Invesco

2021

Invesco Global Sovereign Asset Management Study

This study is not intended for members of the public or retail investors. Full audience information is available on the next page.

Contents

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.

Welcome

Rod Ringrow
Head of Official Institutions

Rod.ringrow@invesco.com

I am delighted to welcome you to our ninth annual study of sovereign investors. Running since 2013, the scale and shape of this study has grown over time and this year represents the views and opinions of 141 chief investment officers, heads of asset classes and senior portfolio strategists at 82 sovereign wealth funds and 59 central banks. Combined, these investors are responsible for managing around US$19 trillion in assets (as of March 2021).

9th
annual study of sovereign investors

141
chief investment officers, heads of asset classes and senior portfolio strategists

Running since 2013

82
sovereign wealth funds

59
central banks

US$19T
in assets (as of March 2021)

With Covid-19 top of mind, impacting both operations and investment strategies, the impact of the ongoing pandemic is the major theme running throughout. This includes an examination of adjustments made in response to the crisis and the impact on long-term trends, including rising allocations to illiquid private markets and interest in China.

Our first theme focuses on asset allocations and liquidity. Governments, faced with fiscal challenges, have turned to sovereigns to help plug their spending deficits. While some funds were well prepared, others have had to make rapid adjustments to generate liquidity. In this theme we also look at how a sharp drop in yields has impacted portfolios, shifting capital away from fixed income toward equities and illiquid private markets.

In our second theme we report an increased focus on ESG, with the pandemic serving to highlight existing structural and environmental challenges. Among central banks the shift has been rapid, with a significant increase in consideration of climate change. ESG is also a focus for sovereigns, with a desire to achieve a positive environmental impact supported by an opportunity to deliver favourable investment returns.

Theme three examines the increasing appeal of China. Improving access and opportunities for attractive returns are notable drivers, buoyed by innovations in areas such as technology and increased openness to foreign investment in sectors such as infrastructure. That said, political tensions continue to pose a challenge, with this risk seen as having become more acute over the past 2 years.

In theme four we focus on real estate, an asset class that has been disproportionately impacted by Covid-19 in certain regions and sectors. Many highlighted the current market conditions as a buying opportunity, prepared to ride out short-term uncertainty and often emboldened by their long-term investment horizons. Sovereigns continue to be discerning in terms of both region and sector, focusing on mature markets with stable regulatory environments, and on industrial and residential sectors that have been less affected by the pandemic.

In our final theme we report ongoing changes in the management of central bank reserve assets. Here we find evidence of a structural change in the way that central banks are thinking about risk, with a move towards viewing risk on a portfolio basis rather than at the single asset level. This is driving an increase in the use of non-traditional 'risk assets' which are now seen as lowering risk via diversification at the same time as improving returns.

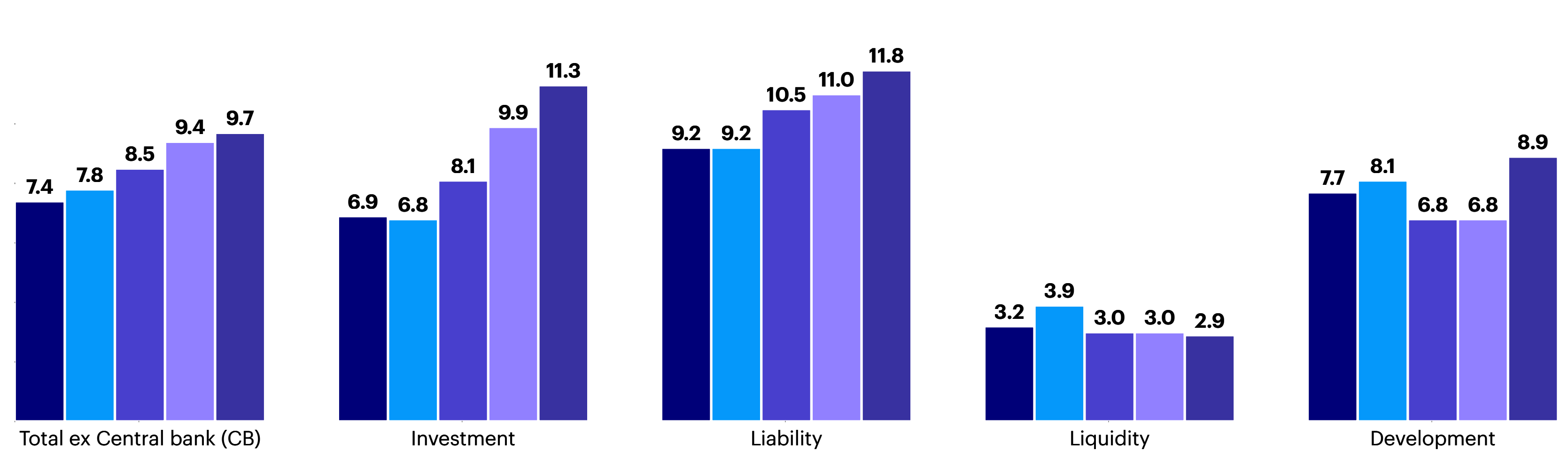
We hope this report gives you an interesting and informative insight into the world of sovereign investors. If you would like to discuss these findings or have any questions, please do get in touch. For more content on this year's themes, please visit **igsams.invesco.com**

Key metrics

Investment horizons
Sovereign investors have continued the trend of extending their investment time horizons, building on the consistent increases reported in previous studies. In 2021, sovereigns reported an investment horizon of 9.7 years, versus the 9.4 years reported in 2020. This has been driven by investment, liability, and development sovereigns, primarily as a reaction to the market turbulence caused by Covid-19. Conversely, liquidity sovereigns have kept their investment horizons consistent at 2.9 years with the threat of drawdowns to fund pandemic responses ever present.

Figure A
Time horizon of investment objective (years)

■ 2017 ■ 2018 ■ 2019 ■ 2020 ■ 2021

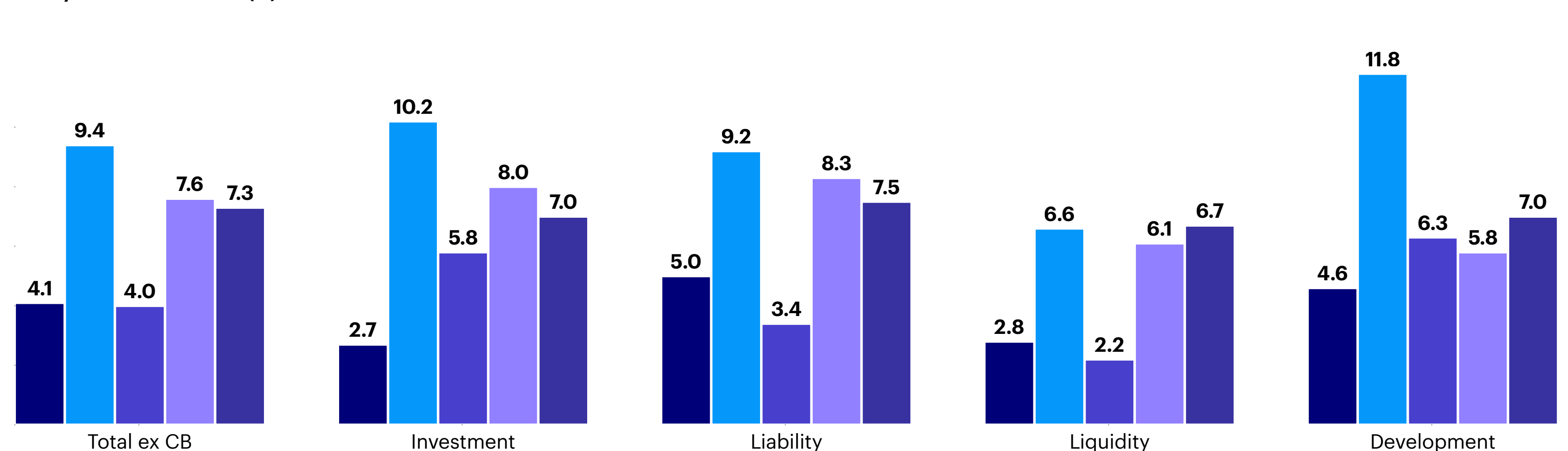


How long is your investment horizon?
Sample size: 2017 = 57, 2018 = 64, 2019 = 65, 2020 = 58, 2021 = 55

