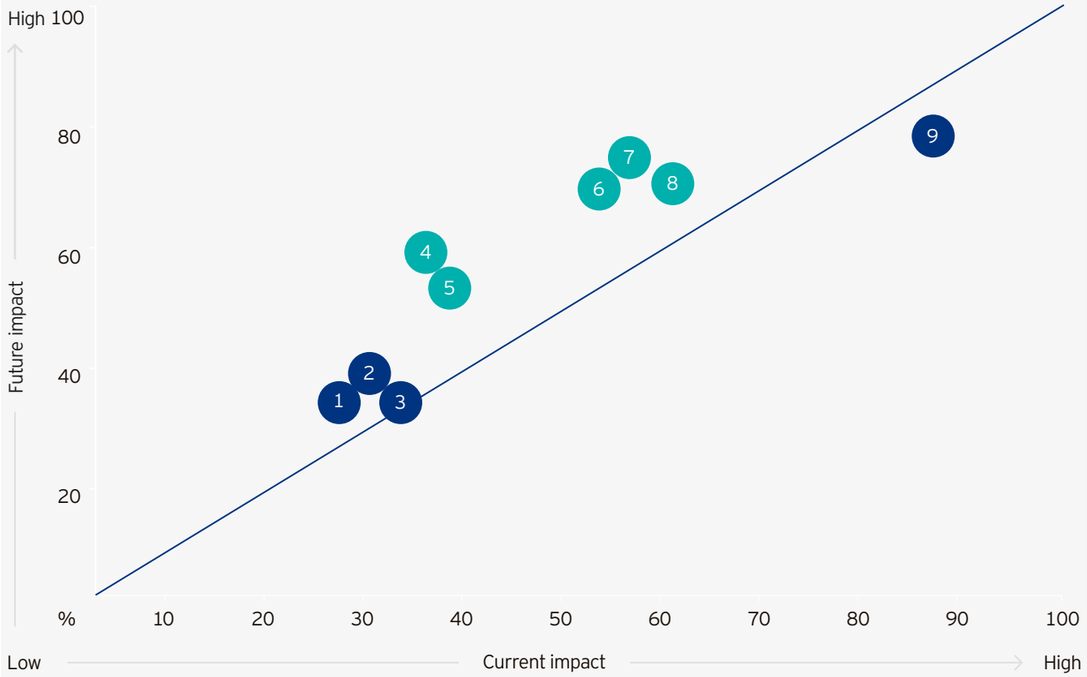
Half of our respondents (figure 5) are already dealing with the issue of ageing populations, but the impact is expected to grow, with three quarters stating that they believe ageing populations will impact their fixed income portfolios within the next three years.

While not funding guaranteed liabilities, DC pension funds and private banks acknowledged the impact of ageing populations, given the relatively younger composition of members of the former, and the need for portfolios to fund longer lifespans for the latter. DC pension funds and private banks face difficulties in structuring portfolios to balance capital preservation, liquidity, and the need to generate income in the decumulation phase of the investor lifecycle.

DB pension funds face the biggest fallout from ageing populations. Funding deficits and asset-liability mismatches are already significant and at risk of increasing further. As life expectancy increases, so too do liabilities, resulting in a deterioration of funding levels. The low yield environment accentuates this problem, and unhedged DB pension funds have seen funding levels diminish as growth in liabilities has outpaced asset growth.

Fig 5. Macro factors, current and 3-year future impact on fixed income portfolios (% citations)

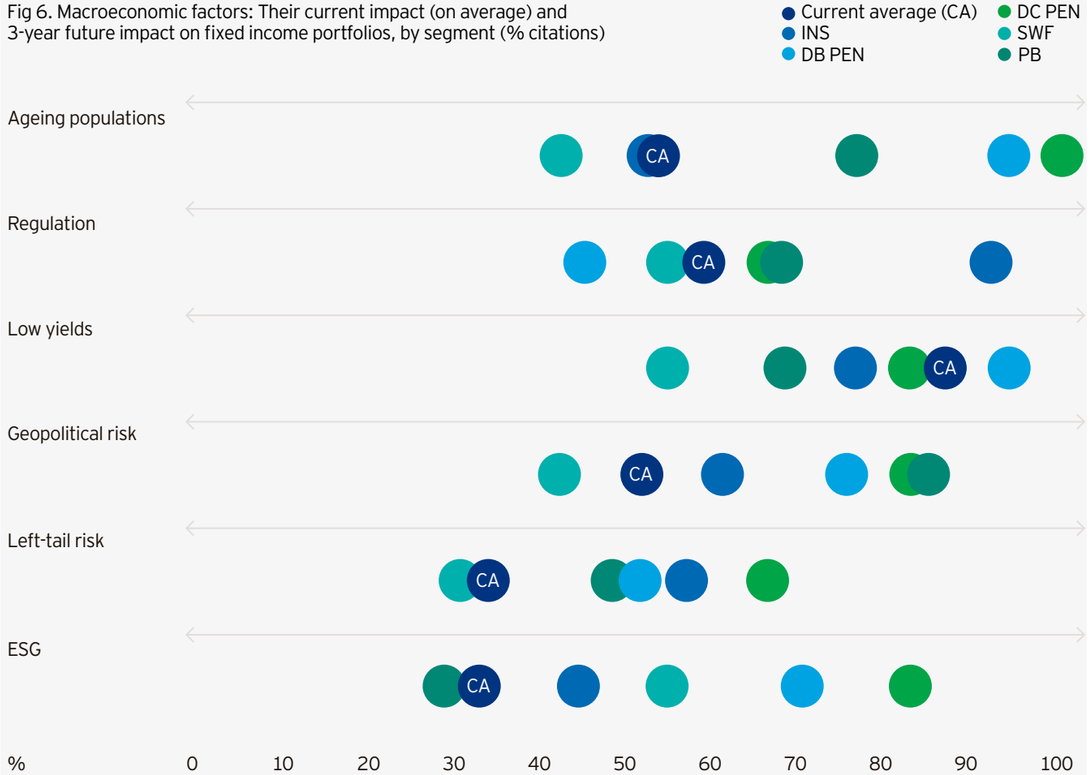
1. Tailored solutions
2. Factor investing
3. Active to passive
4. ESG
5. Left-tail risk
6. Geopolitical risk
7. Ageing populations
8. Regulatory challenges
9. Low yields



Sample: 77

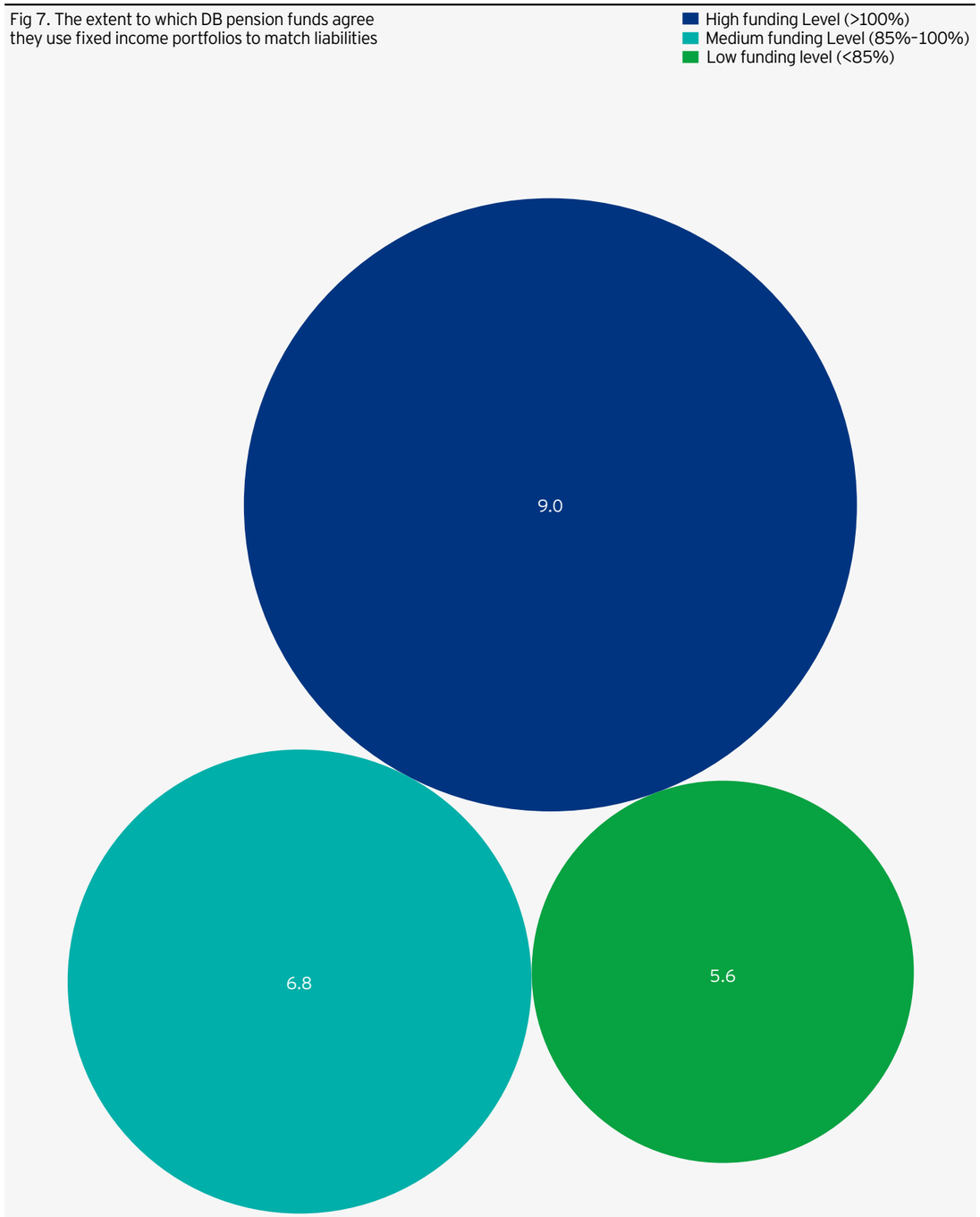
"We discuss a wide range of issues with members. They are increasingly interested in ESG strategies and how geopolitics might impact their portfolio"
DC pen, Asia-Pacific

Fig 6. Macroeconomic factors: Their current impact (on average) and 3-year future impact on fixed income portfolios, by segment (% citations)



Sample: Insurers = 26, DB pension funds = 17, DC pension funds = 12, Sovereign wealth funds = 9, Private banks = 13

Fig 7. The extent to which DB pension funds agree they use fixed income portfolios to match liabilities



Sample: Low funding level = 5, Medium funding level= 6, High funding level = 6
Rating on a scale of 1-10 where 10 is complete agreement

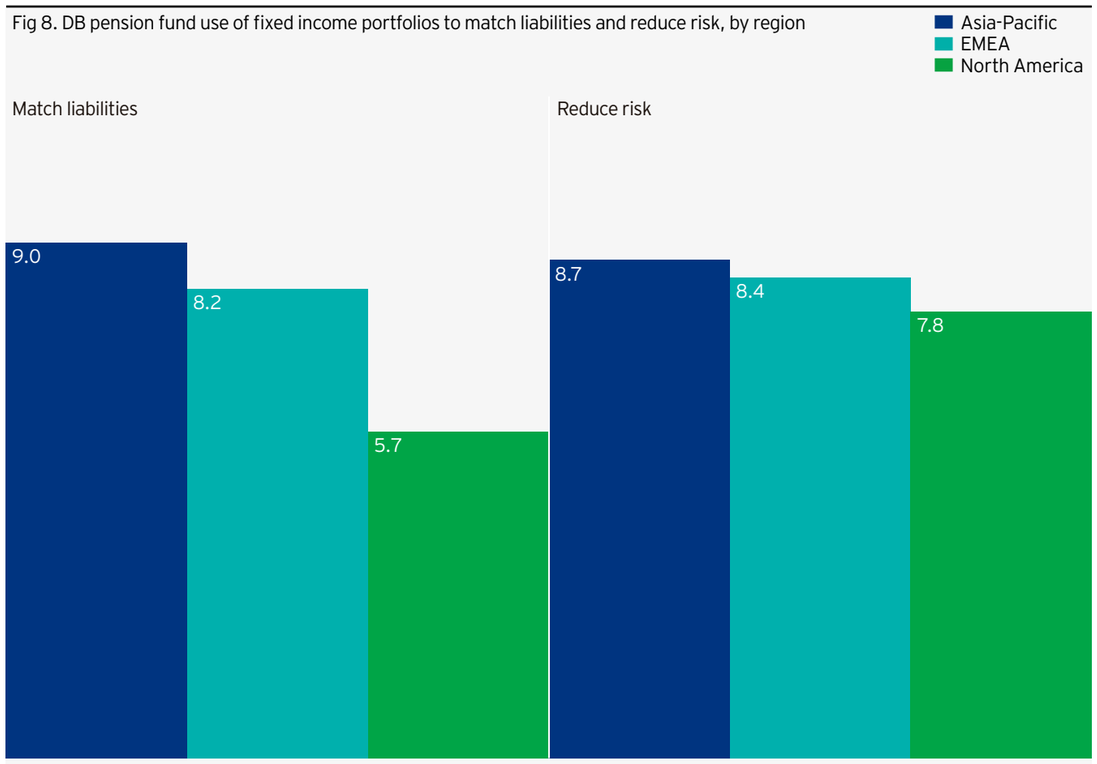
As finding investments that match the cashflows of liabilities and provide an adequate return has become increasingly difficult, investors have become more adventurous in selecting cashflow matching securities. This has included some adoption of illiquid credit (discussed in theme 4), properties with long leases, and infrastructure (particularly debt but also equity).

As funding gaps have expanded, DB pension funds are in the difficult position of requiring higher investment returns despite the low yield environment, creating a driver to take more portfolio level risk.

Notably, DB pension funds with lower funding levels display less commitment to liability matching (figure 7) than funds with higher funding levels. Within the underfunded segment, fixed income is still used to reduce portfolio level risk, but in a context of overall portfolio risk being increased via higher allocations to risk asset classes such as equities and alternatives. This was most evident amongst North American funds (figure 8) which often have larger funding level deficits than their Asia-Pacific and European peers. Consequently, North American investors focus less on using fixed income portfolios to match liabilities and reduce risk (figure 8), instead focusing on returns across the entire portfolio.

DB pension funds with more secure funding positions also display more commitment to liability matching, and have seen funding levels improve over recent years. This is especially so when funding levels are above 100% (figure 7). However, this is also accompanied by an increase in fixed income risk appetite; once matching risk has been eliminated, the traditional risk dampening role of fixed income becomes less important.

Fig 8. DB pension fund use of fixed income portfolios to match liabilities and reduce risk, by region



Sample: Asia-Pacific = 3, EMEA = 5, North America = 9
Rating on a scale of 1-10 where 10 is complete agreement

Looming regulatory challenges

Respondents face multiple strands of tightening regulation, most of which have their roots in responses to the financial crisis (figure 9). Insurers are most impacted, with Solvency II in Europe and Risk-Based Capital (RBC) and C-Ross in Asia-Pacific all aiming for greater transparency and better risk management.

These will be particularly challenging for insurers with large guaranteed books which have high return requirements to ensure guarantees are met. Asia-Pacific guaranteed rates remain higher than sovereign bond yields, and with regulation encouraging greater use of less risky debt instruments, investors face a widening gap between required and expected rates of return.

In addition, changes to international accounting standards (IFRS 17 is due to be phased in by 2021), aimed at market-based accounting over book values, add to the regulatory burden. US insurers are less affected by solvency regulations, but respondents noted a number of other regulations, including Dodd Frank, and bringing US GAAP in line with IFRS 17.

Respondents highlighted three main impacts of regulation on their investment portfolios;

— Reduced appeal of traditional risk assets:
With higher capital charges for risky investments, insurers are looking for new ways to increase returns. Figure 10 highlights the relative unattractiveness of equities, and the appeal of domestic fixed income. Within fixed income, insurers see alternative credit as attractive given a combination of lower capital charges than equities and higher yields than core fixed income. Respondents also view alternative investments favourably, both liquid alternative strategies (such as multi-asset and risk parity strategies), but even more so for illiquid alternatives (including infrastructure and private equity), as they seek to capture an illiquidity premium to enhance returns.

— Increased appeal of quasi-matching assets:
While interviewees accept that regulatory changes are aimed at better aligning assets to liabilities, insurance respondents believe that this is likely to further increase the gap between target and expected returns in the case of guaranteed products. To address this, insurers are turning to quasi-matching assets such as real estate and infrastructure debt, where they can structure cashflows to approximate liabilities, while achieving a higher yield than on traditional matching assets such as core fixed income.

— International diversification where possible:
Insurers look to international fixed income to enhance yield, diversify risk and expand product breadth (for example Asian insurers looking to Europe and the US for longer dated bonds to enhance liability matching). However this is not always permitted, resulting in the mixed view of international developed market fixed income in figure 10 overleaf. Barriers include explicit caps on international allocations in some countries, and local solvency regulations which discourage international investments via higher capital charges.

Geopolitical & left-tail event risks

Recent years have seen a spike in geopolitical events with the potential to impact fixed income markets, including the successes of populist political parties and the related risk of a eurozone break-up, the increasing tensions between the US and North Korea, and the unpredictability of the Trump administration. Investors are watchful, uncertain about the impact of these events on portfolios and surprised about the limited market reaction. Brexit fall-out has been limited, and similarly markets have exhibited little reaction to US and North Korea tensions.

Respondents think that the insouciance of markets will not last, with around 70% believing that geopolitical events will impact overall portfolios in the next three years. Other left-tail event risks are also a growing concern, including:

— Credit bubble in China.

— US debt levels:
US national debt in the US now exceeds 100% of GDP, while household debt exceeds 60% of GDP.

— Reduced liquidity impact:
Dodd-Frank and Basel III are seen to have reduced liquidity in bond markets, which could exacerbate a sell-off.

— Yield curve inversion:
As central banks raise rates but longer dated yields remain suppressed, the yield curve could invert – which is often seen as a leading indicator of recession.

Although there was no dominant view of the next left-tail event scenario, there was considerable agreement that with the US approaching the end of an economic cycle, its economy could prove fragile given its dependence since the financial crisis on central bank support, and that it may take only a small trigger to create a cascading series of events.

Those investors who anticipate the unfolding of one or more left-tail events will find it hard to hedge such risks directly, but expect to respond by increasing allocations to core fixed income. For further measures they tend to rely on their external managers to hedge at an overall portfolio mandate level through geographical, sector and security selection.

Ageing populations, regulation, and geopolitical/ left-tail events all influence directly, but in a well understood manner, on fixed income investors' efforts to achieve returns in a low yield environment. However there is fourth factor which is starting to demand attention but in a much less understood manner: Environmental, Social and Governance (ESG).

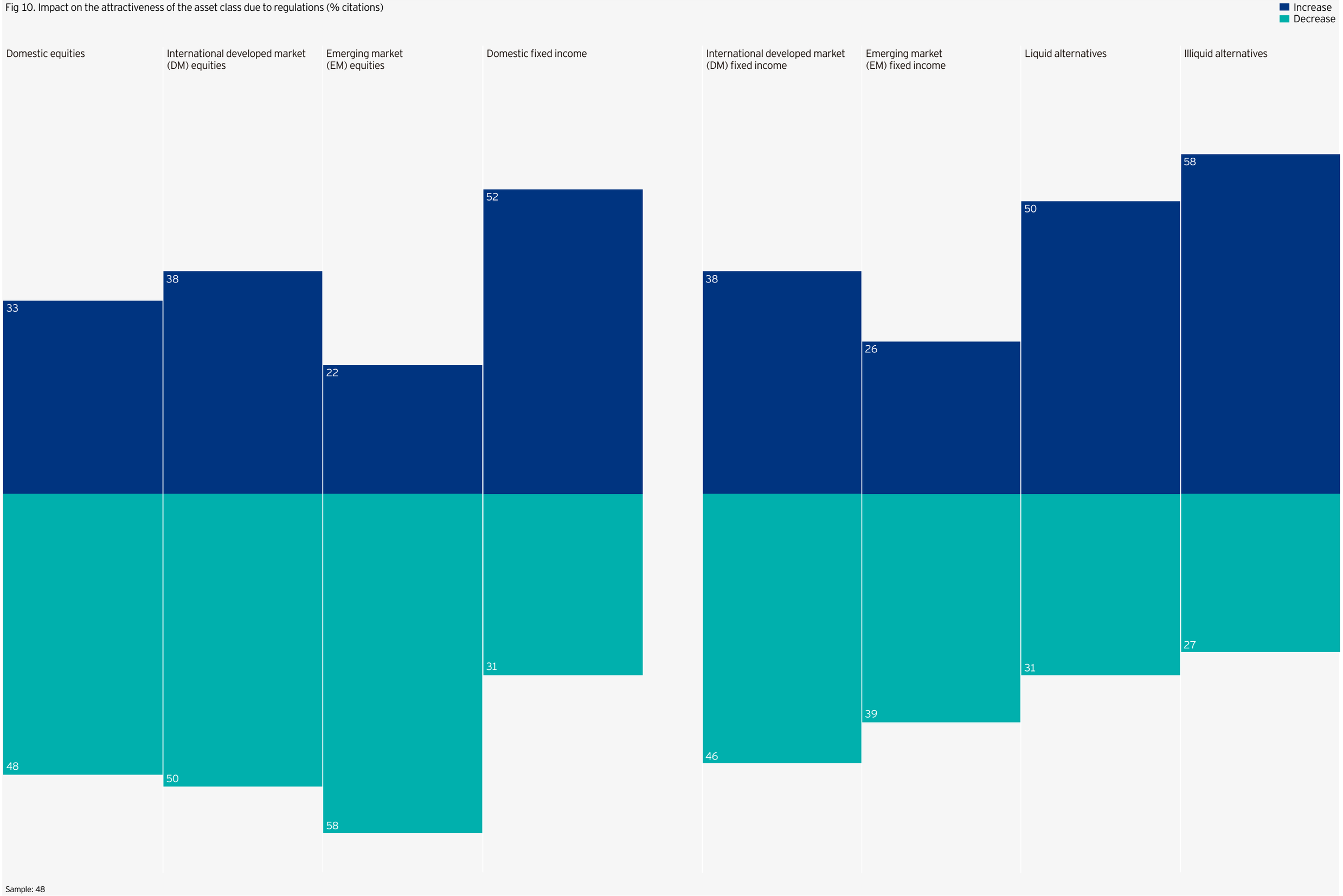
"C-Ross has directly impacted our asset allocation. We have reduced equity allocations and increased infrastructure debt to lower capital charges and better match liabilities"
Insurer, Asia-Pacific

Ageing populations, regulation, and geopolitical/ left-tail events all influence fixed income investors' efforts to achieve returns in a low yield environment

Fig 9. Relative impact of regulation impacting portfolio management

Sample: 33

Fig 10. Impact on the attractiveness of the asset class due to regulations (% citations)



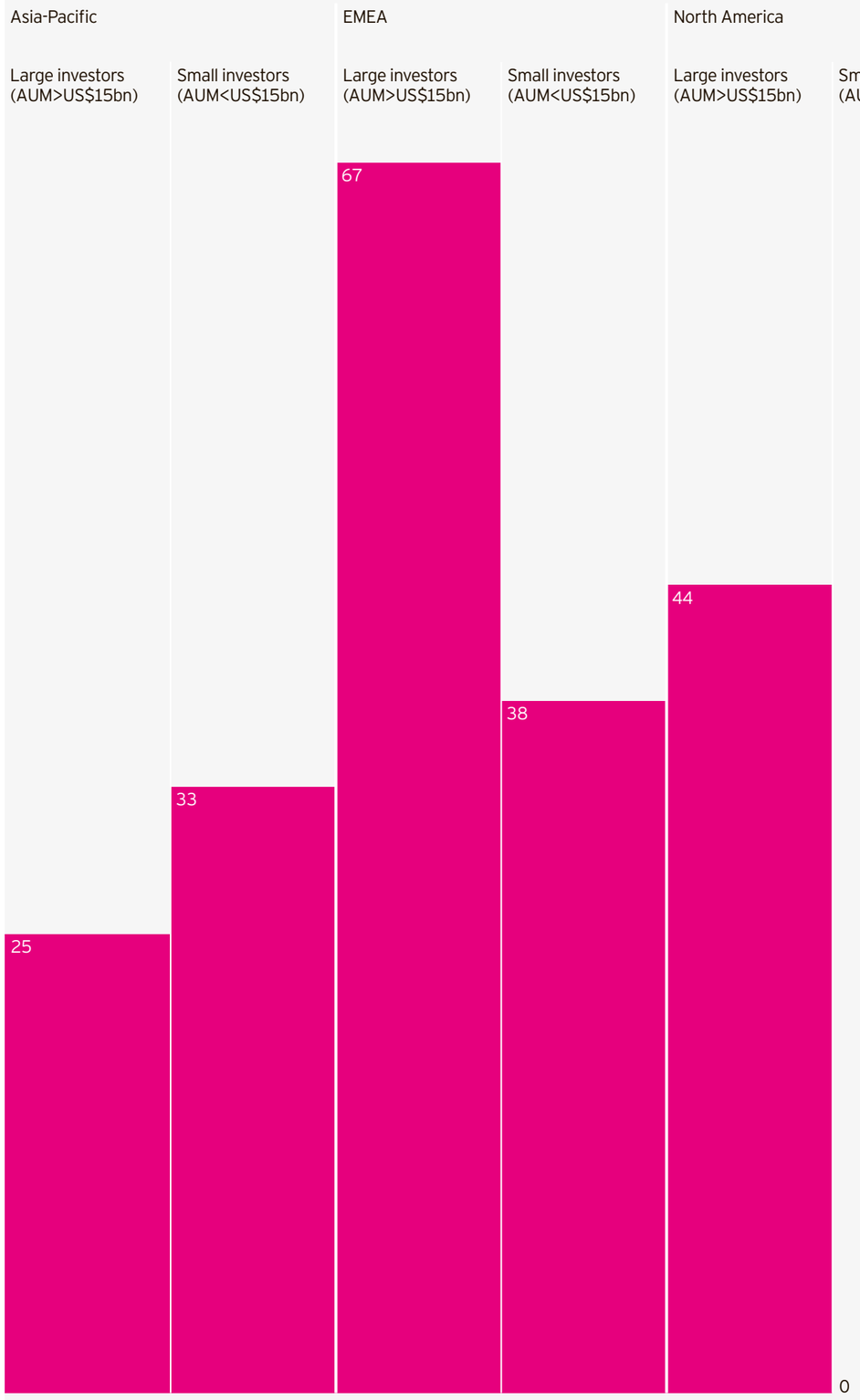
Sample: 48

Theme 3
Managing the migration of ESG to fixed income

Key takeaways:

— As ESG principles become embedded in equities processes, consideration of extending them to fixed income often follows.
— Application of ESG principles to fixed income is expected to rise rapidly, driven in part by pension fund stakeholders.
— Insurers are less focused on ESG within fixed income due to the primacy of regulatory challenges.
— ESG implementation in fixed income is at an early stage and is currently focused on corporate bonds, with some governments encouraging investment in green bonds and social infrastructure projects by making higher yields available relative to comparable sovereign bonds.

Fig 11. Investors currently considering ESG within fixed income portfolios, by size and region (% citations)



Sample: Asia-Pacific - Large investors (AUM>US$15bn) = 12, Small investors (AUM<US$15bn = 9, EMEA – Large investors (AUM>US$15bn) = 9. Small investors (AUM<US$15bn) = 24, North America – Large investors (AUM>US$15bn) = 16, Small investors (AUM<US$15bn) = 9

The application of ESG principles is an issue of growing importance to investors. When such principles are adopted, implementation has typically commenced with equity portfolios where data and research is most extensive.

However, implementation rarely stops with equities, and once equities have been bedded down, consideration is given to which asset class should be addressed next. Fixed income usually leads that list, and evidence indicates growing uptake in portfolios, with 35% of respondents now incorporating ESG strategies within their fixed income portfolios driven by large European investors (figure 11).

There are large divergences between segments and regions in the uptake of ESG strategies in fixed income. Respondents cited four key reasons driving the level of adoption:

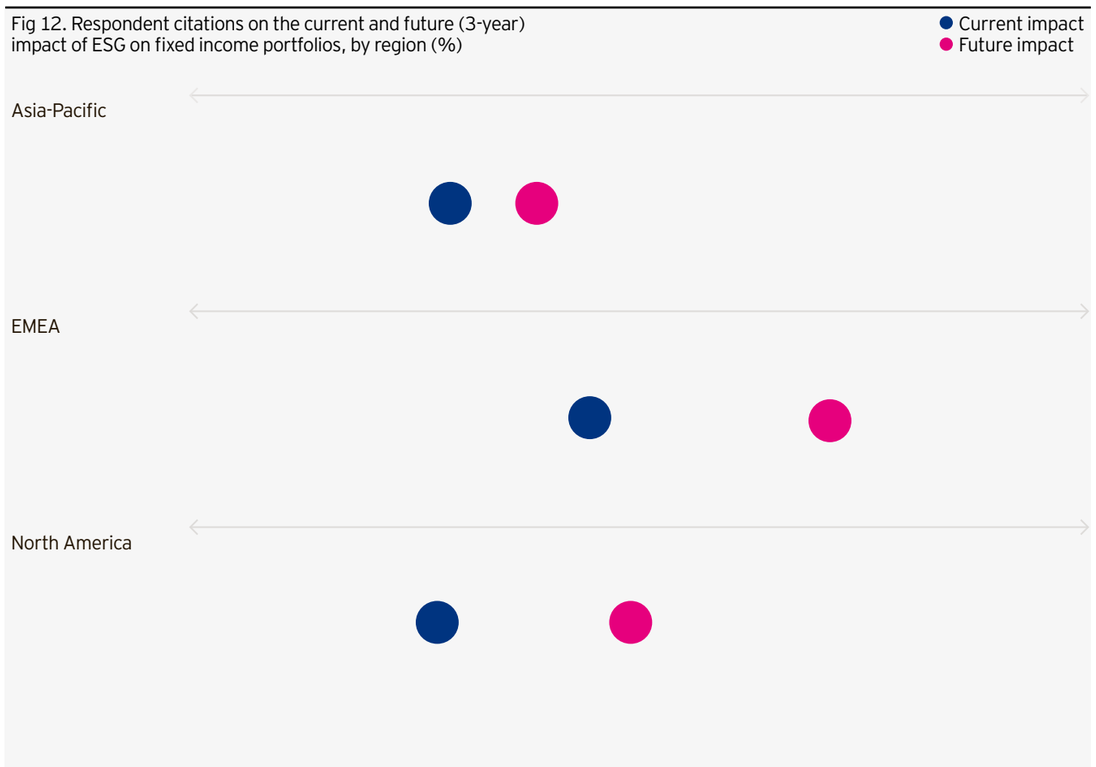
— Culture:
ESG implementation is partly correlated with the social and political climate of the country or region. Generational attitudes also impact the likelihood of incorporating ESG strategies. Regionally, European investors are at the forefront of ESG investing, moving towards amore holistic approach across the entire portfolio. Close to half of European respondents said that ESG currently impacts their fixed income portfolios, in contrast to around 30% for respondents in North America and Asia-Pacific (figure 12).
Within regions there are further large national differences. In Asia-Pacific, ESG in fixed income is heavily biased towards Australian fixed income investors, while uptake in the rest of the region is muted. In North America, the Canadian and West Coast US respondents are ahead of other North American investors.

— Network effect:
Respondents acknowledged a 'network effect' (and peer pressure), noting that the spread of ESG investing puts pressure on others in proximity to follow. As adoption increases, so does the volume and quality of data, allowing for more rigorous analysis and attribution. More European and North American respondents expect ESG to impact their fixed income portfolios in the future compared to Asia-Pacific (figure 12).

— Stakeholder pressure:
Stakeholders representing groups with a connection to the investor play an important role in ESG adoption. Pension funds tend to have the most active stakeholders, both in terms of governance representatives on trustee boards and committees, and external sponsoring organisations.
Stakeholder and investment team perspectives can be very different. Where stakeholders advocate for the general adoption of ESG principles, investors tend to analyse ESG principles to determine which offer most value, typically resulting in a targeted implementation.
Differences of views often revolve around whether implementation will improve or damage investment performance, and therefore the impact on return gaps and funding deficits.

"We have incorporated ESG within our equity portfolio for quite some time, so now we are turning our attention to fixed income"
DB pen, EMEA

Fig 12. Respondent citations on the current and future (3-year) impact of ESG on fixed income portfolios, by region (%)



Sample: Asia-Pacific = 21, EMEA = 33, North America = 25

— System transition to DC:
DC pension funds have the highest current and expected future uptake of ESG strategies within fixed income portfolios (figure 13).
Investors describe the current state as a win-win situation for all stakeholders. Initial implementation in DC funds is often achieved by including ESG options as optional member choices, which allows members to adopt or include ESG strategies in their account, with no implications for employers, other members, or investment teams which are typically most concerned about the performance of the default portfolio.
That said, this is unlikely to represent the final state. Most DC funds are still in a relatively early stage of evolution. As they mature, members and assets will become increasingly weighted towards millennial members, whom respondents believe will increase pressure for ESG strategies, while stakeholder groups (which may include trade unions and other interest groups) are likely to become more active over time in terms of commitment to ESG. Both trends point to the potential for demands for ESG implementation to spill over from member choice options to the default portfolio, although respondents see this as a medium-to-longer-term event.
In contrast insurers see very limited uptake of ESG in the near future. The number of challenges facing insures has pushed ESG down the priority list, especially within fixed income, with respondents noting that ESG is of less strategic importance to them.

Importance of time horizon
ESG implementation tends to increase short-term tracking error relative to mainstream asset class benchmarks, sometimes significantly. This is as true of fixed income as it is for equities, although supplementary measures such as the use of factor strategies can dampen this effect. The tendency of ESG to increase tracking error, if not adjusted, has implications for performance assessment and reporting, especially where those considering outcomes have short-term perspectives.

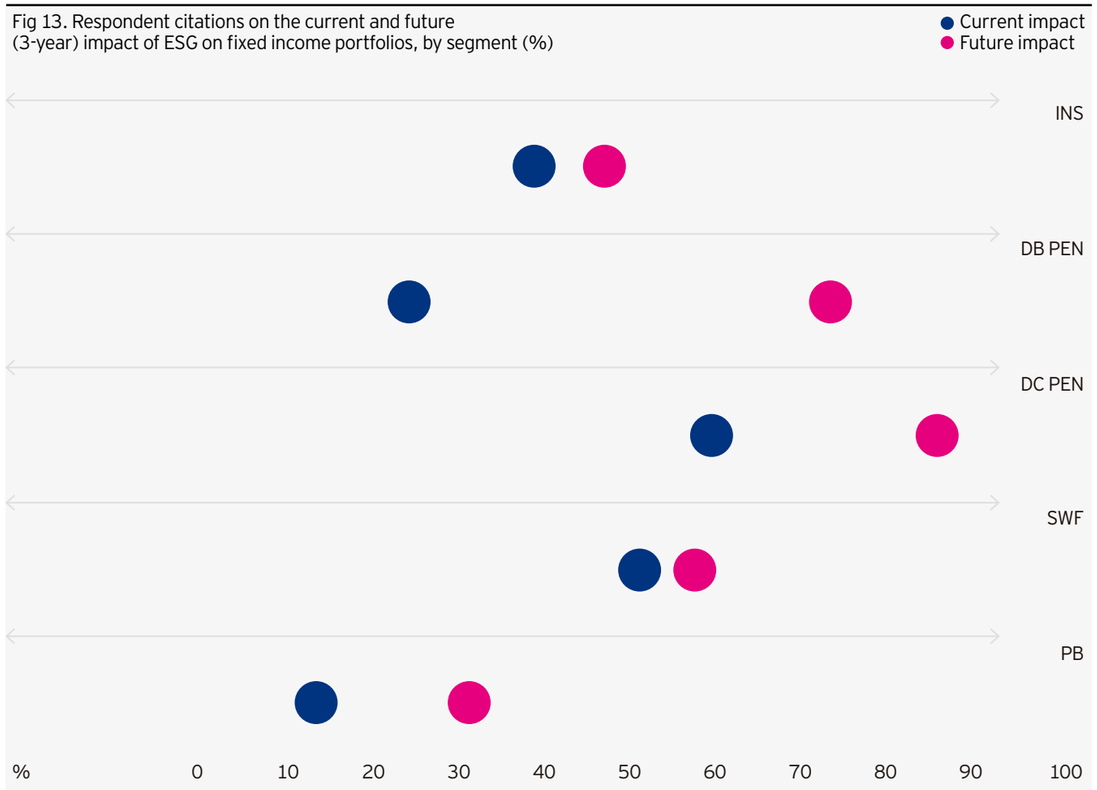
This results in a distinct preference by fixed income investors for ESG implementation where the time horizon is over 10 years, allowing tracking error to dampen and sufficient time for an ESG premium to be demonstrated (figure 14).

This has proved difficult in practice. Long-term commitments to ESG principles can be tested by significant short-term underperformance, whether caused by investments included or excluded. Even DB pension funds with naturally long investment time horizons have struggled to balance this with short-term (often quarterly) reporting requirements.

"We have ESG funds on the platform but it's too expensive for now to include with the default fund. If members want to include it in their portfolios, they have the option"
DC Pen, EMEA

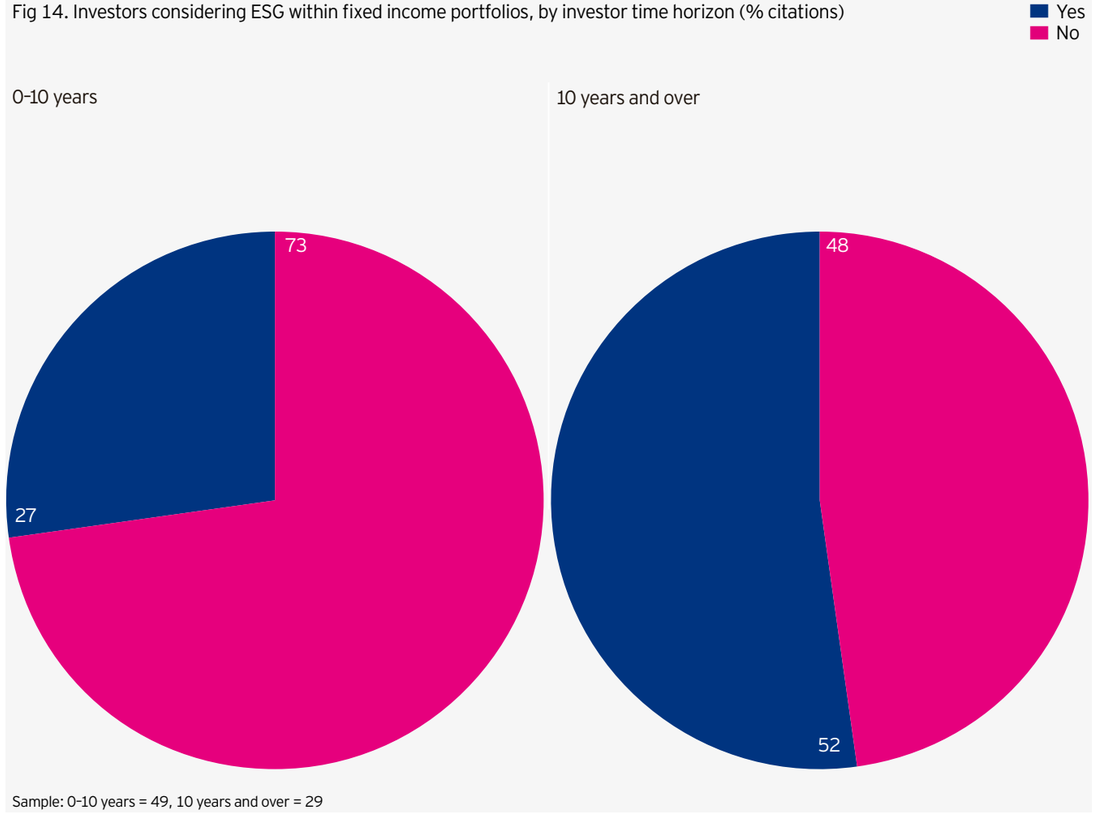
The tendency of ESG to increase short-term tracking error has implications for performance assessment and reporting

Fig 13. Respondent citations on the current and future (3-year) impact of ESG on fixed income portfolios, by segment (%)



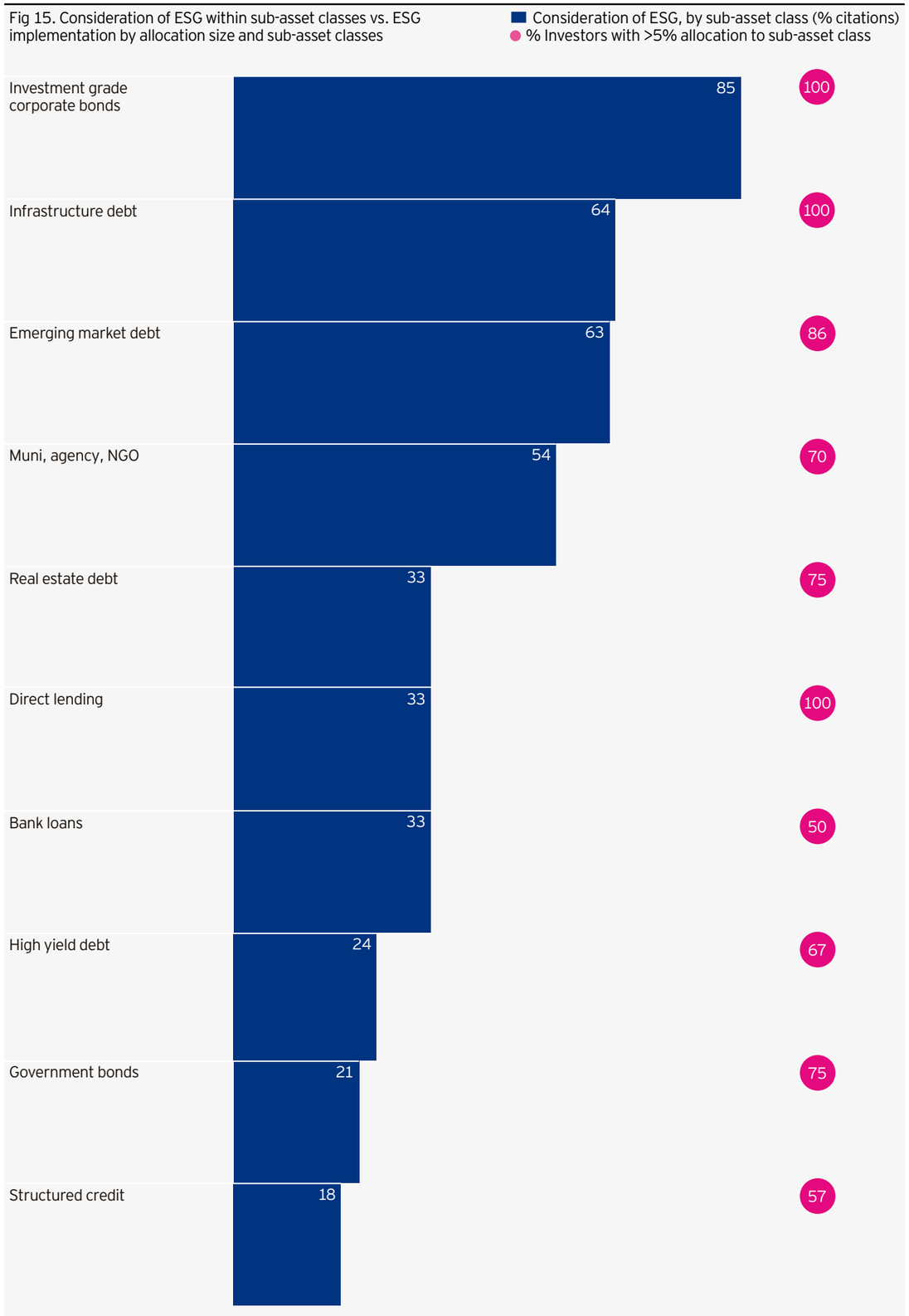
Sample: Insurers = 26, DB pension funds = 17, DC pension funds = 12, Sovereign wealth funds = 10, Private banks = 14

Fig 14. Investors considering ESG within fixed income portfolios, by investor time horizon (% citations)



Sample: 0-10 years = 49, 10 years and over = 29

Fig 15. Consideration of ESG within sub-asset classes vs. ESG implementation by allocation size and sub-asset classes



Sample: 27
Note: Figures in pink represent the proportion of investors that consider ESG within each sub-asset class that have a total allocation of more than 5% of fixed income portfolios to that sub-asset class

Implementation of ESG in fixed income portfolios

Many investors currently implement ESG primarily within corporate bond portfolios (figure 15), via a relatively basic negative screen, or simply by requiring asset managers to adhere to the United Nations Principles for Responsible Investment (UN PRI) framework.