Performance
Sovereign investor performance in 2020 remained strong, despite challenging market conditions, as performance fell slightly to an average return of 7.3%. Returns were relatively consistent across sovereign segments, especially when compared with the variance seen in previous years. In comparison to the previous year, development and liquidity sovereigns saw an increase in their average returns of 1.2% and 0.6% respectively, with liquidity sovereigns benefitting from capital appreciation given falling fixed income yields. Conversely, investment and liability sovereigns registered reductions in average returns of 1.0% and 0.8% respectively.

Figure B
One-year actual returns (%)

■ 2016 ■ 2017 ■ 2018 ■ 2019 ■ 2020



What has been your fund's percentage annualised return (at 31st December 2020) over the past 1 year?
Sample size: 2016 = 49, 2017 = 52, 2018 = 55, 2019 = 71, 2020 = 61

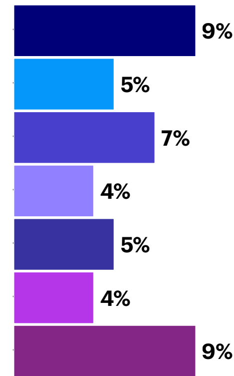
Asset allocation
Fixed income allocations decreased in 2021, moving from 34% to 30% of the portfolio, as sovereigns looked elsewhere for returns in the face of falling yields. Conversely, following the severe but swift market crash in the first quarter of 2020, equities have rebounded strongly and equity allocations within sovereign portfolios has risen to 28%, up from 26% in 2020.

Over the last 12 months, sovereigns have strived to maintain portfolio liquidity and to protect against potential future drawdown requests, leading to an increase in their cash holdings to 9% from 4% in 2020. As a result, illiquid alternatives have noted a minor downtick in portfolio penetration for the first time since 2015.

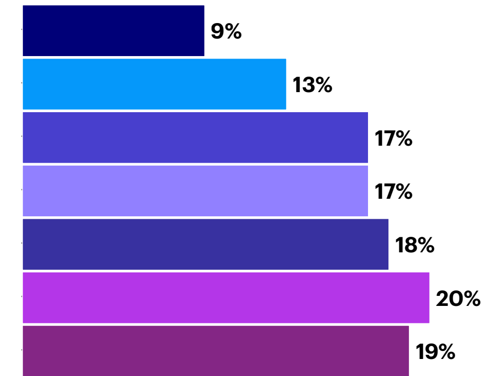
Figure C
Asset allocation trends (% Assets under management (AUM))

2015 2016 2017 2018 2019 2020 2021

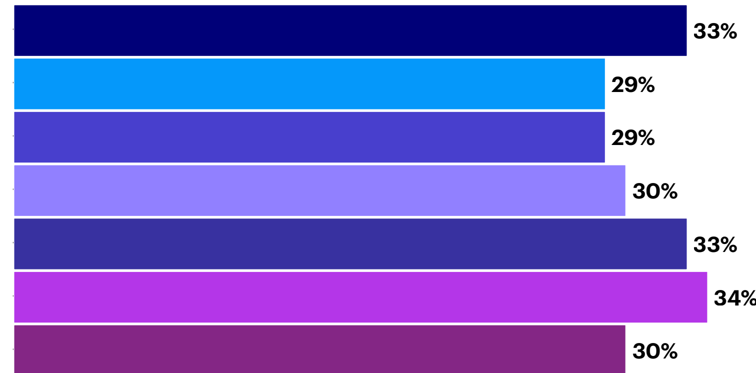
Cash



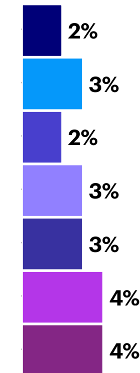
Illiquid alternatives



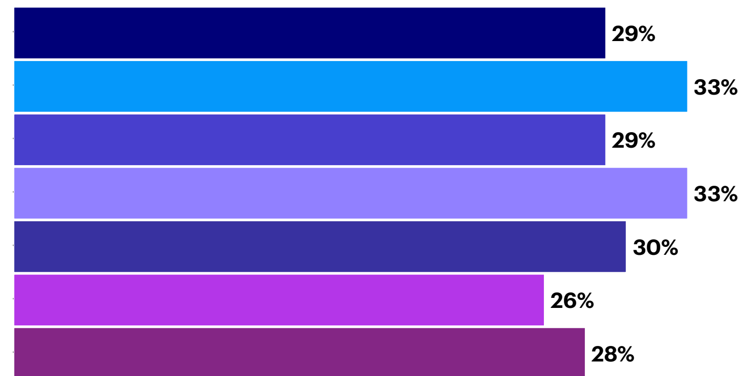
Fixed income



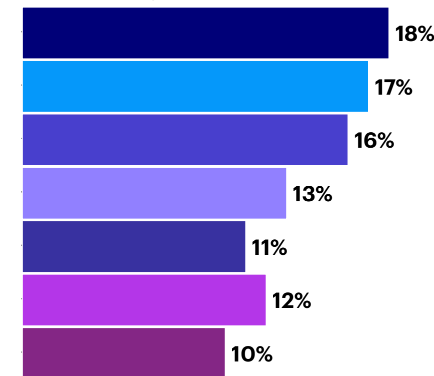
Liquid alternatives



Equity



Direct Strategic Investments (DSI)

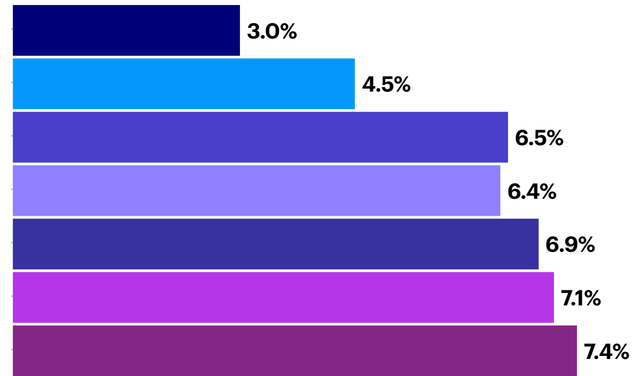


What is the current allocation for the following assets?
Sample size: 2018 = 63, 2019 = 53, 2020 = 78, 2021 = 54