Practical considerations of implementation include the size of allocations to fixed income sub-asset classes (figure 15) and the size of the investible universe. Where allocations are under 5% of the fixed income portfolio, respondents generally consider it is not worth the additional level of research and monitoring, and in small alternative credit categories, the investable universe is relatively limited.

The flipside is where new securities are made available to encourage ESG investment approaches. A notable example for our respondents is infrastructure debt, where certain countries (including China) have policies to encourage debt investment in environmental or social infrastructure projects, enhancing their attractiveness to investors. Strict regulation on the types of asset classes that can be invested in (not just insurers but pension funds too) also forces some investors into social infrastructure projects. With these projects often backed by governments or regional authorities, some investors have begun to utilise green bonds as an alternative to low yielding government securities.

It remains early days in the implementation of ESG in fixed income, with many issues to be overcome. However while the breadth and speed of adoption is open to question, the direction is not – penetration of ESG in fixed income is expected to continue its advance.

"We believe ESG strategies are the way forward for a more sustainable world. We might not reap the rewards of this in the short- term but in the long run we will benefit"
SWF, EMEA

Certain countries have policies to encourage debt investment in environmental or social infrastructure projects, enhancing their attractiveness to investors

Theme 4
Core fixed income vs alternative credit strategy

Key takeaways:

— Investors have been active within their fixed income portfolios in recent years, reducing allocations to core fixed income and increasing alternative credit portfolios.

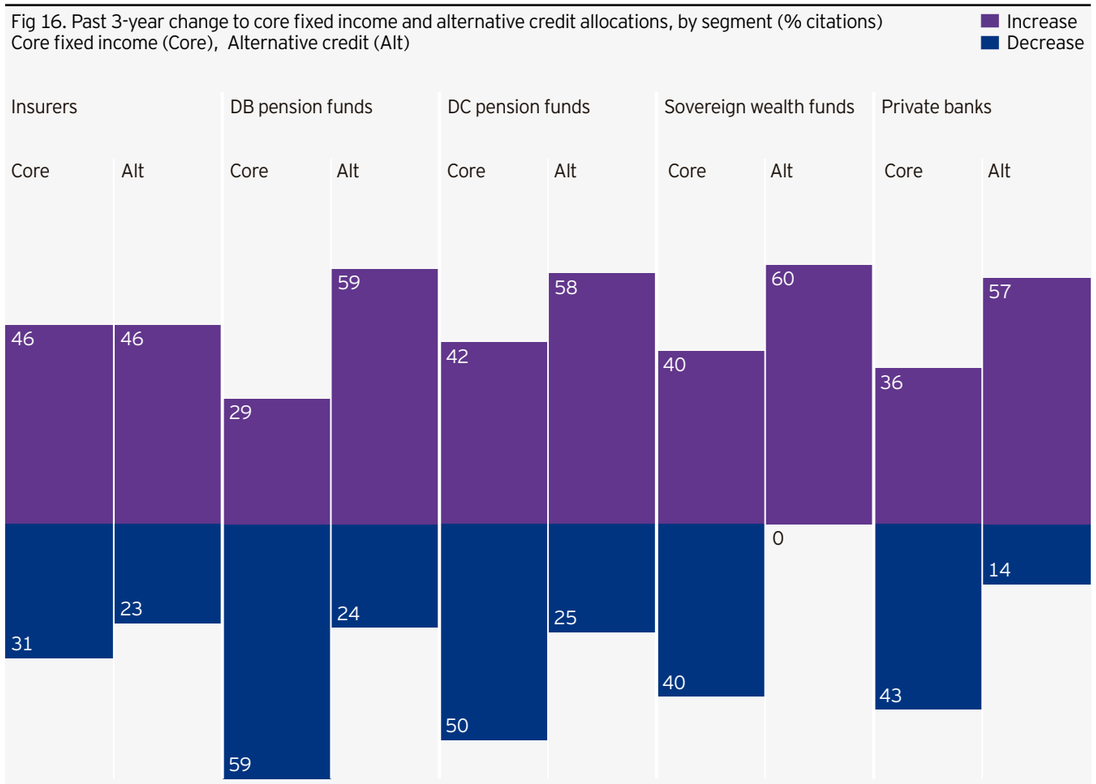
— Insurers and sovereign investors are the two segments which buck this trend and have increased or maintained allocations to core fixed income.

— Over the next three years, those respondents who have drawn down on core fixed income expect to begin restoring those allocations as interest rates rise, but will be funding this predominantly from equities.

— Intentions to increase core fixed income are also informed by views on left-tail risks, and whether investors believe the long end of the yield curve will rise.

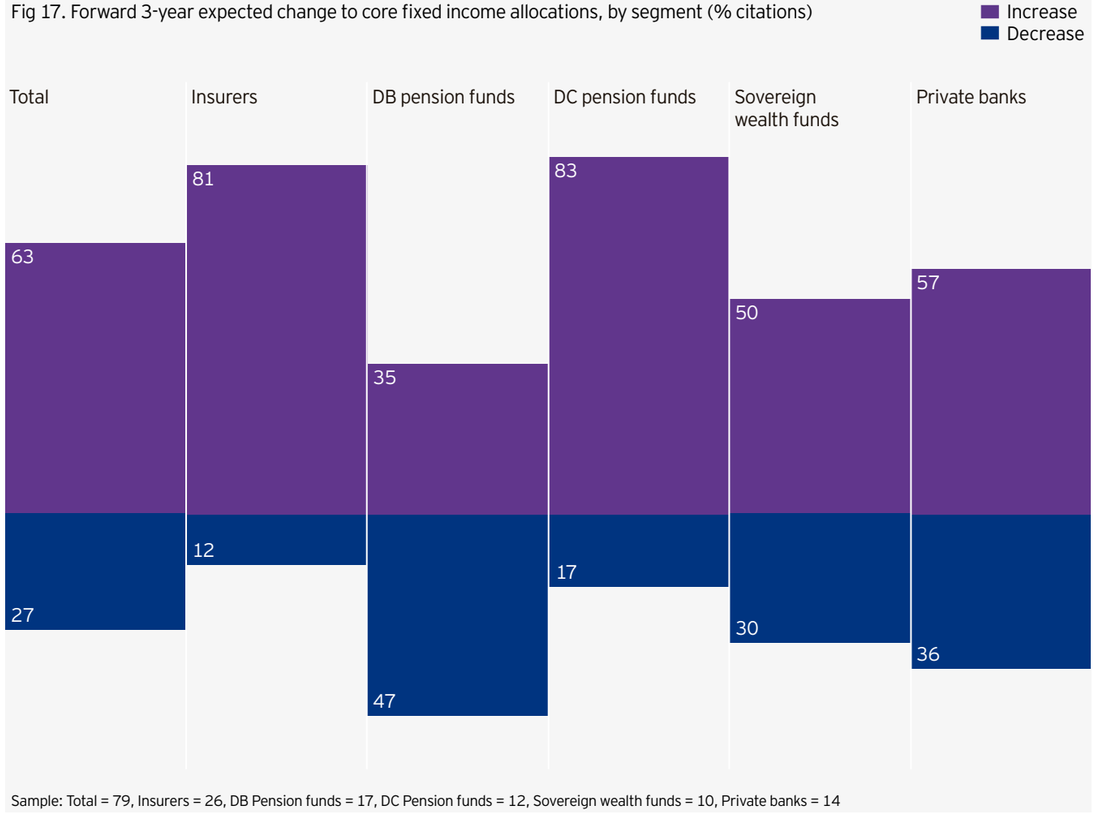
— Allocations to alternative credit appear largely unaffected by these views, with all investors continuing to increase their alternative credit portfolios, albeit at slower rates.

Fig 16. Past 3-year change to core fixed income and alternative credit allocations, by segment (% citations)
Core fixed income (Core), Alternative credit (Alt)



Sample: Insurers = 26, DB Pension funds = 17, DC Pension funds = 12, Sovereign wealth funds = 10, Private banks = 14

Fig 17. Forward 3-year expected change to core fixed income allocations, by segment (% citations)



Sample: Total = 79, Insurers = 26, DB Pension funds = 17, DC Pension funds = 12, Sovereign wealth funds = 10, Private banks = 14

The long period of calm and resulting low or negative yields on many government securities has seen investors rotate into riskier assets in their search for yield. Respondents note that this has occurred both at the portfolio level, with higher allocations to equities and alternatives, and within fixed income (figure 16), where generating income remains a key objective.

The (partial) exception to this rotation is insurers, for regulatory reasons, and sovereign wealth funds, who are split on their decision to increase or decrease allocations to core fixed income.

Insurance regulation is placing greater emphasis on asset-liability matching and incentivising insurers to hold more liquid, less volatile assets via lower capital charges. Insurers have increased allocations to both core fixed income and alternative credit at the expense of other growth asset classes with higher capital changes. The latter includes illiquid alternative credit, as this sub-asset class still incurs relatively favourable capital charges.

Sovereigns which have increased allocations over the last three years, have done so largely to reduce portfolio level risk (figure 4 in theme 1 highlights that sovereign wealth funds use fixed income portfolios to reduce risk to a greater extent than other investors).

With most investors anticipating that yields will rise, many expect to respond by increasing allocations to core fixed income (figure 17). This is reinforced by recent developments such as pensions deregulation (e.g. UK pensions freedom), which are leading to increased demand for core fixed income amongst pension funds.

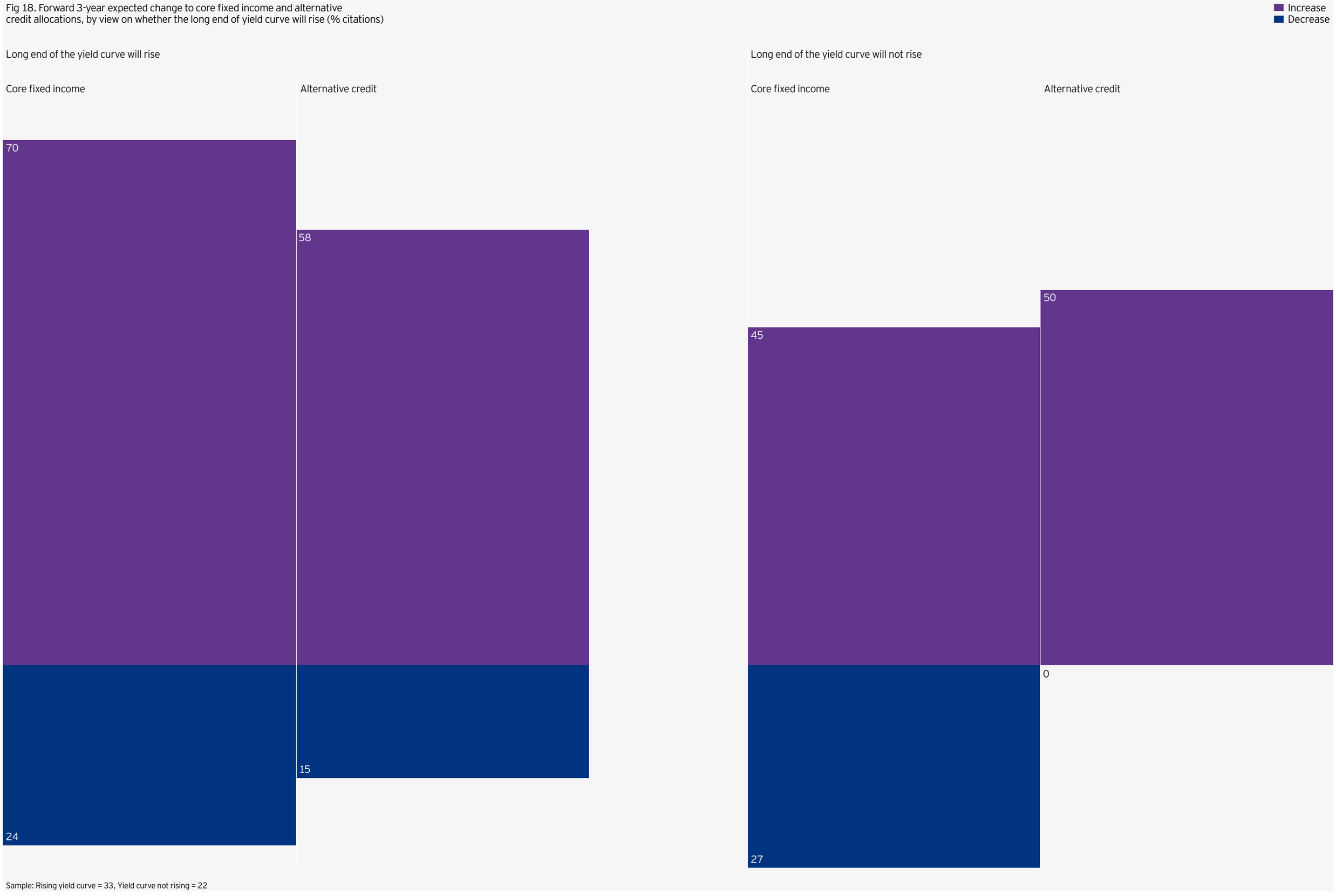
DB pensions are the exception, with a tilt towards decreasing allocations to core fixed income portfolios over the next three years. This decision is largely driven by risk appetite and the need to increase portfolio level returns in order to bridge funding level deficits, as discussed in theme 2.

Figure 18 is an aggregate view, underlying different schools of thought around two key factors informing investor views on fixed income allocations;

— Extent to which the long end of the yield curve will rise.
— Potential impact of left-tail and geopolitical risk.

Low yields on government securities have led to investors rotating into riskier assets, but with most investors anticipating that yields will rise, many expect to respond by increasing allocations to core fixed income

Fig 18. Forward 3-year expected change to core fixed income and alternative credit allocations, by view on whether the long end of yield curve will rise (% citations)



Sample: Rising yield curve = 33, Yield curve not rising = 22

Factor 1
View on long end of the yield curve
Differing views on these factors lead to different positioning of fixed income portfolios, with the majority beginning to rebuild core fixed income allocations, and a smaller but still material segment maintaining the recent direction of reducing core fixed income in favour of alternative credit portfolios.

— Investors with more bullish economic outlooks, who believe that the long end of the yield curve will rise as a result, are more likely to be looking to increase allocations to core fixed income (figure 18).
— Regardless of the view on the long end of the yield curve, investors for the most part intend to maintain or continue increasing allocations to alternative credit. Where investors are also increasing core fixed income allocations, respondents noted that this is likely to be funded from equities allocations, given the strong performance of equities over the last few years, which in some cases has led to an overweight relative to the strategic asset allocation.

With the short end of the yield curve generally expected to rise faster than the long end, and the path of rate rises expected to be slow and steady, respondents planning to increase allocations to core fixed income described a preference to use ladder portfolios (investing in a series bonds of different maturities) and barbell strategies (investing in long and short dated bonds) to help mitigate interest rate and liquidity risk.

Factor 2
View on left-tail events
Core fixed income also finds support from investors who anticipate a left-tail event rather than a slow and steady progression of rate rises. At a portfolio level, such respondents are significantly more bearish on equities and more supportive of fixed income assets than the unconcerned (figure 19).

Within fixed income, investors are positioning sub-asset classes based on their view of left-tail event risk:

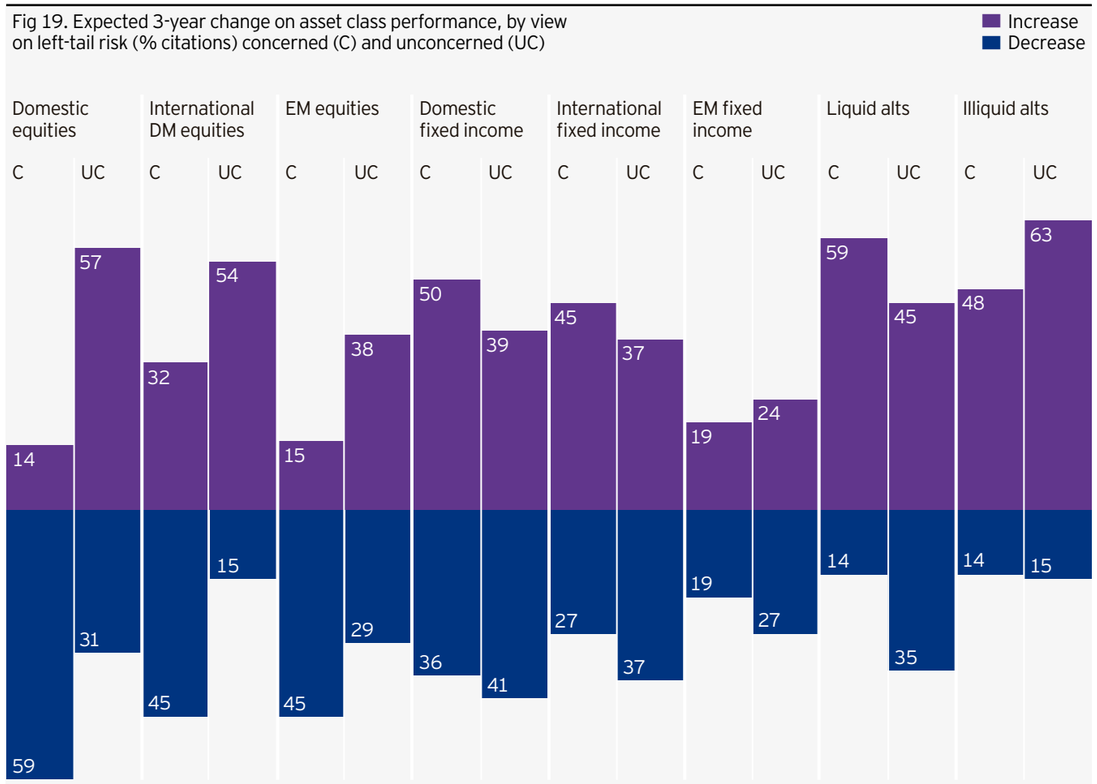
— Those concerned about left-tail events intend to increase allocations to core fixed income.
— Respondents unconcerned by left-tail events expect to keep increasing allocations to alternative credit, as they remain comfortable seeking yield in riskier assets.