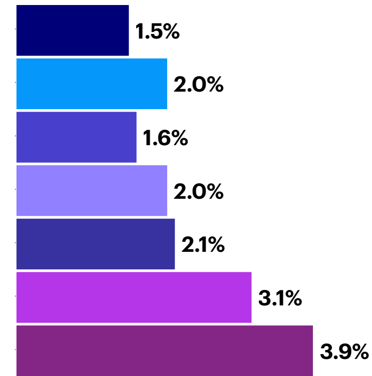
Figure D
Alternative investment asset allocation trends (% AUM)

■ 2015 ■ 2016 ■ 2017 ■ 2018 ■ 2019 ■ 2020 ■ 2021

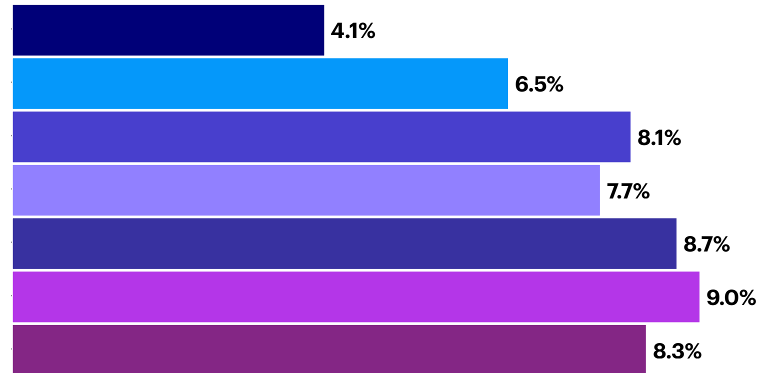
Private equity



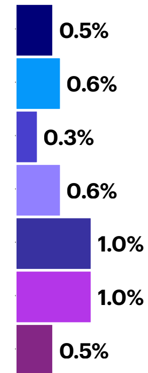
Hedge funds/absolute return funds



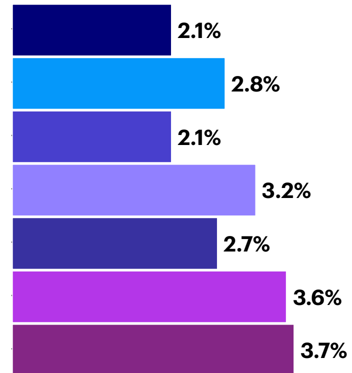
Real estate



Commodities



Infrastructure

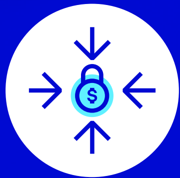


What is the current allocation for the following assets?
Sample size: 2018 = 63, 2019 = 53, 2020 = 78, 2021 = 54

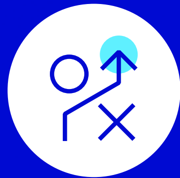
Theme 1

Liquidity in focus as Covid-19 leads sovereigns to face drawdowns and double cash reserves

The impact of Covid-19 on public finances meant that more than a third of sovereigns saw drawdowns during 2020, prompting a shift towards cash; some funds continue to focus on liquidity in anticipation of further withdrawals.



Low yields and high duration risk mean that fixed income allocations have been reduced and are expected to fall further, with equities and private markets benefitting.



However, sovereigns are concerned that equities are overvalued, with allocations increasing simply because they have 'nowhere else to go'. This risk is being mitigated by increasing active strategy allocations and lengthening investment horizons.

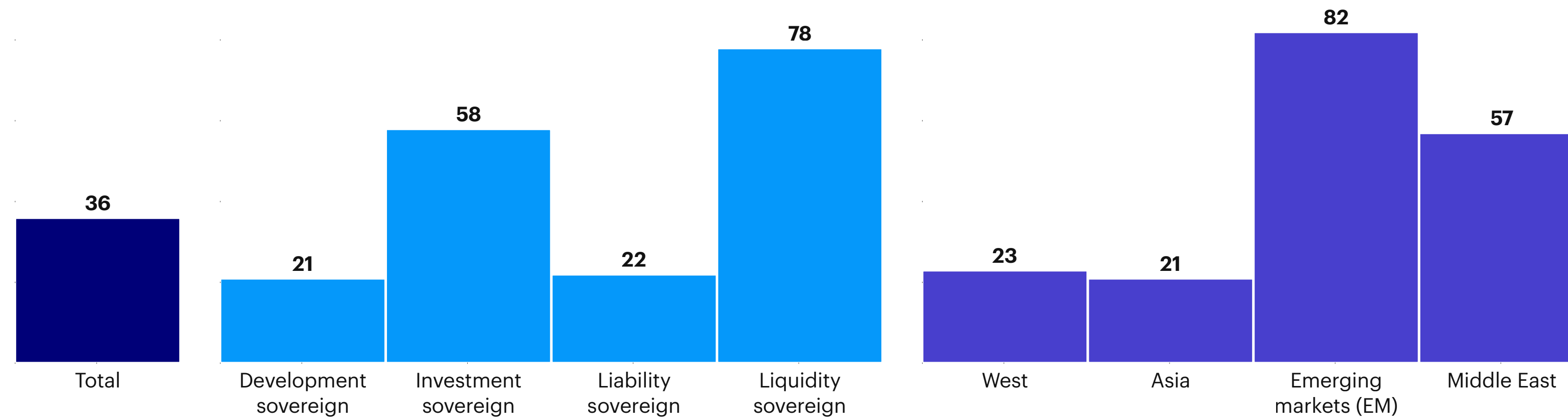
Covid-19's impact on public finances led some governments to tap their sovereign wealth funds for capital in 2020 to fund spending and plug budget deficits. More than a third of sovereign wealth funds interviewed for this year's study in January and February of 2021 registered drawdowns (Figure 1.1), including 78% of liquidity sovereigns and 58% of investment sovereigns.

For liquidity sovereigns, drawdowns are a familiar, if not exactly welcome, phenomena consistent with their purpose. Their objectives generally include investment returns alongside liquidity or stabilisation. Such stabilisation could include stabilising the currency, being called on to fund budget shortfalls or to stimulate demand in the economy. In response to Covid-19, governments rushed to implement policy measures designed to prop up public services such as health, as well as providing support for businesses and households at a time when tax revenues retreated with depressed economic activity. This created a perfect storm for budget deficits and rising government debt, ensuring many liquidity sovereigns were called upon to plug the gaps.

We are holding back on risky or illiquid assets due to liquidity needs.

Liquidity sovereign
Africa

Figure 1.1
Percentage of funds registering drawdowns due to Covid-19 (% citations, sovereigns only)



Has Covid-19 led to drawdowns of your fund?
Sample size: 118

Those liquidity sovereigns in economies with continuing fiscal challenges are anticipating more withdrawals. "We saw a large withdrawal and could face more over coming years," said one Latin American liquidity sovereign, adding: "the purpose of our fund is to fund fiscal deficits, and fiscal pressures mean we are a likely to face ongoing withdrawals until the situation normalises".

The 2020 edition of this study observed commodity-based sovereigns bracing for withdrawals. As illustrated by the number of investment sovereigns registering drawdowns during the year (58%), they were proven correct. Many of the investment sovereigns in this study are located in commodity-based economies **(Figure 1.2)** and a collapse in demand for many commodities, including oil, combined with the fiscal pressures highlighted above, all but guaranteed they would be called on for support.

Figure 1.2
Makeup of investment sovereign sample

Sample size: 13

Funds in the Middle East and Emerging Markets were most likely to be significantly impacted, with more than half such organisations seeing outflows **(Figure 1.1)**. While many funds had learned the importance of liquidity following the global financial crisis, the scale and speed of withdrawals for those that hadn't, meant a significant impact on allocations, and led to a rethink on liquidity risk management. "We are holding back on risky or illiquid assets due to liquidity needs," said one African liquidity sovereign.