This is evident in figure 20. However, it's notable that whichever view prevails, the strategy decision in favour of core fixed income or alternative credit is not expected to come at the expense of the other in net terms. Roughly equal proportions of investors expect to increase or decrease the competing sub-asset class, indicating that the funding source is elsewhere in the portfolio.

"We believe yields will start to move now central banks are raising rates and reducing stimulus, potentially creating an opportunity to move back into core fixed income assets"
DC pen, EMEA

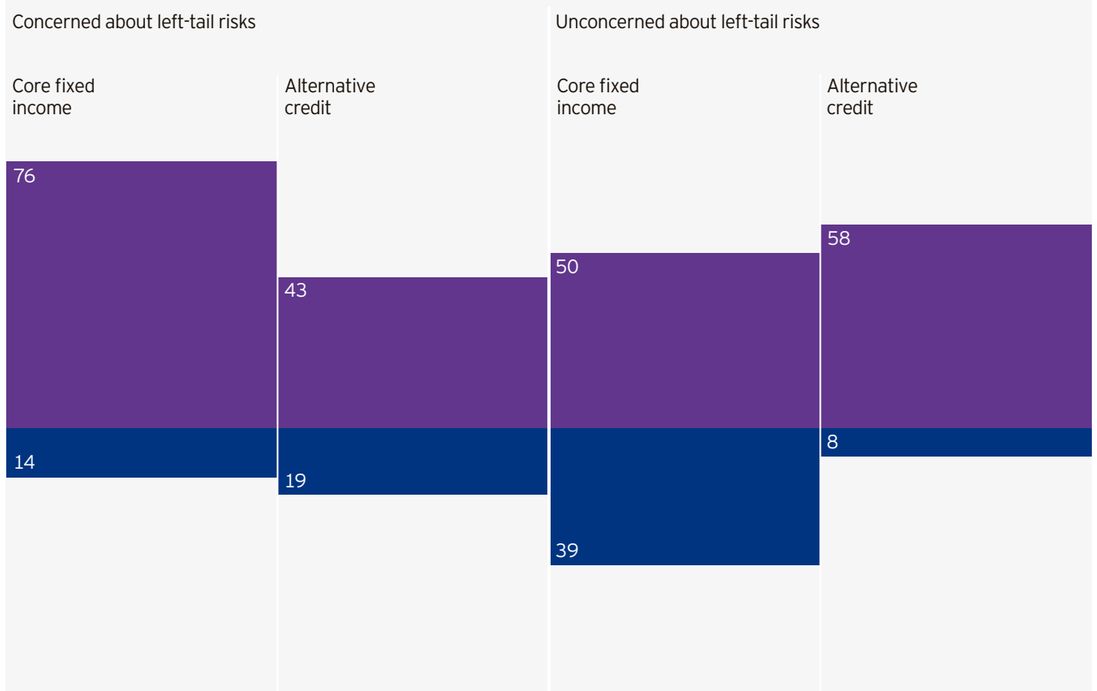
Investors who believe that the long end of the yield curve will rise are more likely to be looking to increase allocations to core fixed income

Fig 19. Expected 3-year change on asset class performance, by view on left-tail risk (% citations) concerned (C) and unconcerned (UC)



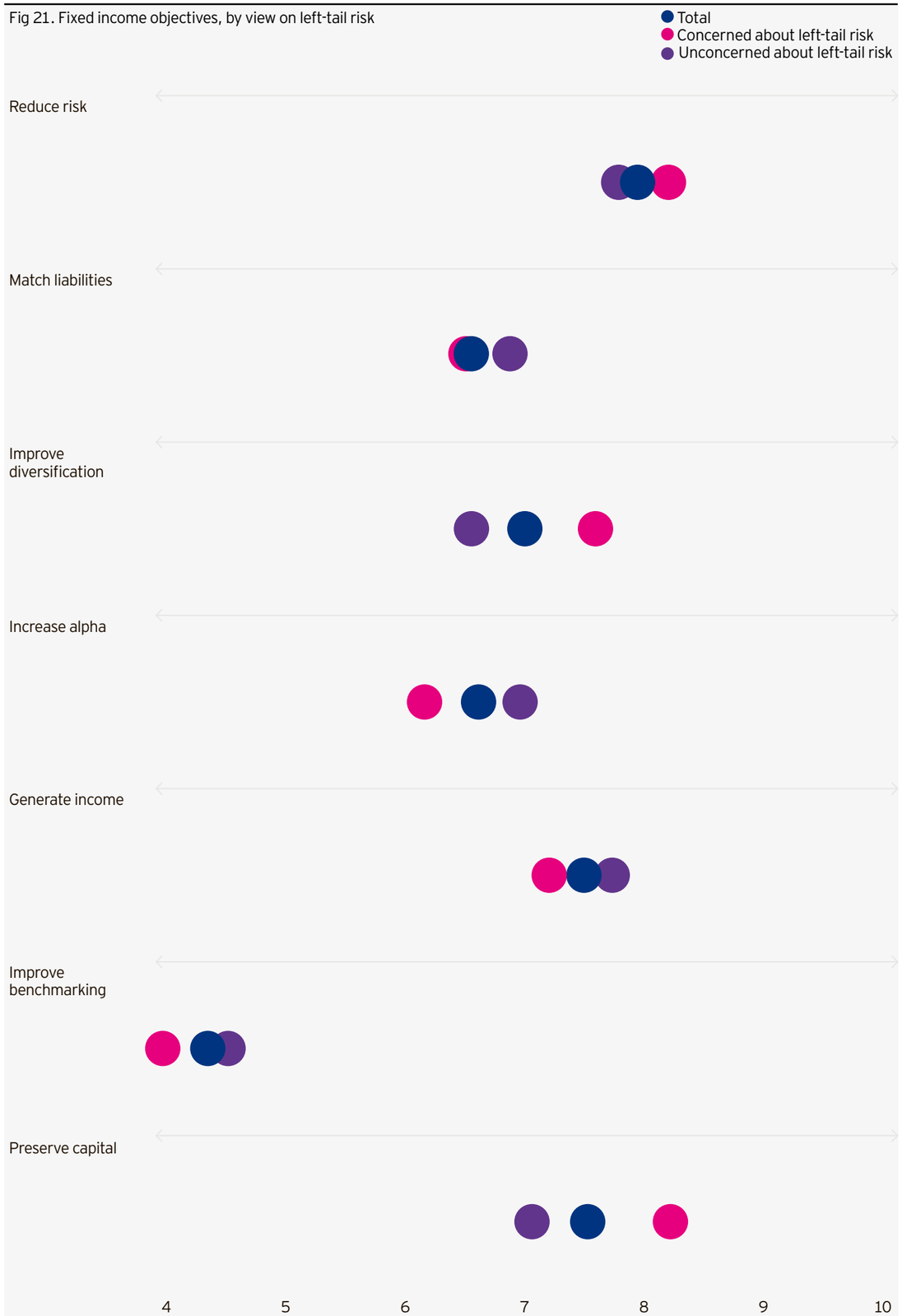
Sample: Concerned about left-tail risks = 22, Unconcerned about left-tail risks = 42

Fig 20. Expected 3-year change to core fixed income and alternative credit allocations, by view on left-tail risk (% citations)



Sample: Concerned about Left-tail risks = 42, Unconcerned about Left-tail risks = 36

Fig 21. Fixed income objectives, by view on left-tail risk



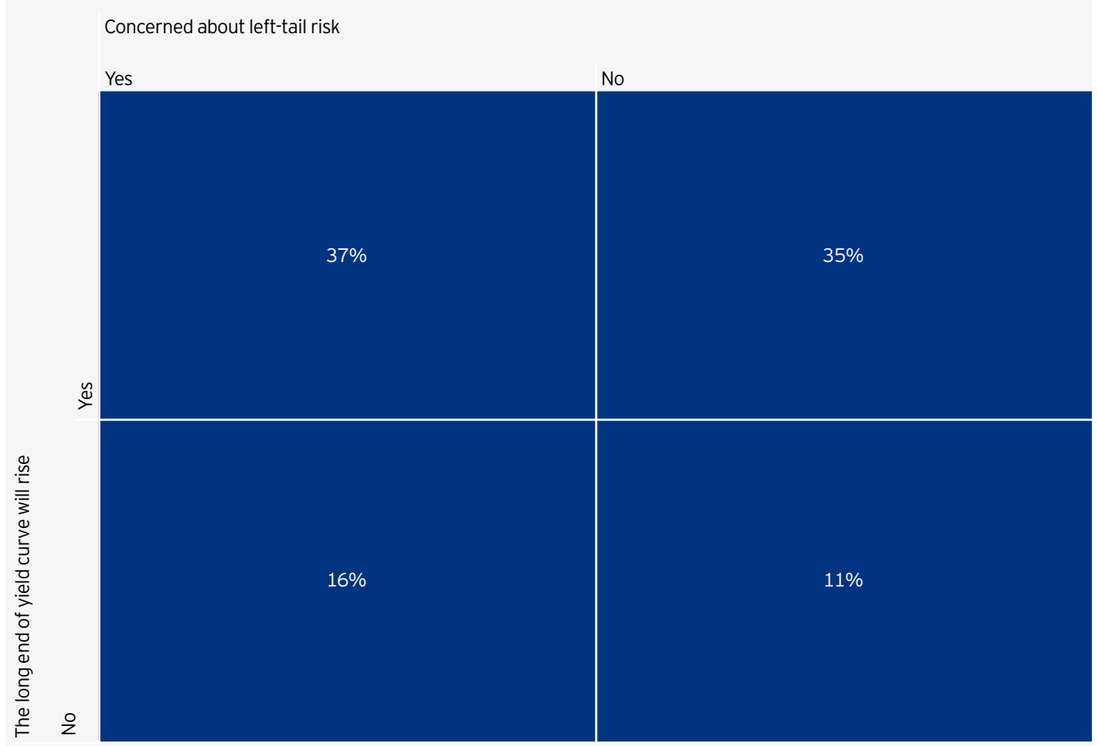
Sample: Concerned about left-tail risk = 28, Unconcerned about left-tail risk = 48
Rating on a scale of 1–10 where 10 is complete agreement with objective

This points to a fundamental difference in the psychology of fixed income investors. Risk-averse respondents continue to view fixed income portfolios from their traditional risk reduction perspective, while the more bullish are less focused on using fixed income to reduce risk, and see it as another means to generate additional returns (figure 21).

For the most part, the economic bears (those who don't believe the long end of the yield curve will rise) and the catastrophists (those anticipating left-tail events), are distinct segments. There is a common group, but it is not large (figure 22), at only 16% of respondents. As figure 22 indicates, around three quarters of investors are positive on the long end of the yield curve rising, but split almost evenly between those concerned about left-field events and those who are relatively insouciant. This supports the dominant view of a comparatively weak economic upswing – the 'new normalisation' – but accompanied by considerable wariness of nasty surprises.

"We are increasing the risk profile of our fixed income portfolio in search of yield and alpha"
DB pen, North America

Figure 22: Overlap of respondents concerned about left-tail risk and long end of the yield curve rising



Sample: 79

Theme 5
Broad appeal of alternative credit

Key takeaways:

— Alternative credit has become an important part of the fixed income universe, particularly since the financial crisis.
— It is seen as offering significant alpha potential as well as diversification and income generation benefits.
— North American investors tend to have higher exposure, benefiting from closer proximity to opportunities and higher risk appetite.
— Appetite for alternative credit remains healthy, but constrained by a reduced set of attractive opportunities.
— Alternative credit is dominated by larger investors which are more likely to have the resources and scale necessary to incorporate it into their portfolios.

The range of sub-asset classes within fixed income has grown significantly over recent decades and now spans a broad range of diverse instruments. While traditional core fixed income assets (government debt and investment grade corporate debt) continue to play a foundational role in many fixed income portfolios (theme 1), alternative credit is increasingly part of the institutional fixed income investors' landscape.

Alternative credit provides fixed income investors with the opportunity to diversify portfolios away from traditional return drivers (rates, term, credit) towards alternative drivers such as illiquidity and manager skill, as well as pursue absolute-return strategies unconstrained by traditional benchmarks. Inefficiencies in alternative credit markets create opportunities for skilled managers to achieve alpha, and highlights the important role that external managers have within alternative credit portfolios.

Investors see a range of benefits (figure 23), with the leading rationale for investing in alternative credit being to increase alpha, slightly ahead of diversifying portfolios by accessing the additional risk premia not available in core fixed income, and generating higher income returns.

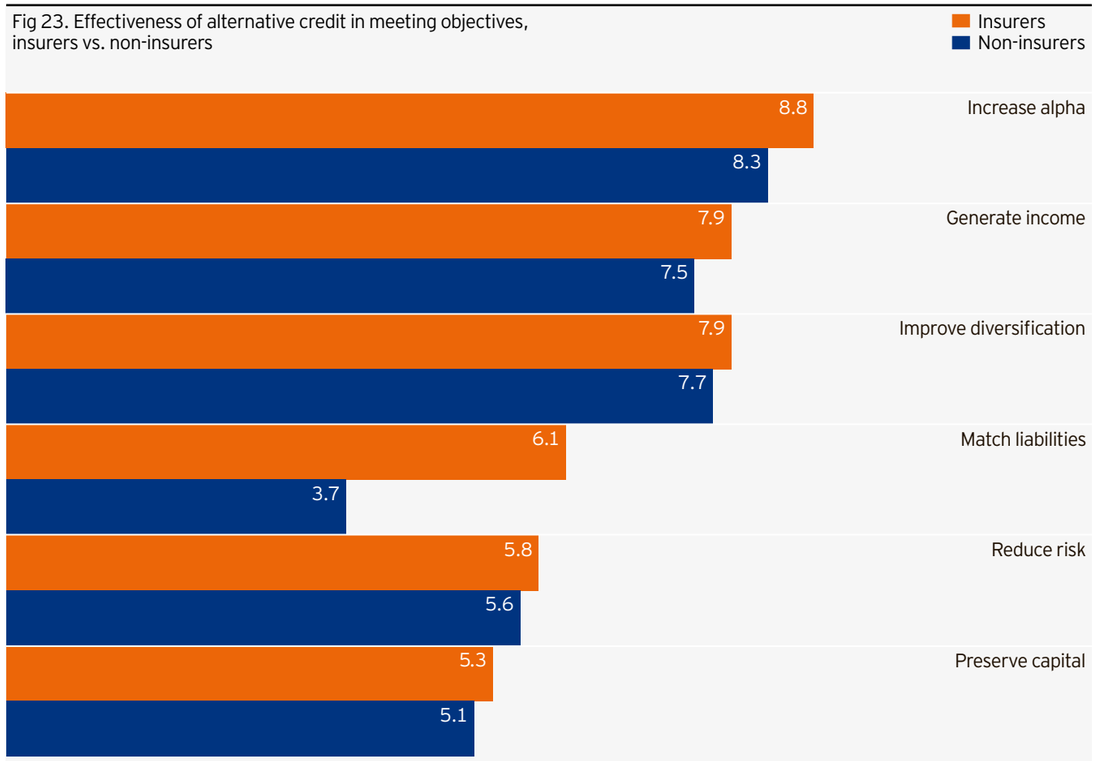
On average, investors allocate just under 20% of their fixed income portfolios to alternative credit strategies (figure 24), but this is skewed by North American investors who view alternative credit as more effective in meeting objectives (figure 25), and therefore allocate a significantly higher proportion (at 26%), than European and Asia-Pacific investors (figure 24).

This is due to:

- Many alternative credit markets and opportunities are located in North America; local investors benefit from the proximity to opportunities and the asset managers which specialise in them.
- North American investors, especially insurers and pension funds, face lower regulatory burdens compared to their European and Asia-Pacific counterparts, enjoying more flexibility to incorporate higher risk, less liquid instruments into fixed income portfolios.
- More emphasis on achieving higher returns (as discussed in theme 2) as a means to close DB pension fund deficits. With less use of the European preferred approach of complex de-risking and matching strategies comes more scope for US investors to make higher allocations to alternative credit.
- Stronger belief that certain alternative credit exposures aids portfolio risk reduction, and particularly diversification. Having already increased interest rate risk (by extending the duration of core fixed income) and credit risk (by investing in lower quality debt) to the extent that is comfortable, North American investors see alternative credit as diversifying their risk premia via assets that have lower sensitivity to rate and credit spread changes.

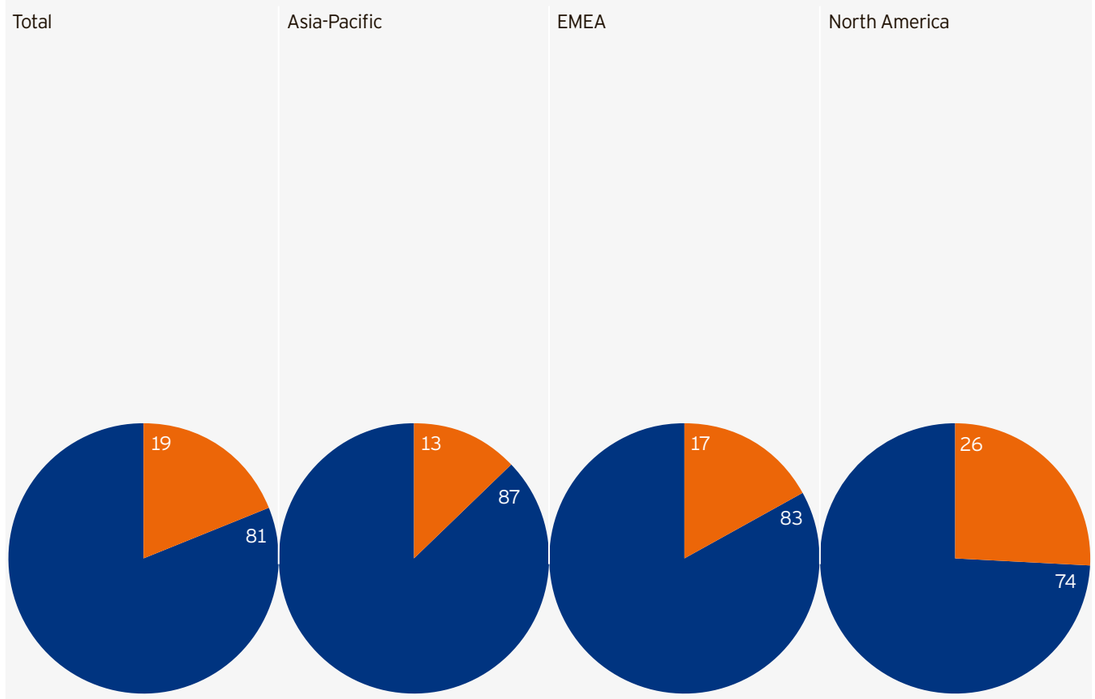
Alternative credit provides investors with the opportunity to diversify portfolios away from traditional return drivers and towards alternative drivers such as illiquidity and manager skill

Fig 23. Effectiveness of alternative credit in meeting objectives, insurers vs. non-insurers



Sample: Insurers = 23, Non-insurers = 46
Rating on a scale of 1–10 where 10 is complete effectiveness

Fig 24. Proportion of fixed income portfolios allocated to core fixed income and alternative credit, by region



Sample: Total = 77, Asia-Pacific = 21, EMEA = 33, North America = 23

Allocations to alternative credit were increasing even prior to the global financial crisis, with investor demand for greater returns from fixed income leading to new and innovative products being made available.

The financial crisis generated a large increase in the opportunity set for investors, while capital and solvency measures aimed at financial institutions have seen banks reduce or withdraw from certain lending activities (such as collateralised loan obligations) to de-risk their balance sheets in line with regulator wishes.

Asset managers have stepped in to fill the void, and in doing so, have provided investors with the ability to access new sub-asset classes. As a result, a broad range of new alternative credit strategies has seen support from investors. These have come from very low or nil bases, and remain individually small, but are collectively now significant (figure 26).

Many investors are unable to access these opportunities directly and rely on asset managers to source and structure the investment opportunity. Asset managers can also typically offer a better risk profile by maintaining a diversified portfolio of alternative credit assets.

Investors remain supportive of alternative credit, but on a more selective basis

Investors overall continue to view alternative credit favourably on a forward 3-year basis (figure 27), but on a more selective basis.

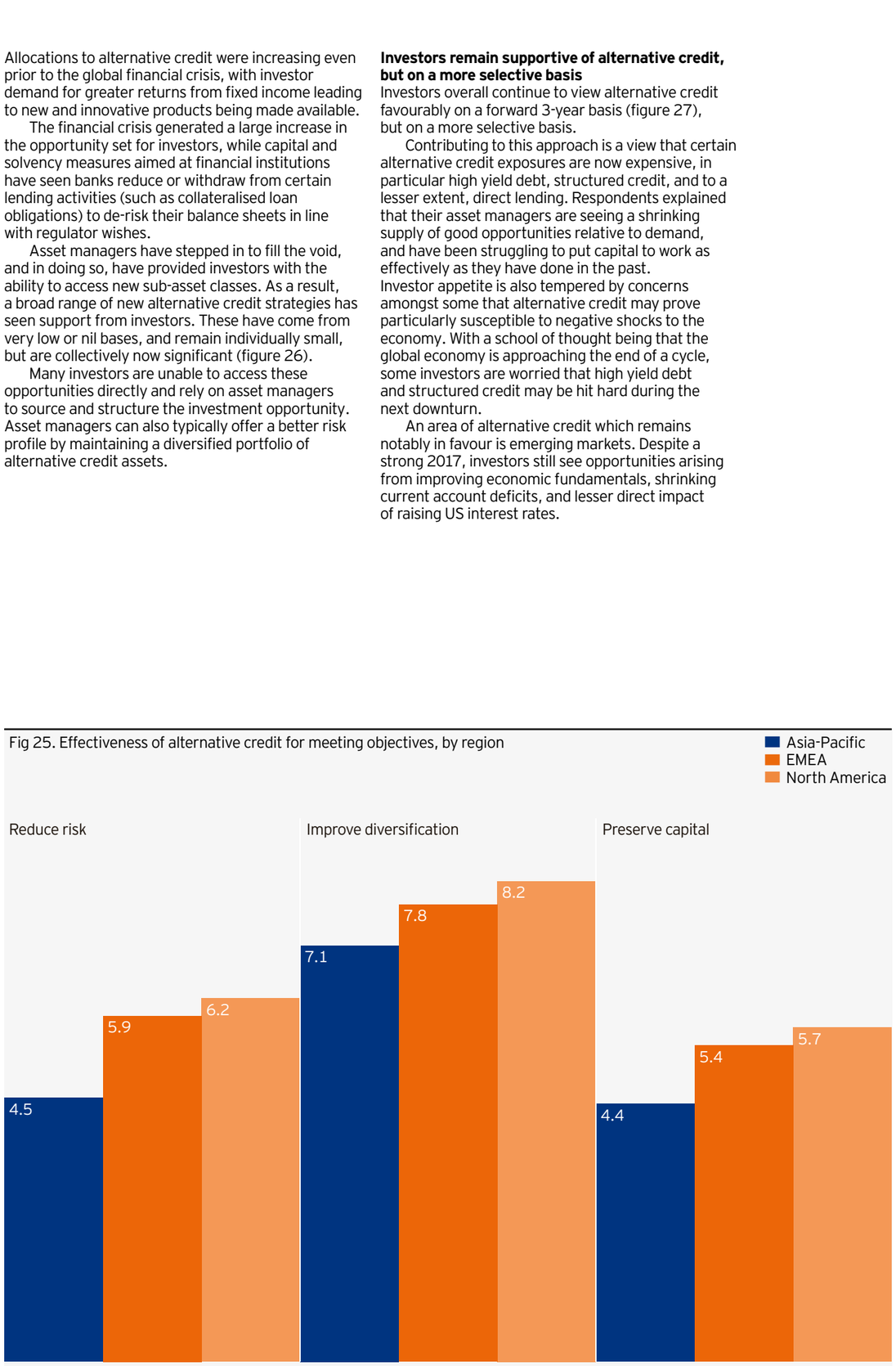
Contributing to this approach is a view that certain alternative credit exposures are now expensive, in particular high yield debt, structured credit, and to a lesser extent, direct lending. Respondents explained that their asset managers are seeing a shrinking supply of good opportunities relative to demand, and have been struggling to put capital to work as effectively as they have done in the past.

Investor appetite is also tempered by concerns amongst some that alternative credit may prove particularly susceptible to negative shocks to the economy. With a school of thought being that the global economy is approaching the end of a cycle, some investors are worried that high yield debt and structured credit may be hit hard during the next downturn.

An area of alternative credit which remains notably in favour is emerging markets. Despite a strong 2017, investors still see opportunities arising from improving economic fundamentals, shrinking current account deficits, and lesser direct impact of raising US interest rates.

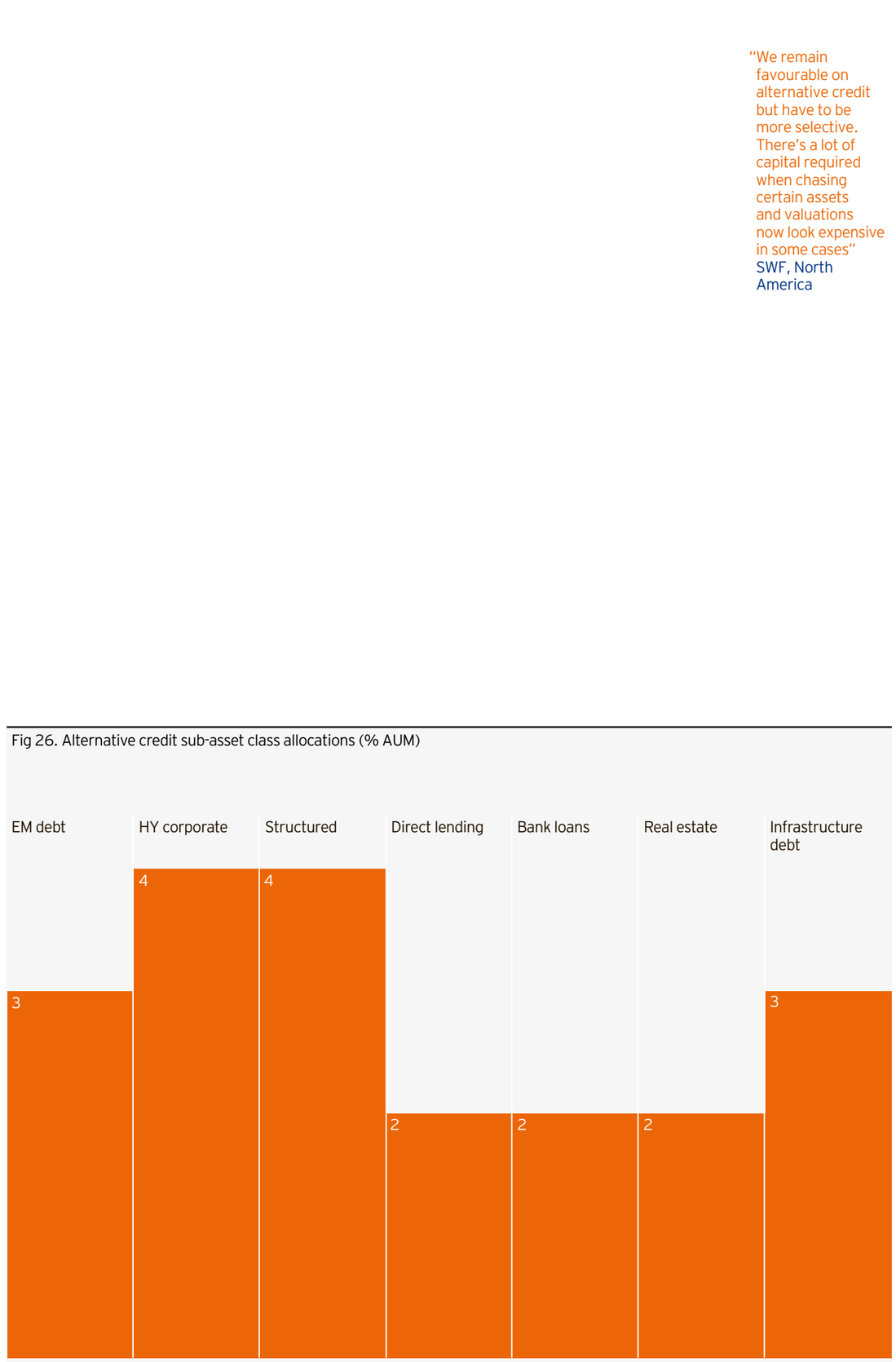
"We remain favourable on alternative credit but have to be more selective. There's a lot of capital required when chasing certain assets and valuations now look expensive in some cases"
SWF, North America

Fig 25. Effectiveness of alternative credit for meeting objectives, by region



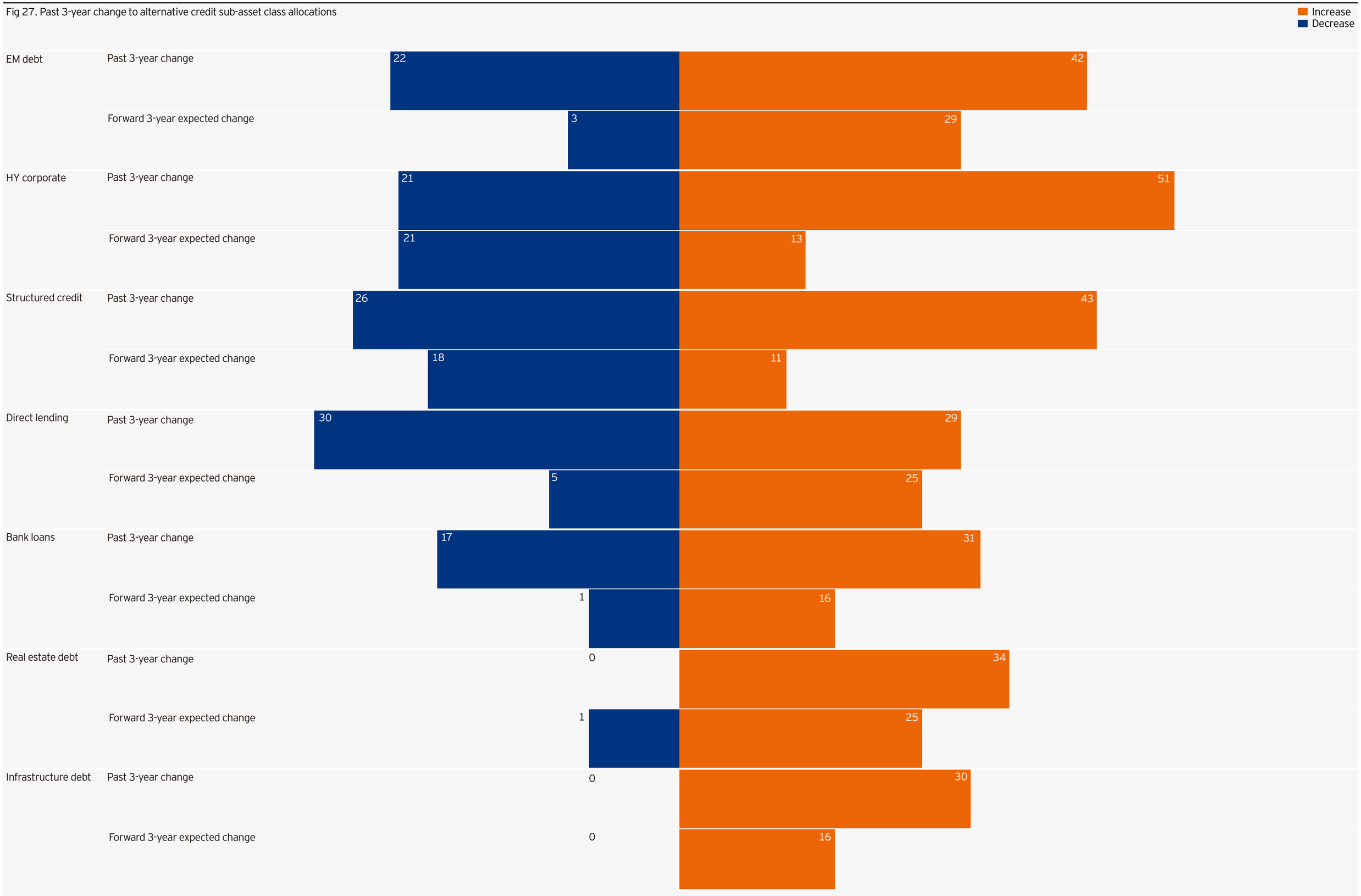
Sample: Asia-Pacific = 16, EMEA = 29, North America = 24 Rating on a scale of 1–10 where 10 is complete effectiveness

Fig 26. Alternative credit sub-asset class allocations (% AUM)



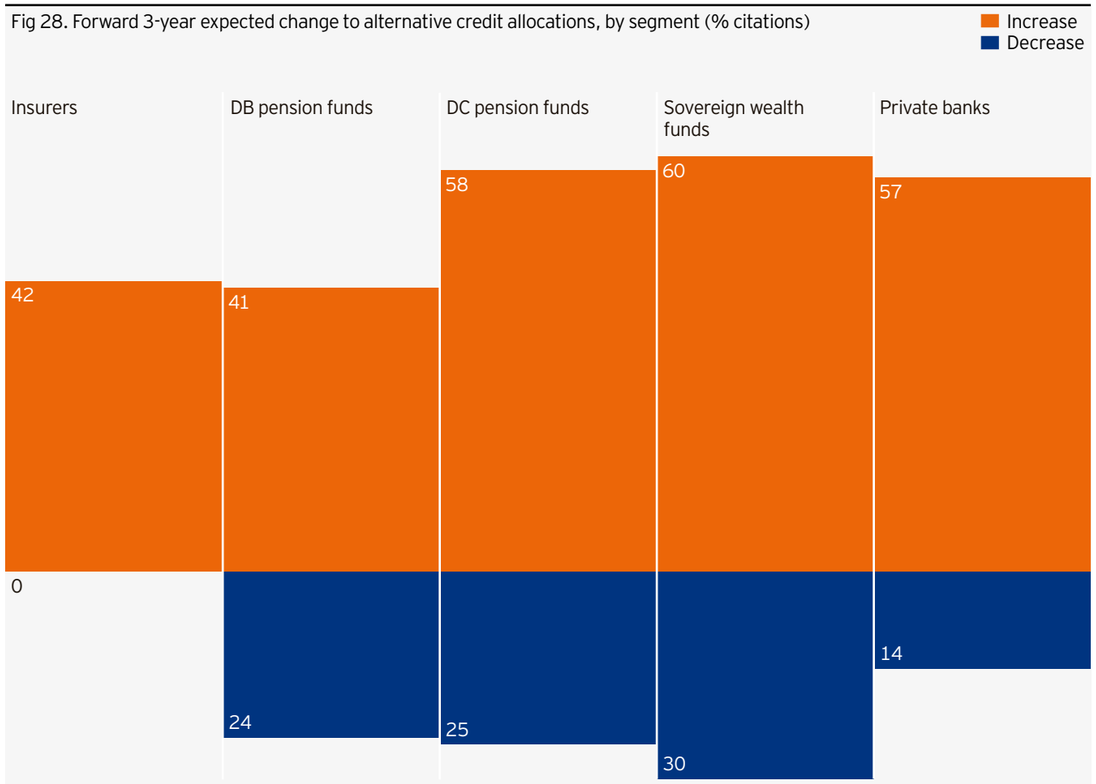
Sample: 79

Fig 27. Past 3-year change to alternative credit sub-asset class allocations



Sample = Past 3-year change = 76, Forward 3-year expected change = 76

Fig 28. Forward 3-year expected change to alternative credit allocations, by segment (% citations)



Sample: Insurers = 26, DB Pension funds = 17, DC Pension funds = 12, Sovereign wealth funds = 10, Private banks = 14

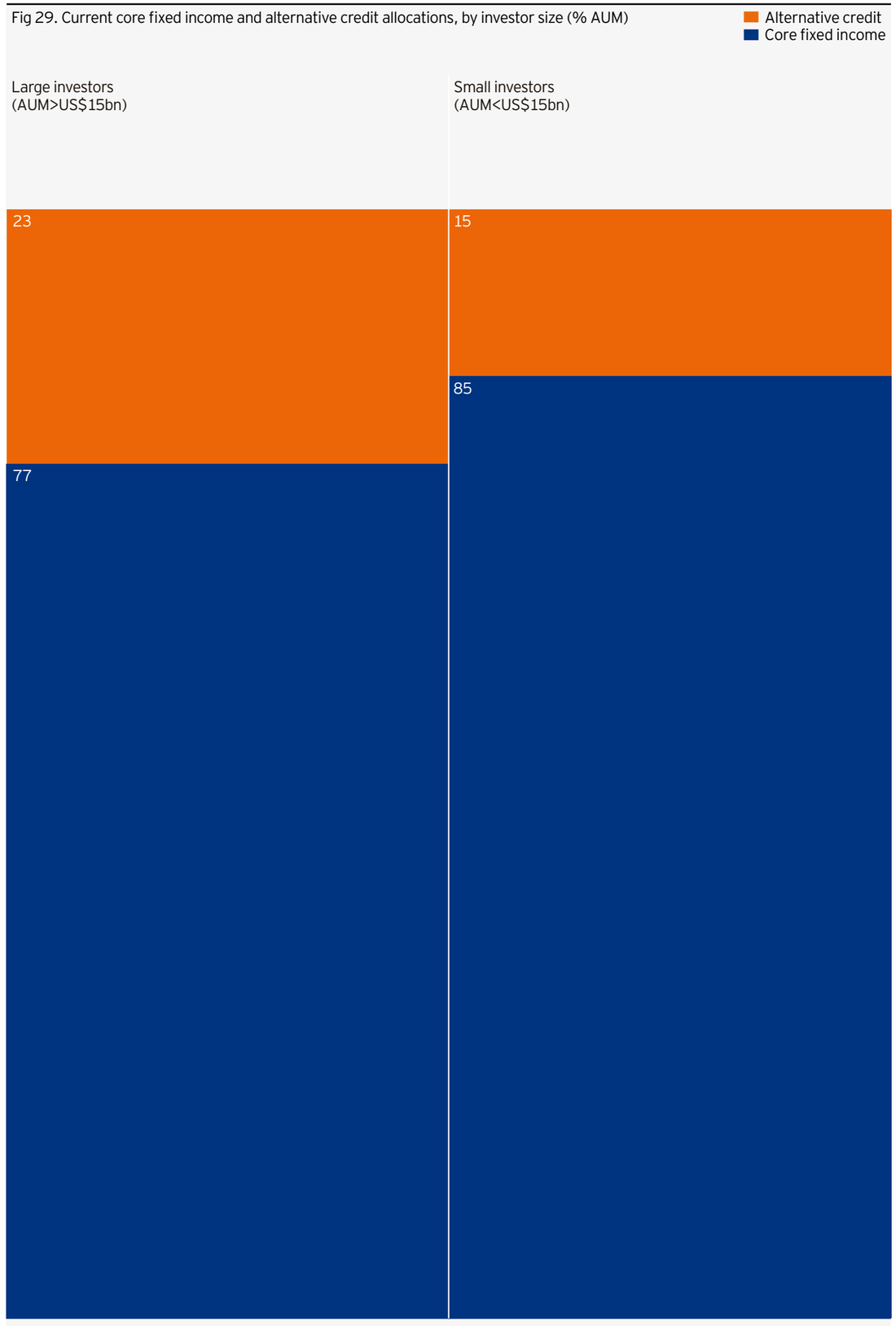
While all respondent segments have a net positive of investors expecting to increase allocations to alternative credit (figure 28), the most supportive are:

— Insurers: insurers particularly favour illiquid alternative credit, which allows them to achieve the dual objectives of generating alpha and income, while adhering to enhanced regulation (figure 23). Real estate and infrastructure debt are particularly attractive; providing an illiquidity premium and cashflows to help match long-term liabilities such as endowments or annuities. Over the last three years, over one third of insurance respondents have increased allocations to infrastructure and real estate debt, more than any other alternative asset class. None reduced allocations. This trend is set to continue over the next three years, albeit at a slower rate.

— Sovereign wealth funds: respondents intend to continue allocating to real estate and infrastructure debt, with 40% and 30% of respondents respectively stating an intention to increase allocations to these sub-asset classes. The long time horizon of sovereigns provides an ideal platform to capture the illiquidity premium and help funds to diversify risk premia in their fixed income portfolios.

Insurers particularly favour illiquid alternative credit, which allows them to achieve the dual objectives of generating alpha and income, while adhering to enhanced regulation

Fig 29. Current core fixed income and alternative credit allocations, by investor size (% AUM)



Sample: Large investors (AUM>US$15bn) = 37, Small investors (AUM<US$15bn) = 42

Large investors are most active in alternative credit
Large investors (AUM>US$15bn) typically have higher allocations to alternative credit. Smaller investors, (AUM<US$15bn), which typically have fewer internal resources and smaller ticket size requirements, are not able to exploit alternative credit strategies to the same extent as their larger peers (figure 29).

As the need for yield and return enhancement is no less important for smaller investors (AUM<US$15bn), they instead compensate via higher allocations to international fixed income assets.

Smaller investors allocate on average 18% of fixed income portfolios to international government bonds and 14% to international corporate bonds, compared to 13% and 11% respectively for large investors. This trend is particularly evident amongst EMEA and Asia-Pacific investors, where yields on local debt have been lower than yields on US debt, leading such investors to look offshore for yield enhancement (figure 30).