But sovereigns have also been stepping in to directly support local economies by investing in sectors hard hit by Covid-19, such as travel and tourism. As one European-based development sovereign explains: "there was a very significant response at the fund level, setting up a new fund to invest in large companies in need of stabilisation finance, with the main consideration being the robustness of the business pre-Covid-19."

Liquidity in focus as sovereigns eye their illiquid assets and double cash reserves

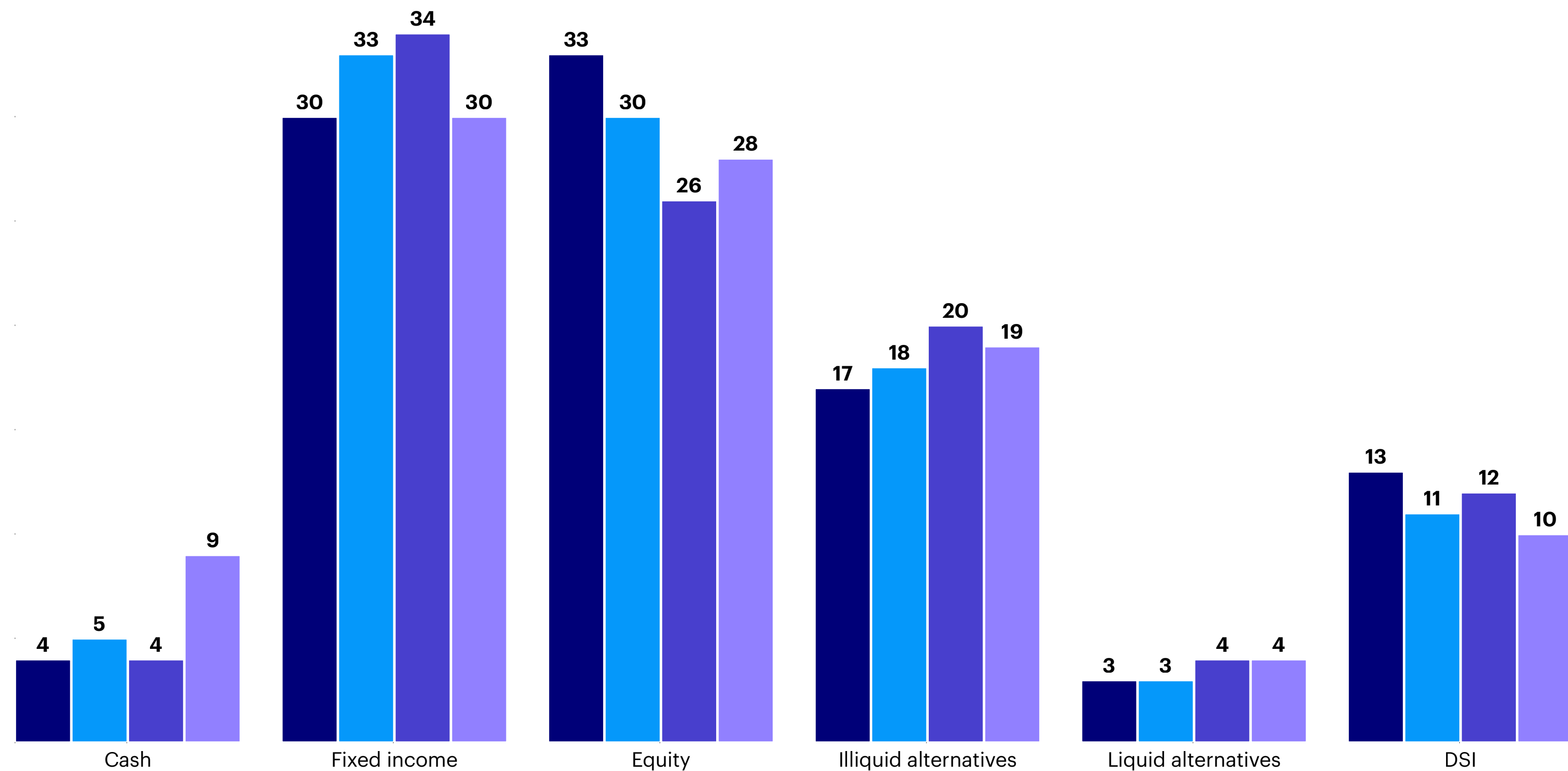
This drive for liquidity contributed to a more than doubling of portfolio cash reserves during 2020. A cut in allocations to direct strategic investments and illiquid alternatives (which includes property, infrastructure and private equity) also played a part **(Figure 1.3)**. Part of this reflects the immediate need to generate funds for current and anticipated outflows. However, sovereigns also noted that the pandemic had shone a spotlight on the importance of liquidity more generally, both as a buffer for future black swan events and to afford the flexibility to take advantage of market opportunities when they arise. Sovereigns noted that among their peer group, the best performing funds during the last year were generally those that had bought into liquid markets early on during the pandemic when prices fell sharply before rebounding.

Sovereigns with high allocations to illiquid asset classes, of which there are many, are in a bind: on the one hand, illiquid alternatives are essential contributors to investment returns, while on the other, they also curtail flexibility to bolster existing positions or take advantage of further volatility. As one investment sovereign in APAC said, “private markets are a vital source of additional return in our investment model, if we are to generate the alpha required to achieve our mandate. But there’s a balance in portfolio construction between hunting and gathering illiquidity premia and bespoke investment opportunities, while retaining enough flexibility and liquidity to be tactical and go where you want quickly should the opportunity arise.”

…there’s a balance in portfolio construction between hunting and gathering illiquidity premia and bespoke investment opportunities, while retaining enough flexibility and liquidity to be tactical and go where you want quickly should the opportunity arise.

Investment sovereign
APAC

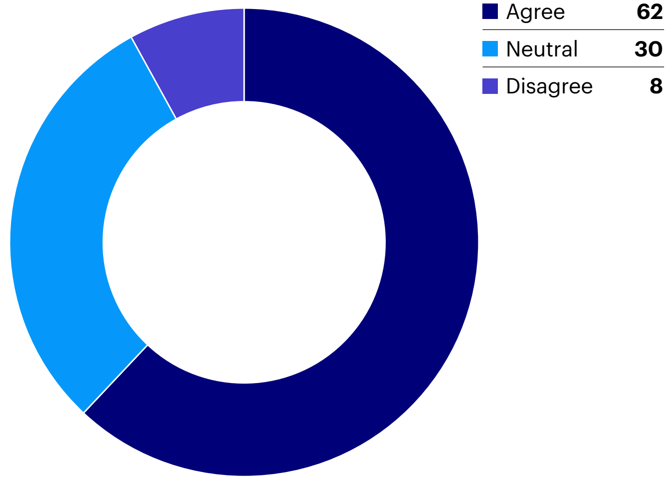
Figure 1.3
Asset allocations (mean %, sovereigns only)



What is the current allocation for the following assets?
Sample size: 2018 = 63, 2019 = 53, 2020 = 78, 2021 = 54

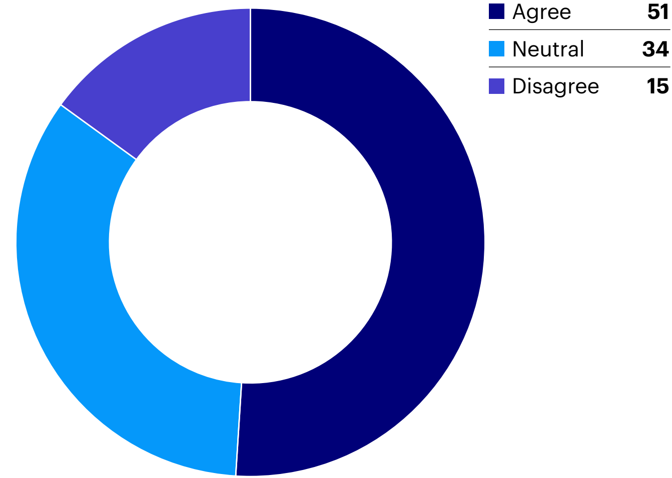
Figure 1.4
Sovereigns' views on the changing role of fixed income (% citations, sovereigns only)

Falling yields mean that fixed income allocations no longer act as a natural buffer in a risk-off environment



Agree	**62**
Neutral	**30**
Disagree	**8**

We are looking at other asset classes to perform the risk reducing role of fixed income



Agree	**51**
Neutral	**34**
Disagree	**15**

Do you agree or disagree with the following statements?
Sample size: 60

The traditional diversifying exposures for a large institutional investor, vis-à-vis nominal duration, is questionable given nominal rates are parked at zero today. The situation with regard to real rates is, of course, even worse, with the outlook not offering much hope for improvement. To what extent are rates able to provide the defensive balance and diversification in our portfolio construction? It's a concern.

Liability sovereign
APAC

The challenge of reformulating portfolios to diversify and better manage liquidity requirements has been compounded by a sharp drop in yields, as the widespread easing of monetary policy in response to the pandemic pushed rates ever lower.

Persistent low rates had been challenging traditional portfolio construction among larger sovereigns for some time, as noted by this APAC liability sovereign: "The traditional diversifying exposures for a large institutional investor, vis-à-vis nominal duration, is questionable given nominal rates are parked at zero today. The situation with regard to real rates is, of course, even worse, with the outlook not offering much hope for improvement. To what extent are rates able to provide the defensive balance and diversification in our portfolio construction? It's a concern."

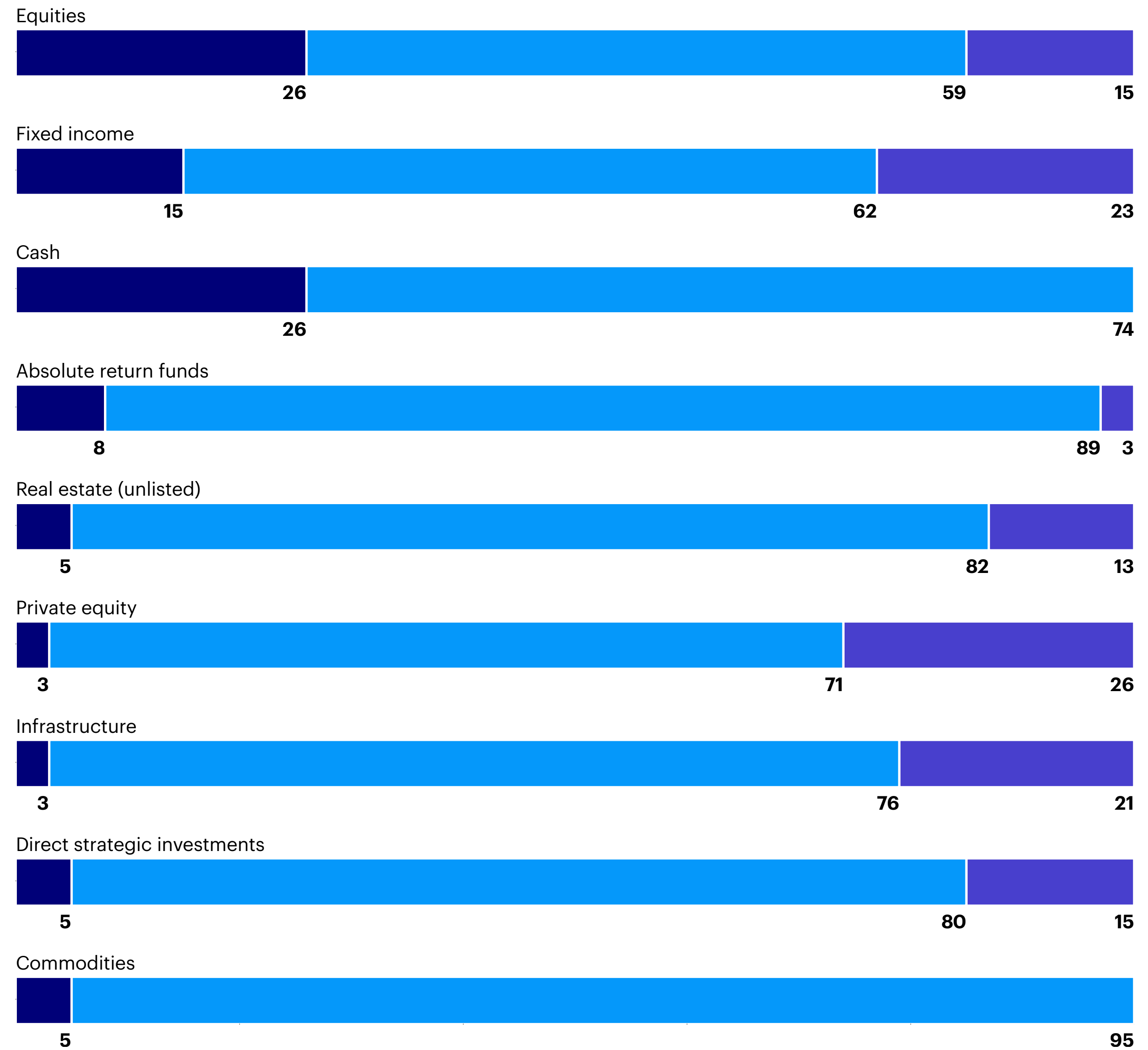
As a result, fixed income allocations fell sharply during the year. Ultra-low rates combined with concerns about the possibility of stimulus-driven inflation to make fixed income even less attractive **(Figure 1.4)**. "The low yield environment means we have taken a lot away from high yield fixed income and EM debt, as we are just not finding a lot of opportunity in those spaces," explained a North American liability sovereign.

Equity allocations increasing, albeit sometimes reluctantly

Equities were the main beneficiary of this repositioning, reversing a two-year trend of declining allocations. Many of the better prepared sovereigns bought into equities opportunistically at the height of the pandemic, and the subsequent rebound in valuations has left more than a quarter of sovereigns overweight **(Figure 1.5)**.

This turn to equities is being done somewhat reluctantly by many respondents, due to them having 'nowhere else to go'.