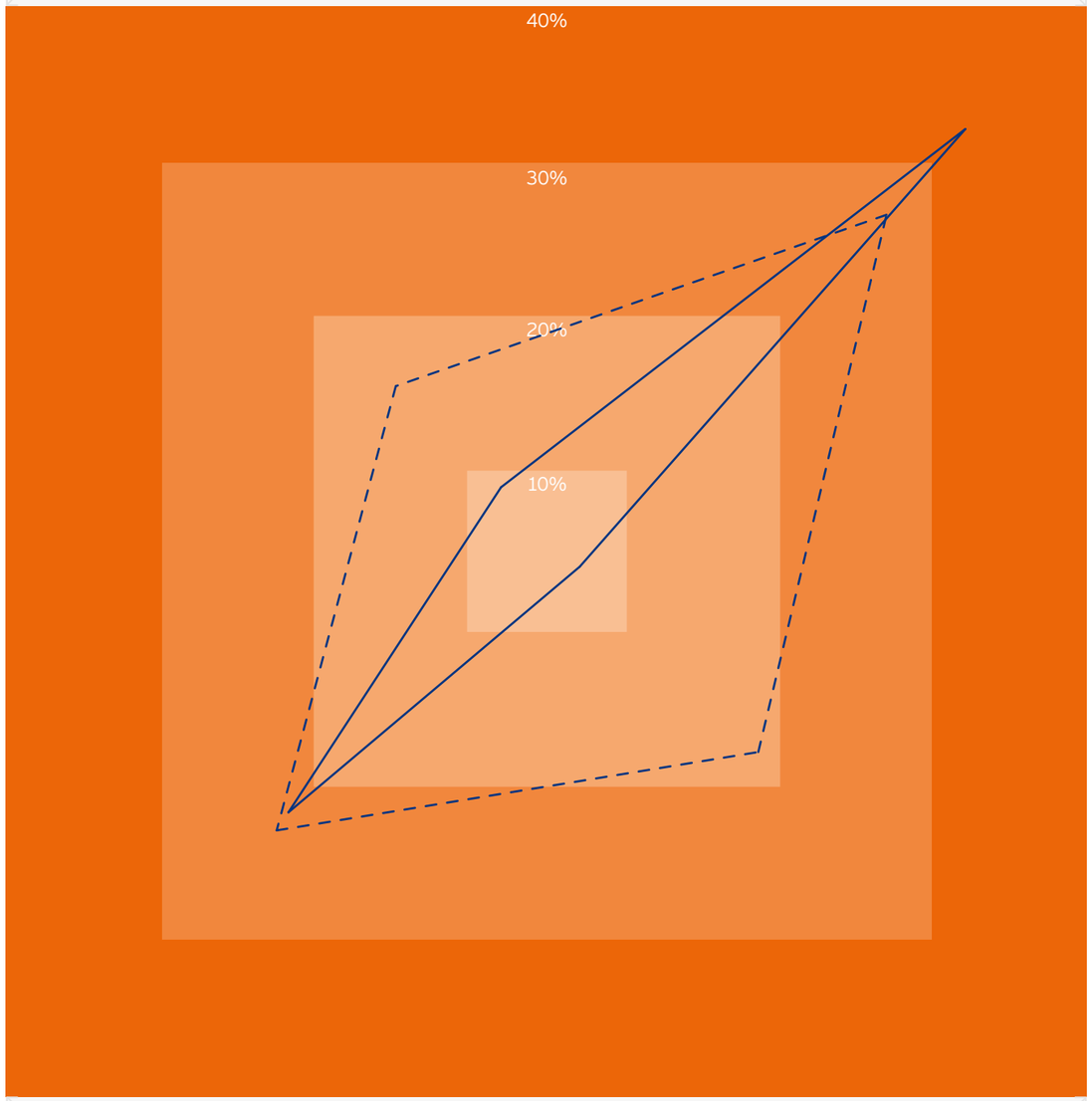
This may of course prove to be only a temporary solution. Although larger investors are likely to maintain an advantage in accessing alternative credit opportunities for the foreseeable future, smaller investors may use international core fixed income as a stepping stone to develop learnings which can subsequently be extended to alternative credit exposures, which are often located in international markets.

"I'd like a higher allocation to alternative credit but it's difficult for us given our size. We don't have the resources to research, implement and monitor these assets"
DB pen, EMEA

Smaller investors, which typically have fewer internal resources and smaller ticket size requirements, are not able to exploit alternative credit strategies to the same extent as their larger peers

Fig 30. Small investors (AUM <US$15bn) core fixed income allocations, by region (% AUM)

— North America
-- EMEA and Asia-Pacific



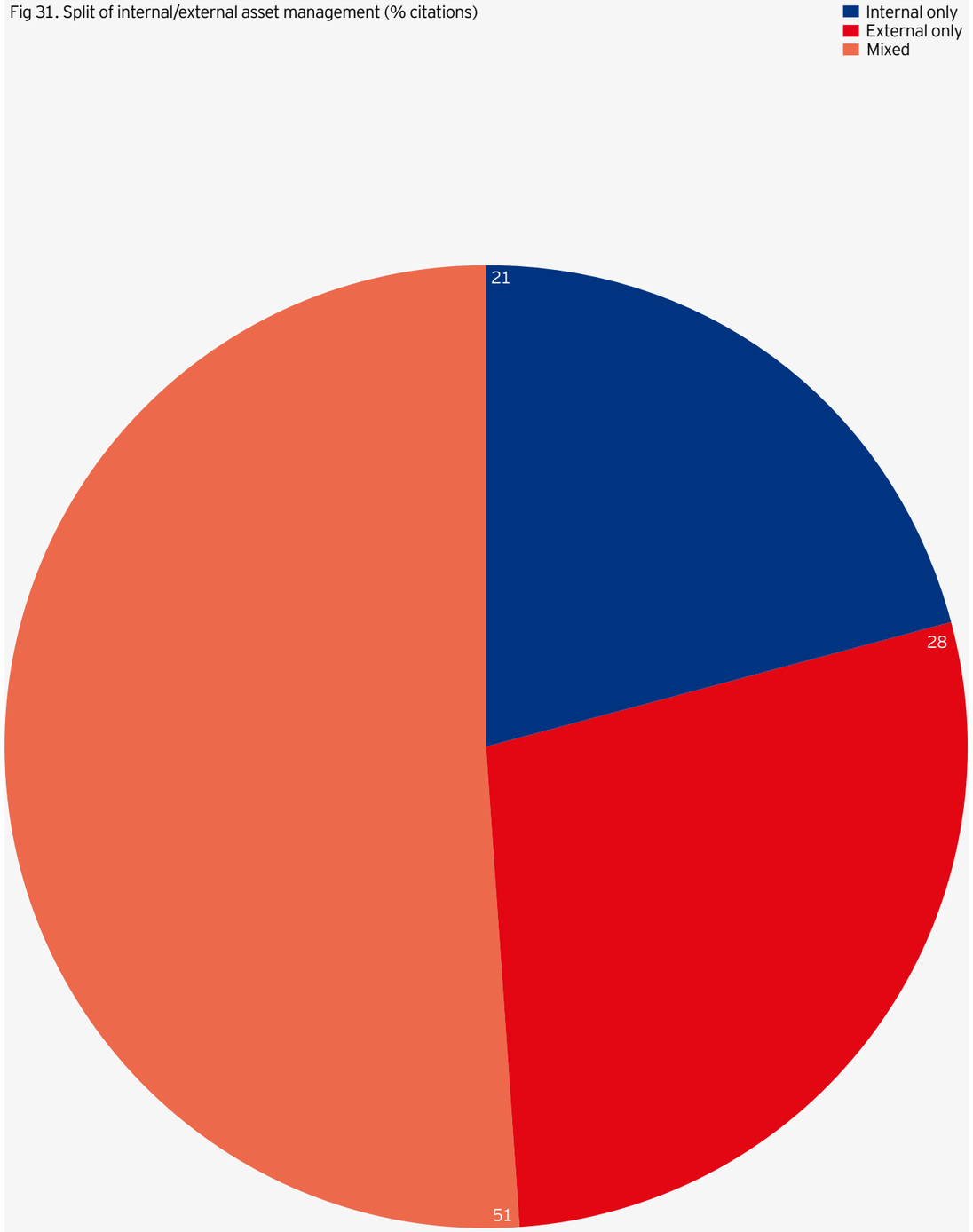
Sample: Asia-Pacific = 9, EMEA = 24, North America = 9
Small investors defined as AUM<US$15bn

Theme 6
Most investors use a hybrid model of internal and external asset management

Key takeaways:

— Pressure on returns causes investors to consider internalisation options, but most still use external managers.
— External managers are particularly important for alternative credit strategies, with in-house teams (where they exist) focused on core fixed income.
— Larger investors prefer global specialists as their external asset manager while smaller investors more often choose local generalists.
— Main role of asset consultants has become portfolio monitoring; while still very influential in manager selection for smaller investors, larger investors increasingly select external manager via specialist internal resources.

Fig 31. Split of internal/external asset management (% citations)



Sample: 79

As most investors plan for a 'new normalisation' world, an implication of continued low (or even further deterioration of) fixed income returns has increased pressure on investment teams to improve net performance. They have done so by seeking higher yielding assets (discussed throughout themes 1–5), but also by reducing costs within the portfolio where possible.

These two approaches can prove contradictory. The pursuit of alternative, novel, or complex strategies with greater return potential, typically relies on the expertise of specialist asset managers. Given the importance of specialist skills in sourcing, analysing and structuring these limited and esoteric opportunities, investors pay a premium with limited scope to negotiate more favourable fee structures.

Consequently, those seeking to reduce overall fixed income portfolio costs have focused their attention on core fixed income and the more mainstream alternative credit sub-asset classes such as high yield and emerging market debt. These investors have used two strategies to reduce costs in these sub-asset classes:

— Greater emphasis on price and fee structures in the external manager selection process.
— Examination of the viability of bringing the management of these asset classes in-house.

The impact has been a rise in the number of respondents using or considering internal teams to complement their external holdings. Although three quarters of investors manage some fixed income assets internally (figure 31), only 21% manage the entire portfolio internally. Over half use a hybrid of internal and external asset management, highlighting the ongoing importance of external asset manager relationships.

"We manage core bond portfolios in-house because it's cheap and simple to do. Our alternative credit portfolio is outsourced to take advantage of the skill and resources of external managers"
DB pen, Asia-Pacific

Although three quarters of investors manage some fixed income assets internally, only 21% manage the entire portfolio internally

Internalisation is not just about cost goals however, as figure 32 highlights. An equally important reason – particularly in light of the difficulties in achieving specific target objectives – is to increase control over fixed income portfolios.

Respondents expressed a desire for asset managers to work more collaboratively with them, which helps them get a better understanding of the idiosyncratic complexities of their asset portfolios. Insurers and DB pensions in particular highlighted the need for asset managers to develop solutions that are attuned to their cashflow and maturity profiles, both critical aspects of the portfolio management process. This extends beyond the underlying assets to better aligning interests such as fee structures and fund terms.

The internal vs external decision

In allocating responsibilities between internal and external resources, there is a clear bias towards managing passive and core fixed income in-house, and issuing alternative credit mandates to external managers (figure 33).

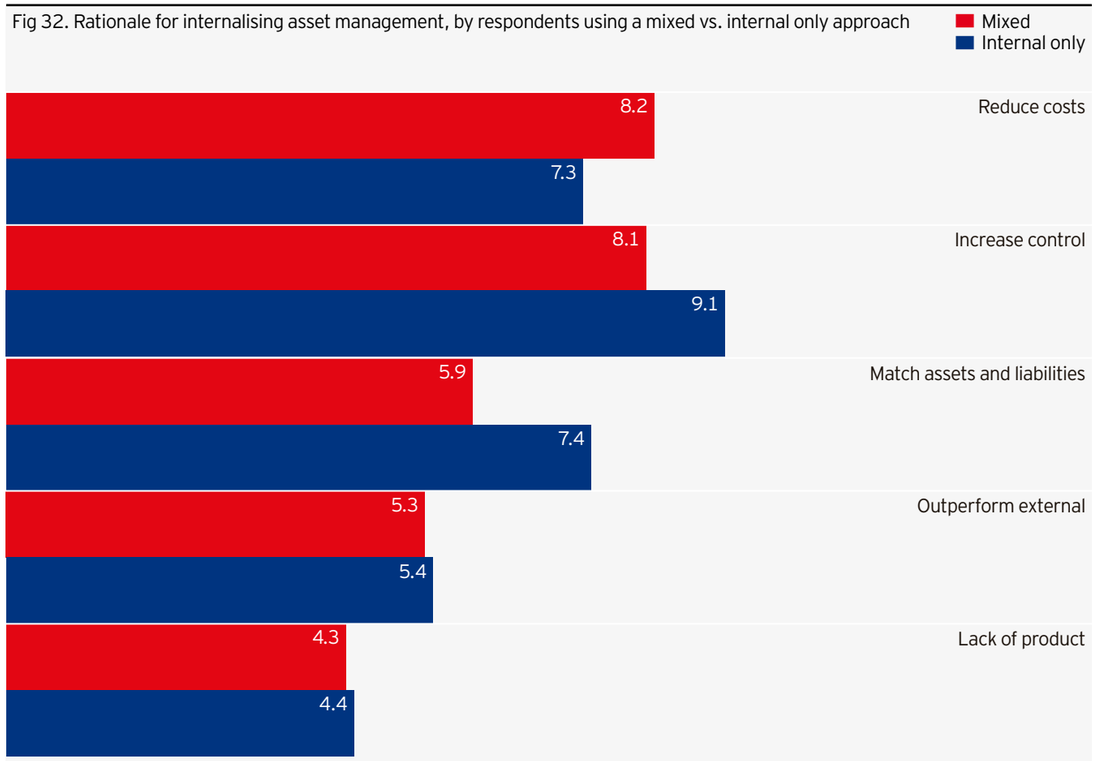
With core fixed income representing 74%–87% of total fixed income portfolios depending on the region, many respondents have achieved the scale required to manage at least the more straightforward needs of core fixed income internally.

By comparison, alternative credit strategies have smaller allocations and require significantly higher investment in research, portfolio management, risk management, and monitoring costs, adding layers of operating complexity, and increasing the level of risk the internal team is exposed to. Collectively these make them less viable to bring in-house, especially if they require a significant level of diversity by region and sector.

The exception within alternative credit is structured credit. While classified as an alternative credit strategy, structured credit can also be accessed through passive strategies. Respondents managing structured credit strategies in-house noted these are usually part of a wider passive strategy, tracking an index such as the Barclays Global Aggregate, which includes structured credits such as mortgage and asset backed securities.

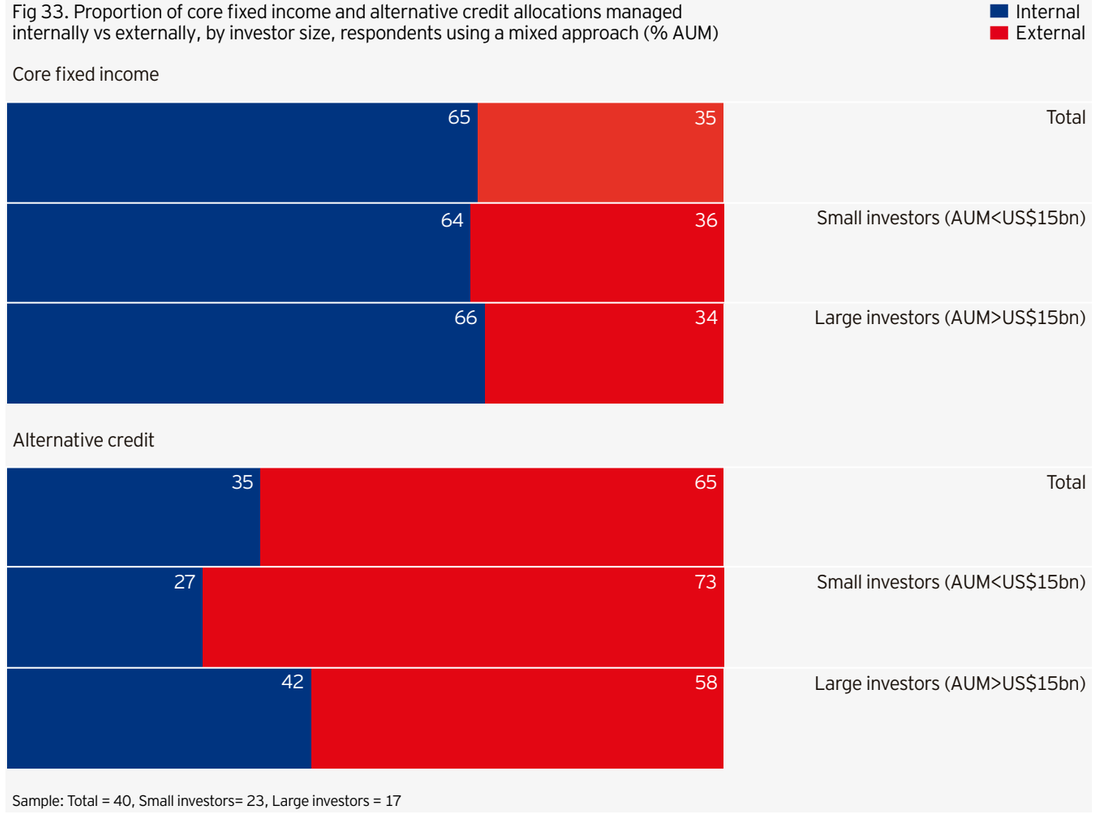
The preference to outsource alternative credit strategies to specialist managers is especially marked among smaller investors. Figure 33 demonstrates that while there is little difference in the treatment of core fixed income by size of investor, and most investors of all sizes outsource alternative credit, smaller investors do so to a much greater extent. A consequence is that where respondents manage

Fig 32. Rationale for internalising asset management, by respondents using a mixed vs. internal only approach



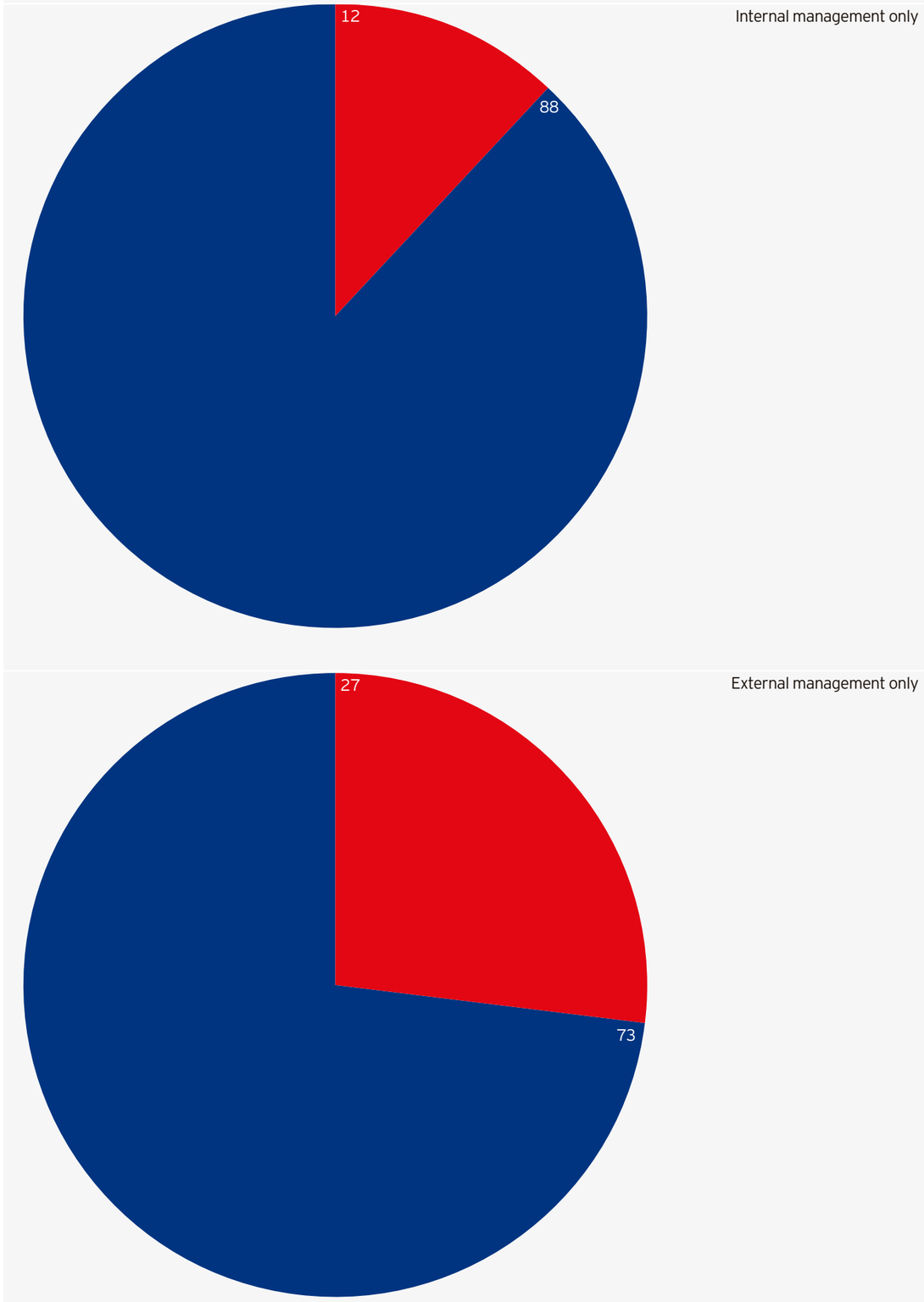
Sample: Mixed = 39, Internal only = 17
Rating on a scale of 1–10 where 10 is complete agreement in rationale

Fig 33. Proportion of core fixed income and alternative credit allocations managed internally vs externally, by investor size, respondents using a mixed approach (% AUM)



Sample: Total = 40, Small investors= 23, Large investors = 17

Fig 34. Core fixed income and alternative credit allocations, by respondents who use only internal management or only external management (% AUM)



Sample: Internal management only = 17, External management only = 22

the entire fixed income portfolio internally, they usually have much less exposure to alternative credit strategies than those who outsource the entirety of their fixed income portfolios (figure 34).