Figure 1.5
Current asset allocation weights relative to strategic asset allocation (SAA) (% citations, sovereigns only)

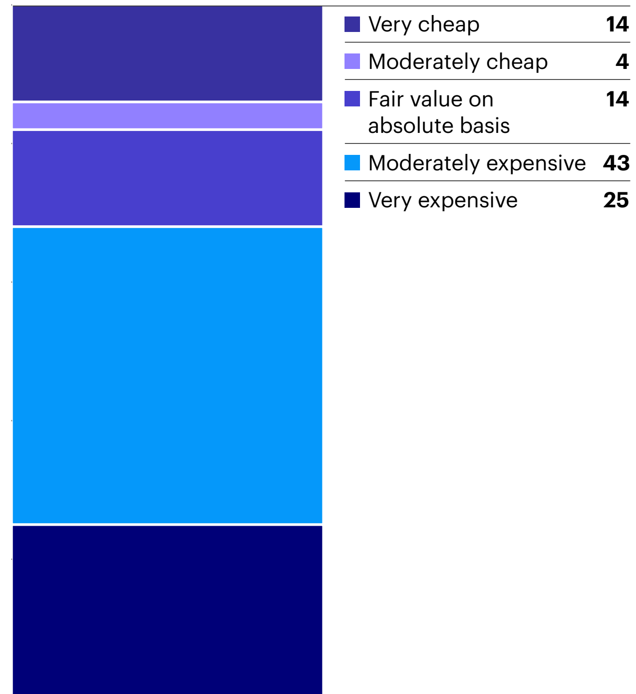


For each asset class, are you currently overweight, at target or underweight relative to your current SAA?
Sample size: 39

This movement towards equities and away from fixed income is expected to continue over the coming year, boosted by higher allocations from investment sovereigns and liability sovereigns **(Figure 1.6 and 1.7 [on next page])**.

This turn to equities is being done somewhat reluctantly by many respondents, due to them having 'nowhere else to go'. Three-quarters of sovereigns said that equities are overvalued on an absolute basis, with generous stimulus measures and the high demand for corporate debt seen as flattering company valuations **(Figure 1.8)**. "Because of low interest rates there is nowhere for people to put their cash so it is all going into equities and pushing prices up. If interest rates were to go up this could then reverse" said an APAC-based liability sovereign.

Figure 1.8
Equities valuation on an absolute basis (% citations, sovereigns only)



How do you view current equity valuations on an absolute basis?
Sample size: 28

Figure 1.6
Intended change in allocations over next 12 months (% citations, sovereigns)

Asset class	Decreasing Significantly (> 5%)	Decreasing (1-5%)	Maintaining	Increasing (1-5%)	Increase Significantly (> 5%)
Equities	2	10	58	15	15
Fixed income	10	23	51	11	5
Cash	6	15	76	3	
Absolute return funds	2	10	83	5	
Real estate (unlisted)		10	57	15	18
Private equity	2	15	57	11	15
Infrastructure		6	55	24	15
Direct strategic investments	5	5	66	11	13
Commodities		5	92	3	

For each asset class, do you intend on increasing / maintaining / decreasing your SAA over the next 12 months?
Sample size: 62

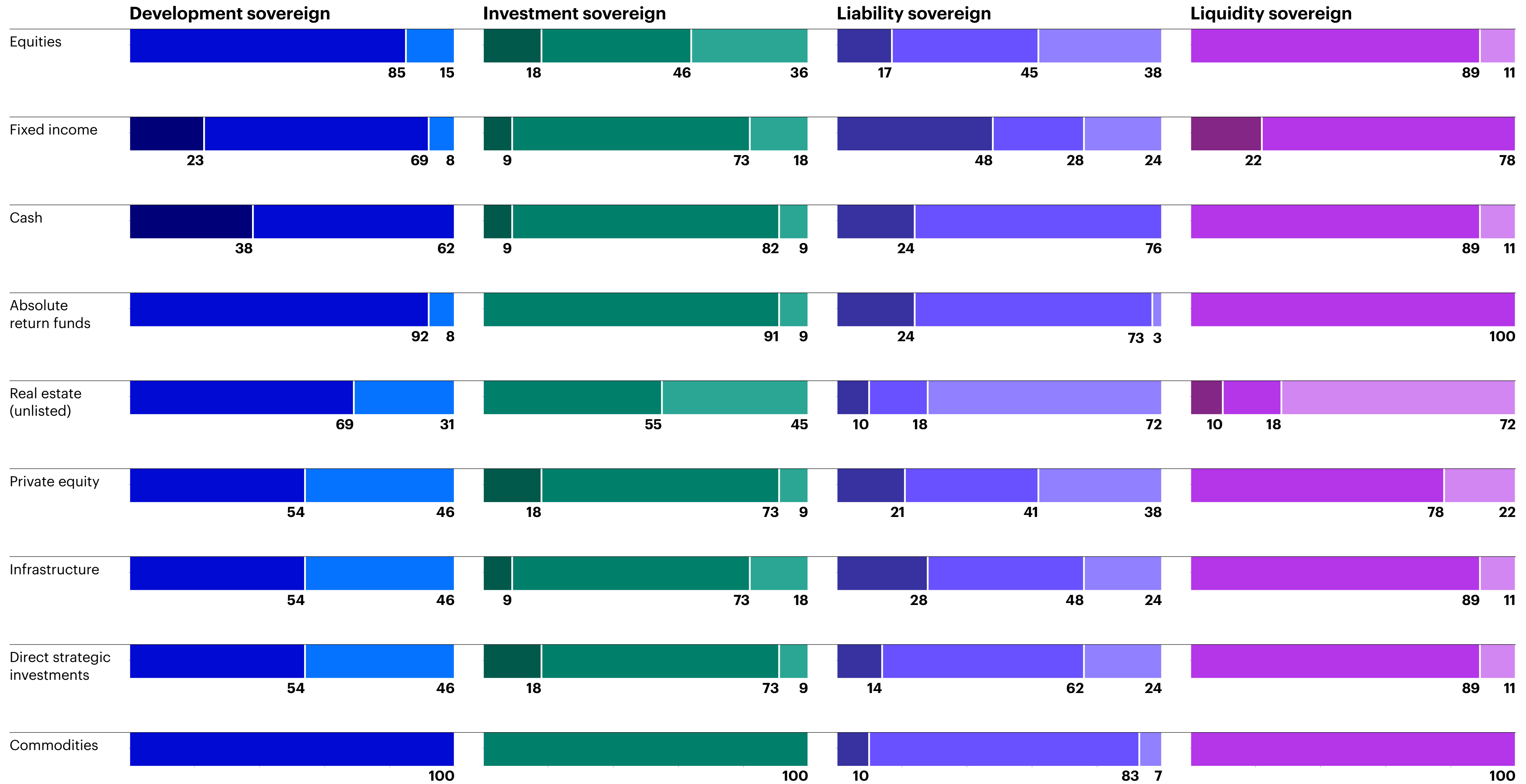
Figure 1.7
Intended change in allocations over next 12 months by segment (% citations, sovereigns)

Development sovereign
- Decreasing
- Maintaining
- Increasing

Investment sovereign
- Decreasing
- Maintaining
- Increasing

Liability sovereign
- Decreasing
- Maintaining
- Increasing

Liquidity sovereign
- Decreasing
- Maintaining
- Increasing



For each asset class, do you intend on increasing / maintaining / decreasing your SAA over the next 12 months?
Sample size: 62

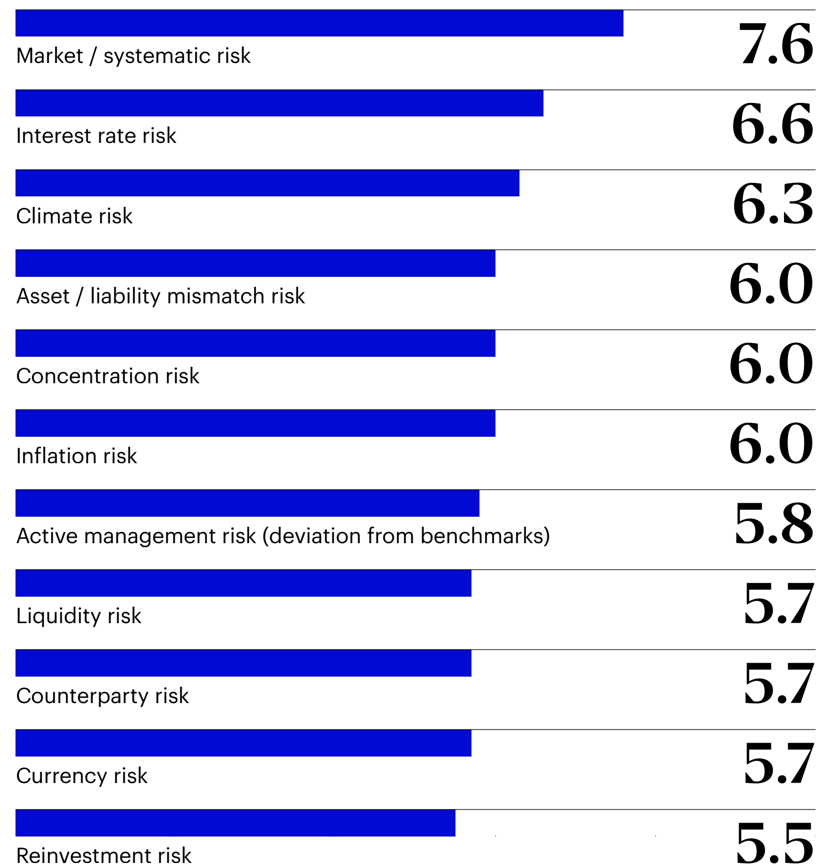
Indeed, current valuations were viewed as only being justified by very bullish post-pandemic growth assumptions. High levels of uncertainty surrounding this scenario have led to increased perceptions of risk. Market risk is seen as by far the most important portfolio risk **(Figure 1.9)** and 57% of sovereigns say that it has increased due to Covid-19 **(Figure 1.10)**. "Market risk is our biggest concern. We are always thinking about how long the bull market will continue and whether yields will continue to be depressed," said a North American liability sovereign, adding: "at the same time we need to deliver sufficient returns and have enough liquidity to meet all our commitments, which puts us in a challenging position".

Offsetting increased levels of market risk was therefore seen as a pressing challenge for many, particularly as the low yield environment meant that fixed income allocations were no longer seen as acting as a natural buffer in a risk-off environment.

Market risk is our biggest concern. We are always thinking about how long the bull market will continue and whether yields will continue to be depressed.

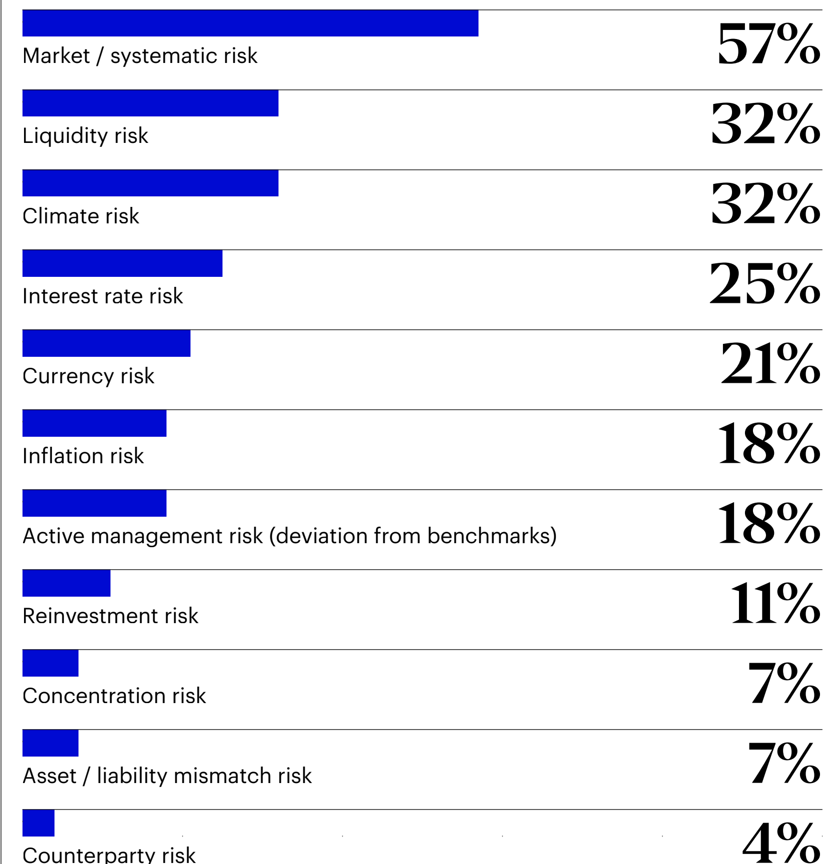
Liability sovereign
North America

Figure 1.9
Absolute level of importance of different portfolio risks (average score /10, where 10 = most important, sovereigns only)



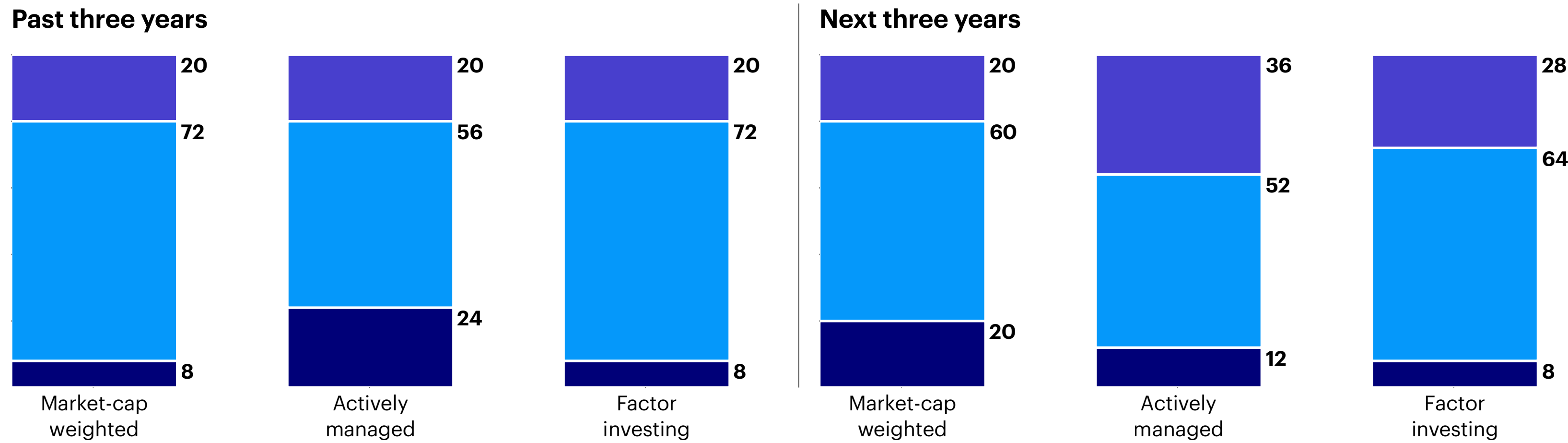
Rate the following portfolio risks in terms of importance to you right now.
Sample size: 43

Figure 1.10
Risks that have been assigned more importance in past year because of Covid-19 (% citations, sovereigns only)



Have any of these risks been assigned more importance as a result of Covid-19?
Sample size: 28

Figure 1.11
Change in market-cap weighted, active and factor allocations (% citations, sovereigns only)



Over the last 3 years how has your allocation to each changed? How do you expect these allocations to change in the next 3 years?
Sample size: 25

Part of the solution has been to move away from market-cap weighted (passive) investing towards more active management. Some 36% of sovereigns plan (over the next three years) to rotate back to active management, while factor-based investing is also seeing an uptick (28%) **(Figure 1.11)**. This represents a partial reversal of the previous three years, which saw a slight shift away from active management towards passive and factor strategies.