Where exposure to alternative credit does exist in fully internal portfolios, allocations tend to be heavily weighted towards infrastructure debt (figure 35). This is however a special case relating to Asian insurers and pension funds. These investors have strict regulations dictating where they can invest, with governments encouraging investment in infrastructure through lower capital charges and less stringent regulations on these asset classes.

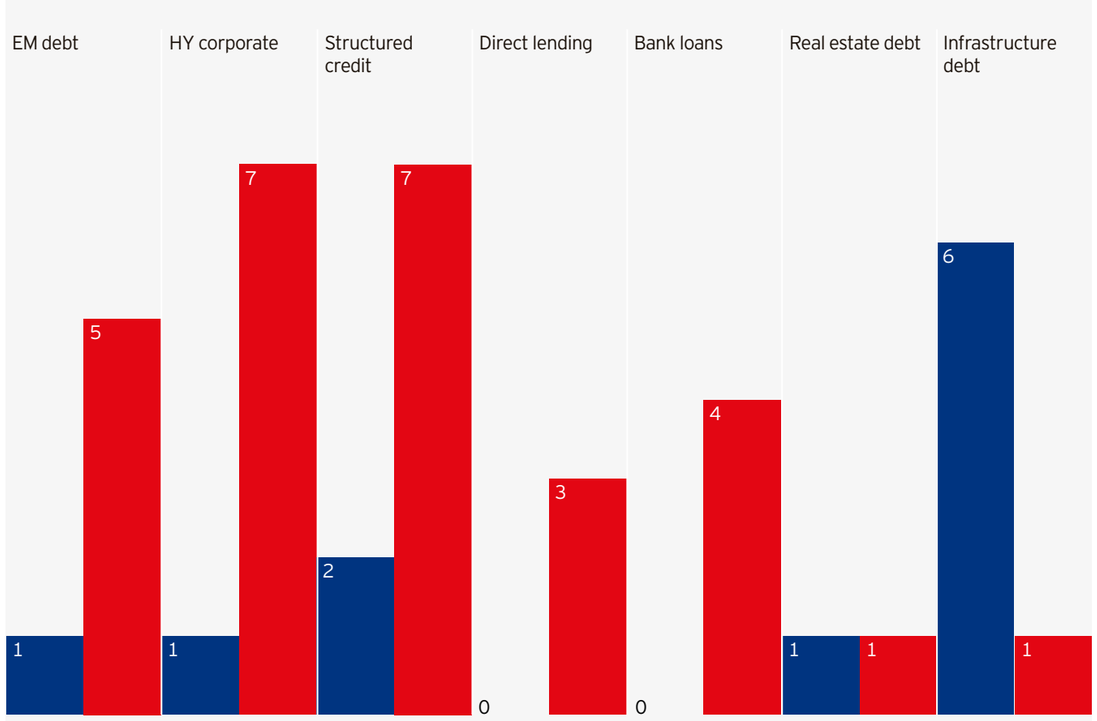
Selecting external managers

When considering how to best use external fixed income managers, there was a noticeable difference in preferences between large and small investors (figures 36 and 37).

— Large investors (AUM>US$15bn) prefer global, specialist managers at the sub-asset class level. In focusing their selection on a global universe, large investors are not only able to select from a larger pool of fixed income managers, but can utilise the regional expertise of each manager.
— Small investors (AUM<US$15bn) favour local market generalist managers. This is often less to do with choice than the practicalities of resource availability. With small internal teams, small investors cannot afford the time and costs of identifying, researching and monitoring global managers, so they tend to allocate to local managers which are accessible, known to them, and have a local service offering.

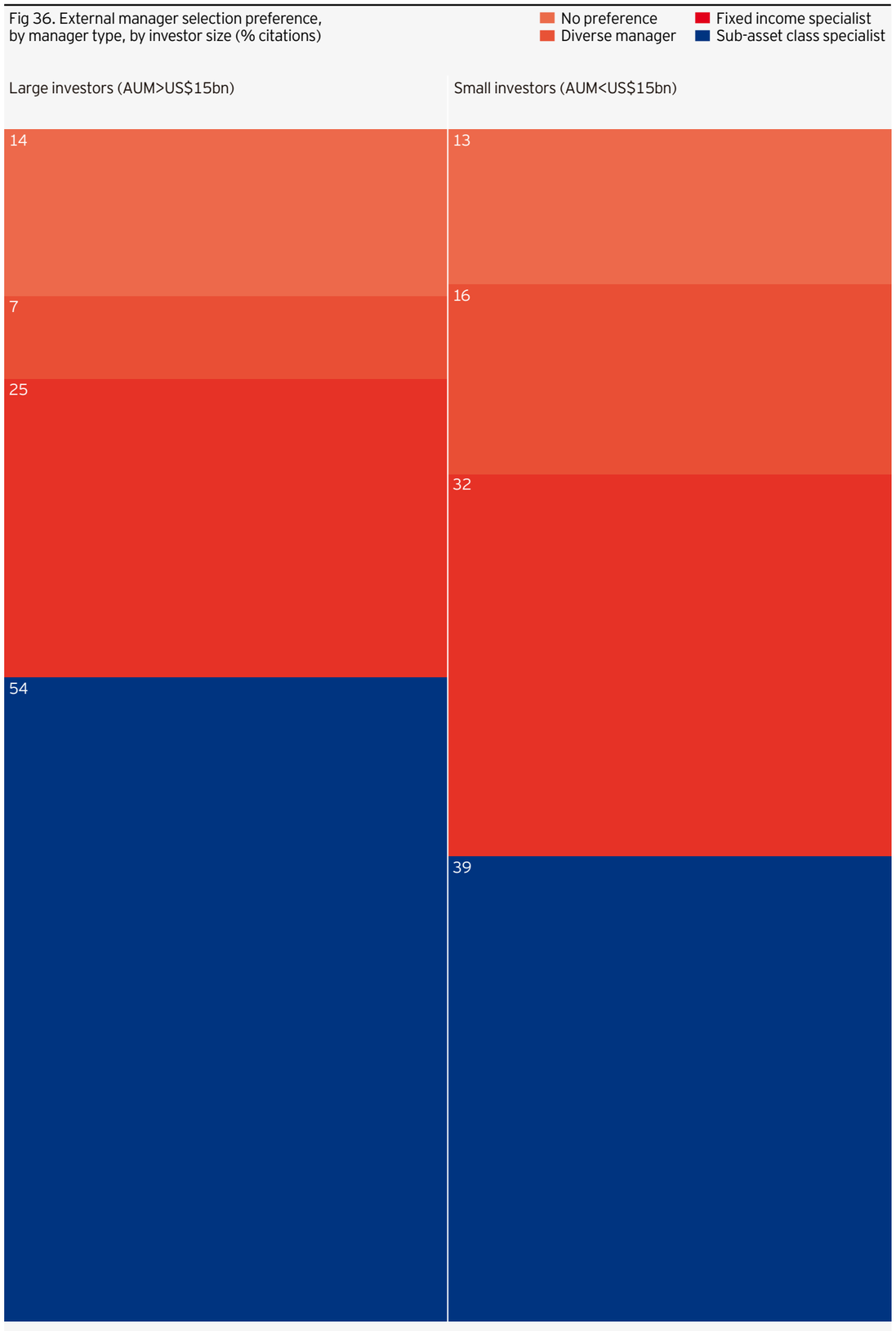
Asia-Pacific and EMEA investors look to global managers to a much greater extent than North American investors (figure 38). This partly reflects the location of the opportunity set, but also a home market bias amongst North America investors.

Fig 35. Alternative credit allocations, by respondents who use only internal management or only external management (%AUM)



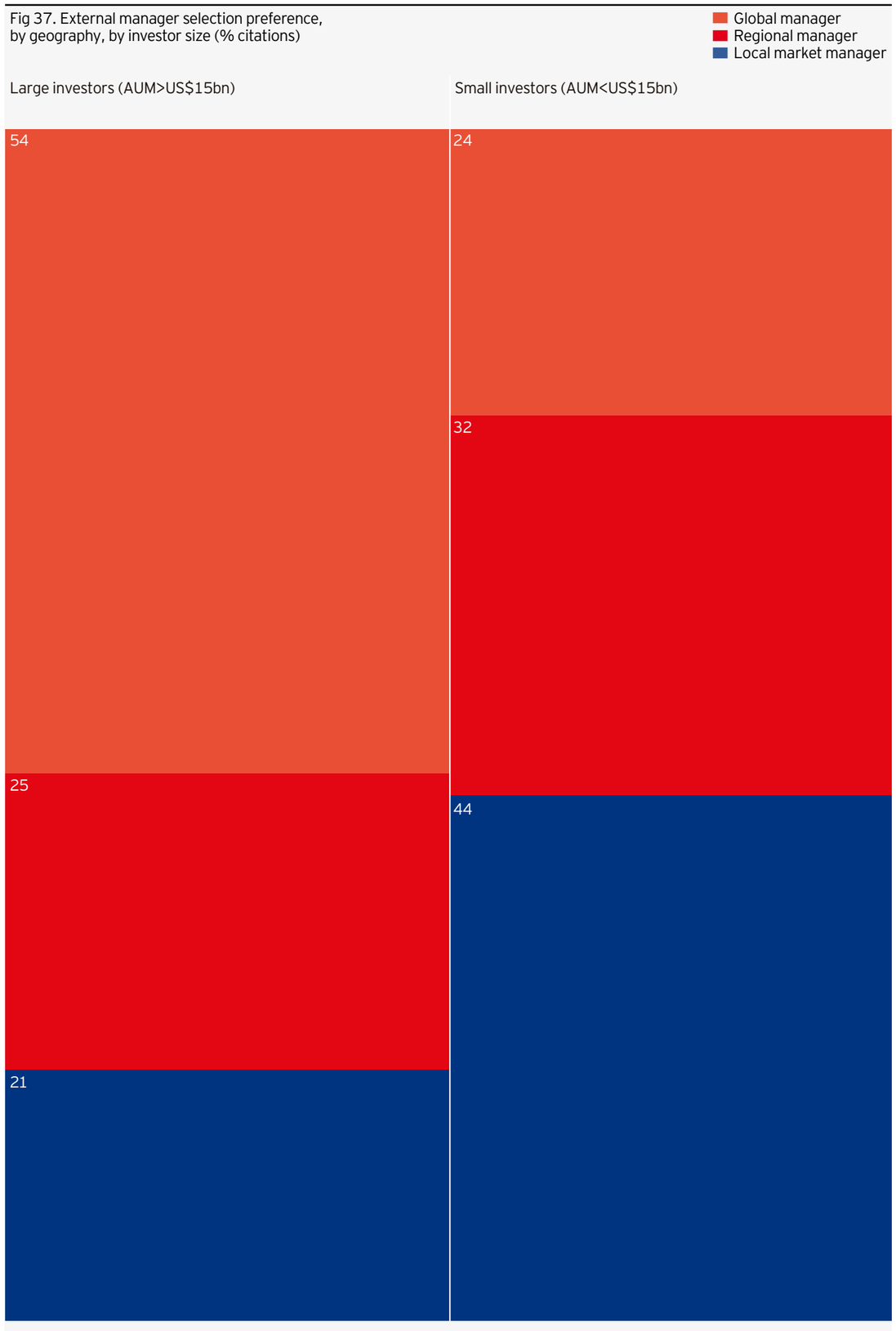
Internal management only = 17, External management only = 22

Fig 36. External manager selection preference, by manager type, by investor size (% citations)



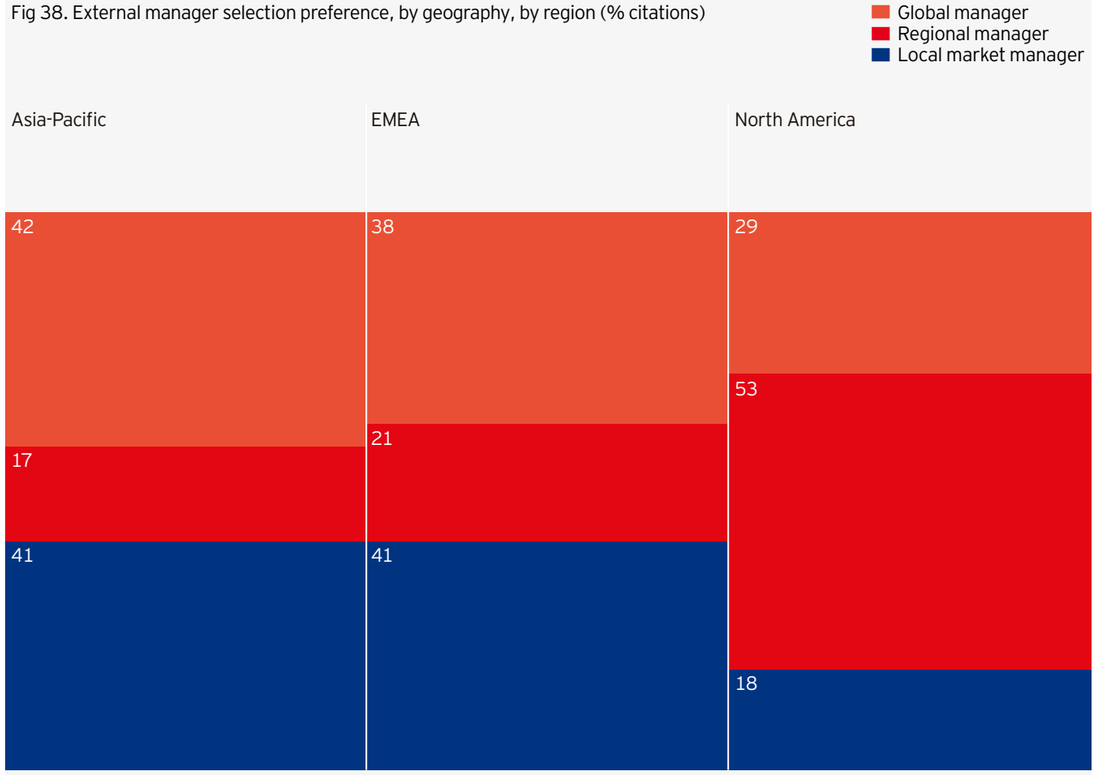
Sample: Large investors (AUM>US$15bn) = 28, Small investors (AUM<US$15bn) = 38

Fig 37. External manager selection preference, by geography, by investor size (% citations)



Sample: Large investors (AUM>US$15bn) = 24, Small investors (AUM<US$15bn) = 34

Fig 38. External manager selection preference, by geography, by region (% citations)



Sample: Asia-Pacific = 12, EMEA = 29, North America = 17

Variances between large and small investors is also noticeable in respondents' selection criteria for external managers (figure 39), and for largely the same reason: limited resources.

Investment philosophy and transparency are the chief criteria for both large and small investors, but smaller investors place a greater emphasis on reputation, past performance and ancillary benefits such as client servicing.

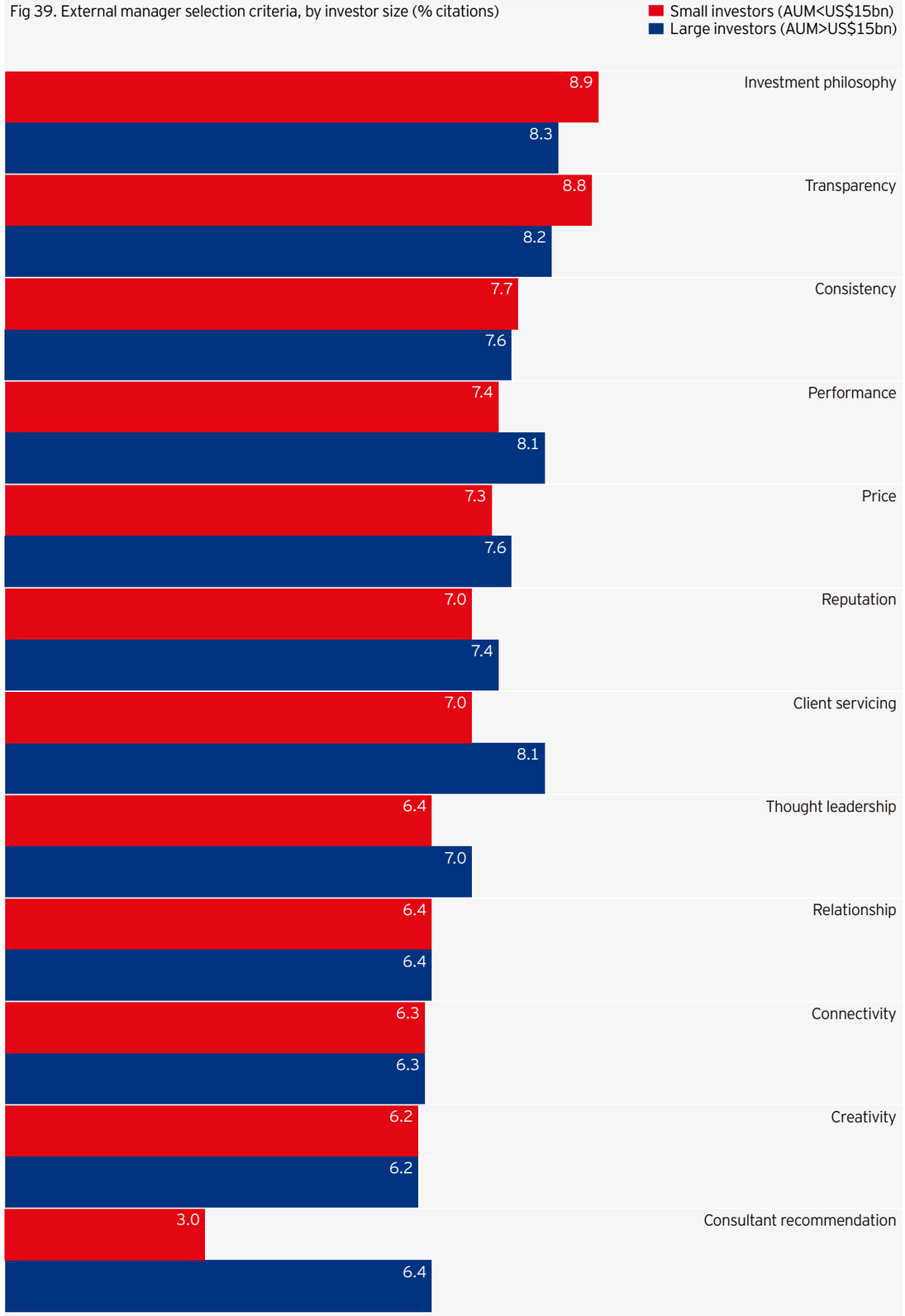
Where resources are limited, past performance is a critical initial screening criteria for small investors. Despite the drawbacks of this approach, respondents explained they have few options given the large universe of available managers, and also because trustees/board members often require a performance track record in order to approve the incorporation of a new manager into the portfolio.

Given the constraints that small investors often face in selecting fixed income managers, they are much more reliant on asset consultants than large investors: 67% of small investors use asset consultants relative to only 42% of large investors (figure 40).

The dominant use of asset consultants for both large and small investors is for monitoring of the portfolio. However as might be expected the importance of asset consultants in all aspects of managing the fixed income portfolio is significantly higher for small investors than large (figure 41).

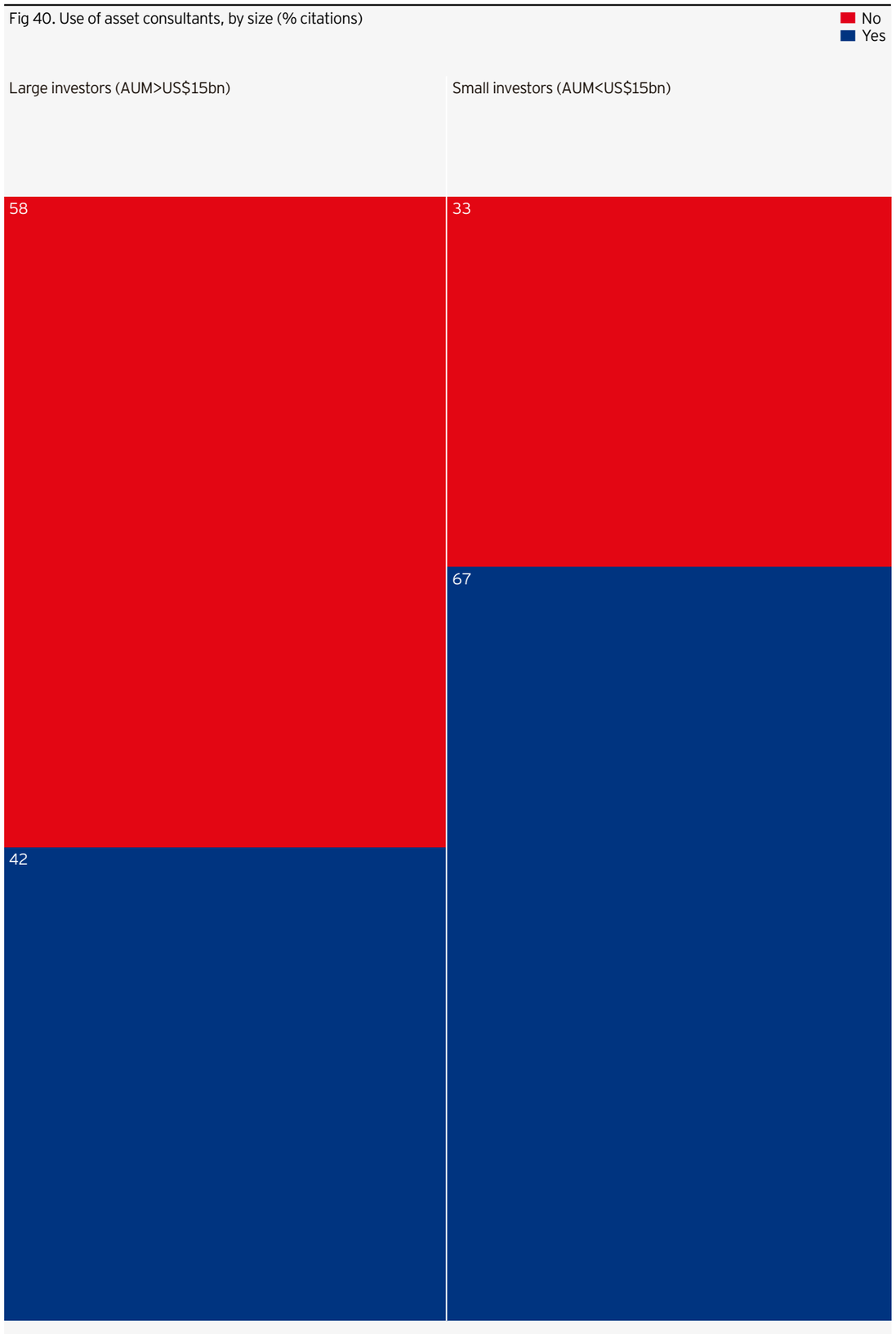
External asset management of fixed income continues to make a critical contribution for most investors, and as large investors become more capable of making their own manager selection decisions, there is scope for more direct and strategic relationships. Many investors clearly want this style of relationship and equally the transparency and collaboration which is a marker of it.

Fig 39. External manager selection criteria, by investor size (% citations)



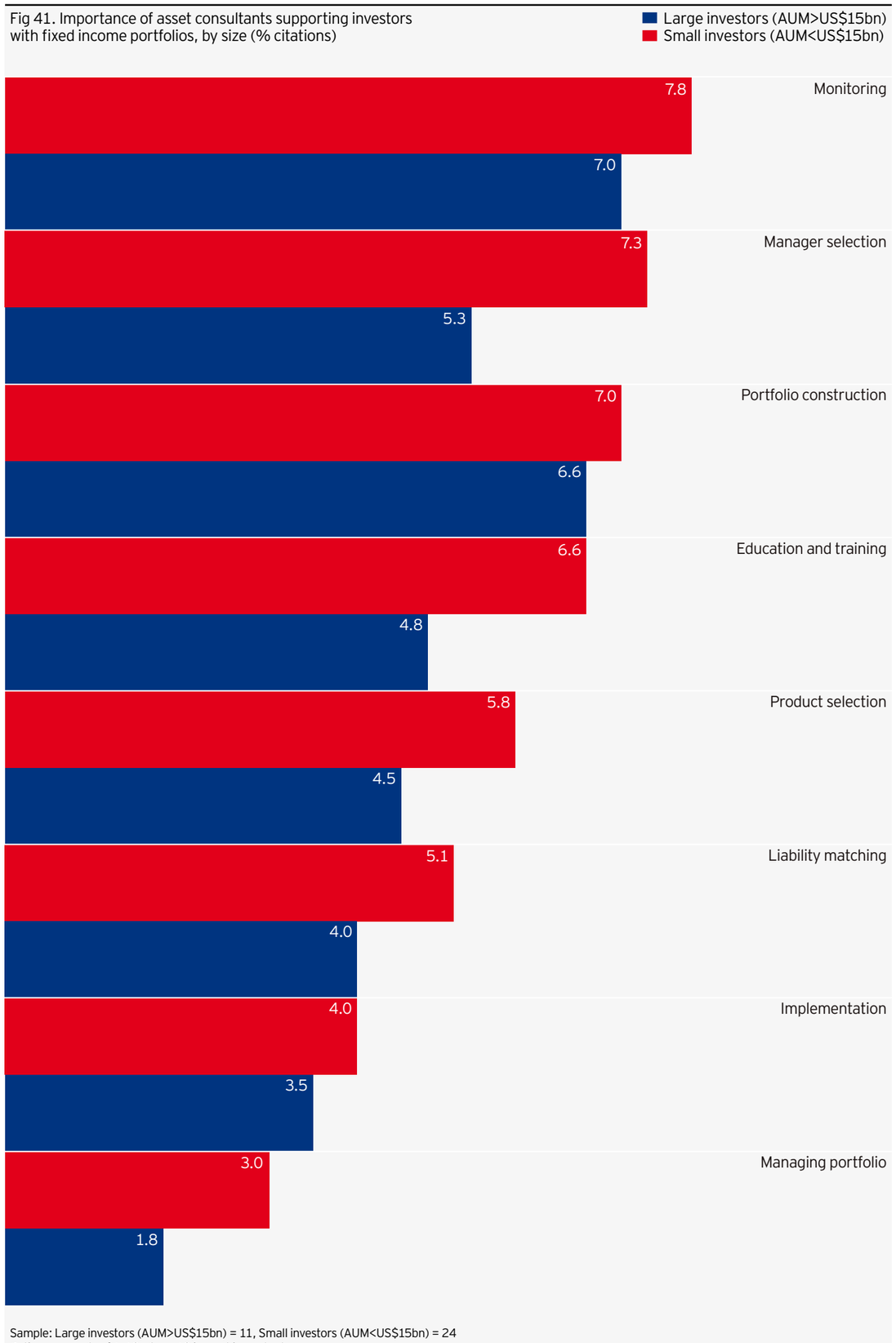
Sample: Large investors (AUM>US$15bn) = 21, Small investors (AUM<US$15bn) = 34
Rating on a scale of 1–10 where 10 is most important

Fig 40. Use of asset consultants, by size (% citations)



Sample: Large investors (AUM>US$15bn) = 26, Small investors (AUM<US$15bn) = 36

Fig 41. Importance of asset consultants supporting investors with fixed income portfolios, by size (% citations)



Sample: Large investors (AUM>US$15bn) = 11, Small investors (AUM<US$15bn) = 24
Rating on a scale of 1-10 where 10 is most important

Appendix

Sample and methodology
The fieldwork for this study was conducted by NMG's strategy consulting practice. Invesco chose to engage a specialist independent firm to ensure high quality objective results. Key components of the methodology include:

- A focus on the key fixed income decision makers within institutional investors and private banks, conducting interviews using experienced consultants and offering market insights rather than financial incentives.
- In-depth (typically one hour) face-to-face interviews using a structured questionnaire to ensure quantitative as well as qualitative analytics were collected.
- Analysis capturing investment preferences as well as actual investment allocations with a bias toward actual allocations over stated preferences
- Results interpreted by NMG's strategy team with relevant consulting experience in the global asset management sector.

In 2017, we conducted interviews with 79 different insurers, defined benefit and contribution pension funds, sovereign investors and private banks across Asia-Pacific, EMEA and North America. The breakdown of the 2017 interview sample by investor segment and geographic region is displayed in figures 42 and 43.

Invesco
Invesco is a leading independent global investment management firm, dedicated to helping investors achieve their financial objectives. With offices globally, capabilities in virtually every asset class and investment style, a disciplined approach to investment management and a commitment to the highest standards of performance and client service – we are uniquely positioned to help institutional investors achieve their investment objectives.

NMG Consulting
Shape your thinking
NMG Consulting is a global consulting business operating in the insurance and investment markets. Our specialist focus, global insights programmes and unique network give us the inside track in insurance and investment markets, translating insights into opportunities. We provide strategy consulting, as well as actuarial and research services to financial institutions including asset managers, insurers, reinsurers and fund managers.

NMG's evidence-based insight programmes carry out interviews with industry-leading experts, top clients and intermediaries as a basis to analyse industry trends, competitive positioning and capability. Established programmes exist in asset and wealth management, life insurance and reinsurance across North America, the UK and Europe, Asia-Pacific, South Africa and the Middle East.

Fig 42. Sample, by investor segment

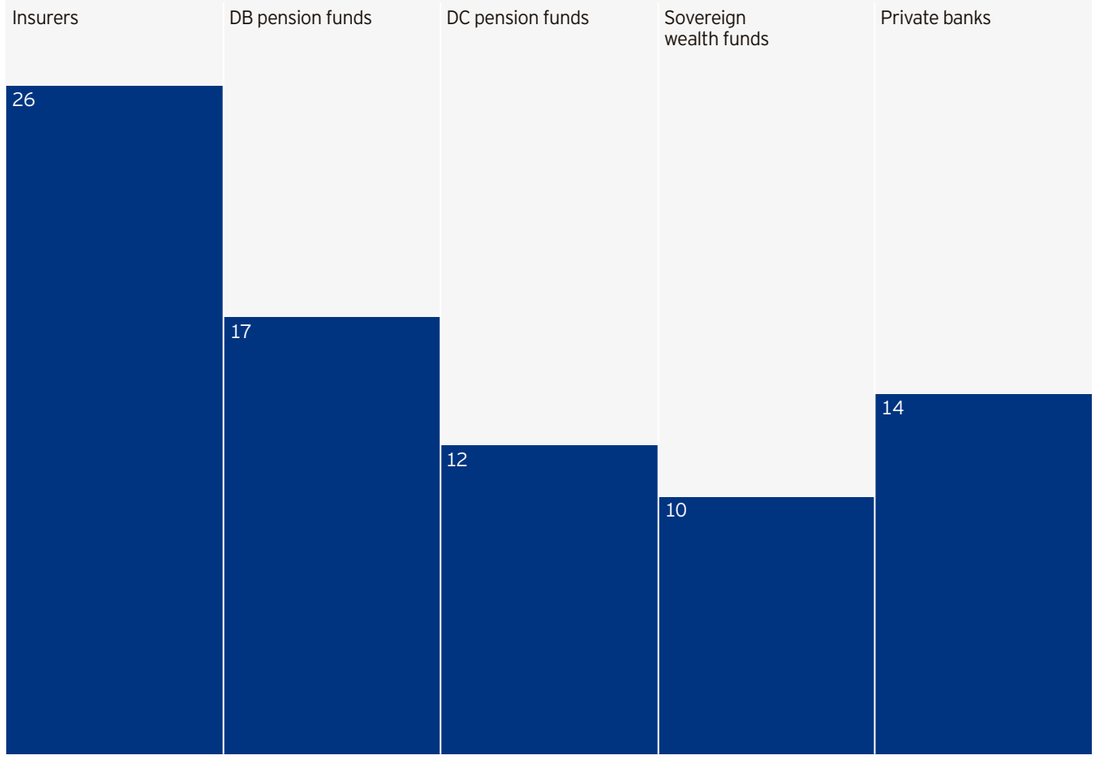
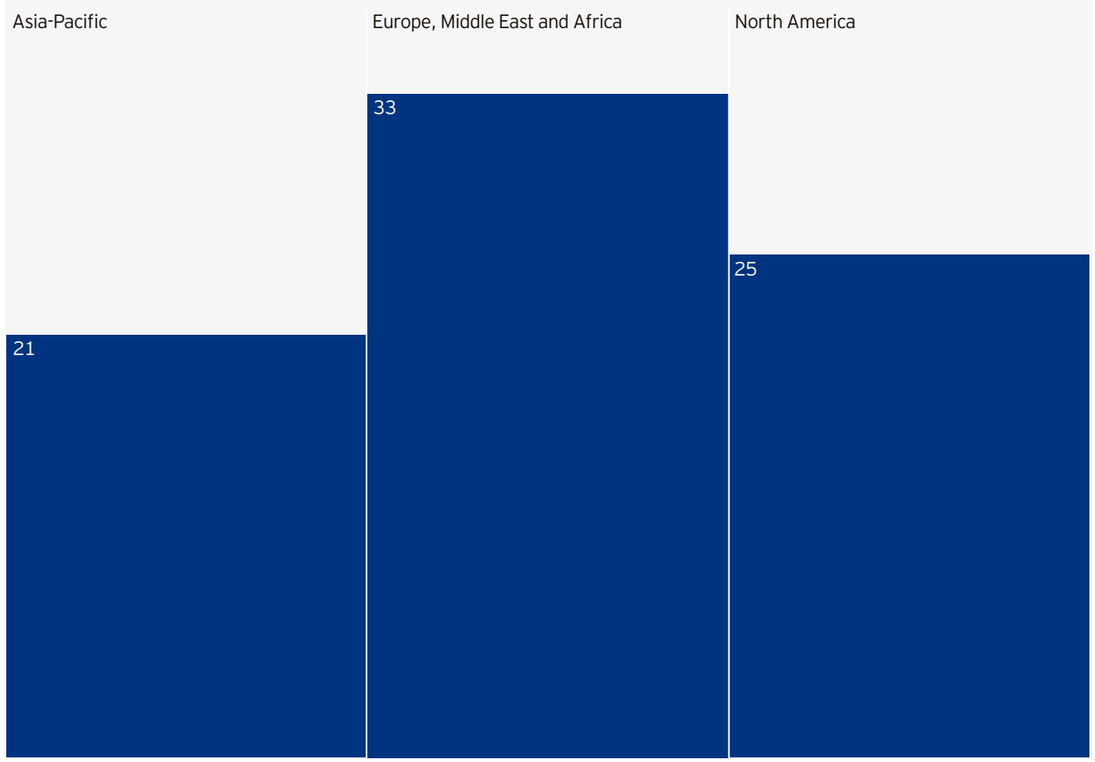


Fig 43. Sample, by region



Important information
This document is intended only for Professional Clients and Financial Advisers in Continental Europe (as defined in the important information); for Qualified Investors in Switzerland; for Professional Clients in, Dubai, Jersey, Guernsey, Isle of Man, Ireland and the UK, for Institutional Investors in the United States and Australia, for Institutional Investors and/or Accredited Investors in Singapore, for Professional Investors only in Hong Kong, for Qualified Institutional Investors, pension funds and distributing companies in Japan; for Wholesale Investors (as defined in the Financial Markets Conduct Act) in New Zealand, for accredited investors as defined under National Instrument 45-106 in Canada, for certain specific Qualified Institutions/Sophisticated Investors only in Taiwan and for one-on-one use with Institutional Investors in Bermuda, Chile, Panama and Peru.

For the distribution of this document, Continental Europe is defined as Austria, Belgium, France, Finland, Greece, Luxembourg, Norway, Portugal, Denmark, Germany, Italy, the Netherlands, Spain, Sweden and Switzerland.

This document is for information purposes only and is not an offering. It is not intended for and should not be distributed to, or relied upon by members of the public. Circulation, disclosure, or dissemination of all or any part of this material to any unauthorised persons is prohibited. All data provided by Invesco as at 3 1 August 2017, unless otherwise stated. The opinions expressed are current as of the date of this publication, are subject to change without notice and may differ from other Invesco investment professionals.

The document contains general information only and does not take into account individual objectives, taxation position or financial needs. Nor does this constitute a recommendation of the suitability of any investment strategy for a particular investor. This is not an invitation to subscribe for shares in a fund nor is it to be construed as an offer to buy or sell any financial instruments. While great care has been taken to ensure that the information contained herein is accurate, no responsibility can be accepted for any errors, mistakes or omissions or for any action taken in reliance thereon. You may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco.

Australia
This document has been prepared only for those persons to whom Invesco has provided it. It should not be relied upon by anyone else. Information contained in this document may not have been prepared or tailored for an Australian audience and does not constitute an offer of a financial product in Australia. You should note that this information:

- May contain references to amounts which are not in local currencies.
- May contain financial information which is not prepared in accordance with Australian law or practices.
- May not address risks associated with investment in foreign currency denominated investments; & does not address Australian tax issues.

Hong Kong
This document is provided to Professional Investors in Hong Kong only (as defined in the Hong Kong Securities and Futures Ordinance and the Securities and Futures (Professional Investor) Rules).

Singapore
This document may not be circulated or distributed, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 304 of the SFA, (ii) to a relevant person pursuant to Section 305(1), or any person pursuant to Section 305(2), and in accordance with the conditions specified in Section 305 of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

New Zealand
This document is issued only to wholesale investors in New Zealand to whom disclosure is not required under Part 3 of the Financial Markets Conduct Act. This document has been prepared only for those persons to whom it has been provided by Invesco. It should not be relied upon by anyone else and must not be distributed to members of the public in New Zealand. Information contained in this document may not have been prepared or tailored for a New Zealand audience. You may only reproduce, circulate and use this document (or any part of it) with the consent of Invesco. This document does not constitute and should not be construed as an offer of, invitation or proposal to make an offer for, recommendation to apply for, an opinion or guidance on Interests to members of the public in New Zealand. Applications or any requests for information from persons who are members of the public in New Zealand will not be accepted.

This document is issued in:
Australia by Invesco Australia Limited (ABN 48 001 693 232), Level 26, 333 Collins Street, Melbourne, Victoria, 3000, Australia, which holds an Australian Financial Services Licence number 239916.

Austria by Invesco Asset Management Österreich – Zweigniederlassung der Invesco Asset Management Deutschland GmbH, Rotenturmstrasse 16-18, A-1010 Vienna, Austria.

Belgium by Invesco Asset Management SA Belgian Branch (France), Avenue Louise 235, B-1050 Brussels, Belgium.

Canada by Invesco Canada Ltd., 5140 Yonge Street, Suite 800, Toronto, Ontario, M2N 6X7, Canada.

Dubai by Invesco Asset Management Limited, Po Box 506599, DIFC Precinct Building No 4, Level 3, Office 305, Dubai, United Arab Emirates. Regulated by the Dubai Financial Services Authority.

France, Finland, Greece, Luxembourg, Norway, Portugal and Denmark, by Invesco Asset Management SA, 16-18 rue de Londres, 75009 Paris, France.

Germany by Invesco Asset Management Deutschland GmbH, An der Welle 5, 60322 Frankfurt am Main, Germany.

Hong Kong by Invesco Hong Kong Limited, 41/F, Champion Tower, Three Garden Road, Central, Hong Kong.

The Isle of Man and Ireland by Invesco Global Asset Management DAC, Central Quay, Riverside IV, Sir John Rogerson's Quay, Dublin 2, Ireland. Regulated in Ireland by the Central Bank of Ireland.

Italy by Invesco Asset Management S.A. – Italian Branch, Via Bocchetto 6, 20123, Italy.

Japan by Invesco Asset Management (Japan) Limited, Roppongi Hills Mori Tower 14F, 6-10-1 Roppongi, Minato-ku, Tokyo 106-6114; Registration Number: The Director-General of Kanto Local Finance Bureau (Kin-sho) 306; Member of the Investment Trusts Association, Japan and the Japan Investment Advisers Association.

Jersey and Guernsey by Invesco International Limited, 2nd Floor, Orviss House, 17a Queen Street, St Helier, Jersey, JE2 4WD. Regulated by the Jersey Financial Services Commission.

The Netherlands by Invesco Asset Management S.A. Dutch Branch, Vinoly Building, Claude, Debussylaan 26, 1082 MD, Amsterdam, The Netherlands.

New Zealand by Invesco Australia Limited (ABN 48 001 693 232), Level 26, 333 Collins Street, Melbourne, Victoria, 3000, Australia, which holds an Australian Financial Services Licence number 239916.

Singapore by Invesco Asset Management Singapore Ltd, 9 Raffles Place, #18-01 Republic Plaza, Singapore 048619.

Spain by Invesco Asset Management SA, Sucursal en España, C/GOYA 6, 3rd floor, 28001 Madrid, Spain.

Sweden by Invesco Asset Management SA, Swedish Filial, Stureplan 4c, 4th floor, 114 35 Stockholm, Sweden.

Switzerland by Invesco Asset Management (Schweiz) AG, Talacker 34, CH-8001 Zurich, Switzerland.

Taiwan by Invesco Taiwan Limited, 22F, No.1, Songzhi Road, Taipei 11047, Taiwan (0800-045-066). Invesco Taiwan Limited is operated and managed independently.

The UK by Invesco Asset Management Limited, Perpetual Park, Perpetual Park Drive, Henley-on-Thames, Oxfordshire RG9 1HH. Authorised and regulated by the Financial Conduct Authority.

The United States of America by Invesco Advisers, Inc., Two Peachtree Pointe, 1555 Peachtree Street, N.W., Suite 1800, Atlanta, Georgia 30309, US.