This was the experience of this APAC investment sovereign, who said "historically we'd moved away from long only active management and focused heavily on efficient beta management and factor investing, building a stable of long-short market neutral type equity managers, more fundamentally oriented than a hedge fund programme.

We may have taken this approach too far and are now looking again at opportunities from active management. We will have high standards, though". This EMEA central bank share similar sentiments, "Certain investment risks became more aggravated due to market volatility, and interest rates took a dip. So, we needed to manage those in a more active manner".

At the same time, a fifth of investors were extending their investment horizons, in part to help protect against higher volatility resulting from a rotation into higher risk strategies **(Figure 1.12)**.

Figure 1.12
Change in investment horizons (% citations, sovereigns only)

Has your investment horizon changed over the a) past year and b) past 5 years?
Sample size: 74

In the past 12 months, we moved from bonds to equities and are now looking to grow our alternative assets.

Liability sovereign
APAC

Private market allocations fill the role of fixed income for some

Private markets look set to be the other major beneficiary of falling fixed income allocations, with liability sovereigns a key driver, as they look to replace fixed income returns. "In the past 12 months, we moved from bonds to equities and are now looking to grow our alternative assets," said one APAC liability sovereign, which had moved away from fixed income because of the low interest rate environment.

The collapse in fixed income yields means that private market asset classes that might perform a similar risk-reducing role to fixed income have begun to look more attractive on that basis. However, opportunities in real estate and infrastructure are often hampered by high levels of competing capital. This has implications for deal-flow and means many funds continue to struggle to reach their allocation targets **(see Figure 1.5, on page 11)**. When combined with increased demands for liquidity, and with many funds wishing to maintain flexibility in the face of post-pandemic uncertainty, equities look set to continue to attract sovereign investor flows.

...the pandemic has brought the handover to fiscal policy from monetary policy into focus. Given monetary policy is out of gas, and has been for some time, the shift has quickened.

Investment sovereign
APAC

Inflation concerns muted as sovereigns focus on pandemic's influence on asset allocations

When asked which macro themes were influencing their allocations, Covid-19 unsurprisingly continue to dominate, with sovereigns pointing to the ramifications for the global economy, potential risks to existing asset allocations but also the potential for further opportunities **(Figure 1.13)**.

Climate change risks were also high on the agenda and are dealt with in more detail in Theme 2. It was notable that even among some more opaque sovereigns and those (particularly commodity-based) less inclined to public commentary around climate, programmes were being implemented to quantify and measure the potential impact of climate change on their portfolios.

Inflation was a lower ranked concern for sovereigns in January and February when interviews were conducted. For some, inflation concerns were a derivative of broader policy concerns and complexity around the balance between monetary and fiscal policy. As one APAC investment sovereign noted, "the pandemic has brought the handover to fiscal policy from monetary policy into focus. Given monetary policy is out of gas, and has been for some time, the shift has quickened".

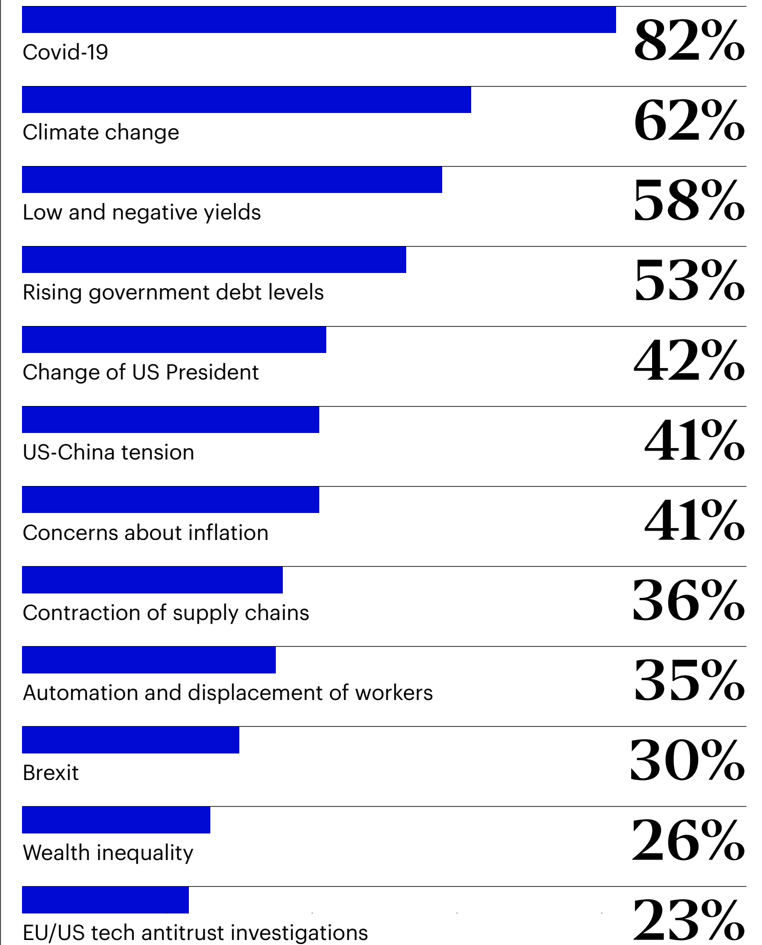
Importantly, these views were captured in the early days of the Biden administration and prior to the March announcements of its US$1.9 trillion Covid-19 relief bill and the unveiling of a US$2 trillion infrastructure plan later that month. Several sovereigns had taken a 'believe it when I see it' approach, having watched years of monetary policy easing have little to no impact on inflation.

Conversations around inflation were often anchored in structural changes to trade that could arise as a result of Covid-19 and the potential for de-globalisation. Globalisation and supply chain efficiency has long been associated with sustained, lower inflation as more open trade and the movement of production facilities to lower cost economies kept production costs and prices low.

The initial months of the pandemic brought concerns over the disruption of supply chains from lower economic activity and potential difficulties moving goods. However, as one European liability sovereign noted, "one of the biggest surprises of last year was how well most things worked. I know we talked a lot about supply chains, but I don't think we saw much disruption really. I think that supply chains will be much more affected by geopolitics than the pandemic". This concern over geopolitical risk was echoed by an investment sovereign in APAC, who said "deglobalisation, all else being equal, is inflationary". But it was not considered to be a fait accompli, as "deglobalisation won't necessarily translate to uniform global inflation".

While inflation concerns were subordinate to the broader Covid-19 theme and climate change, two-fifths of respondents flagged inflation concerns as having an impact on their allocations. "In the major economies we invest in, like the US and to a lesser extent the UK and Europe, and even parts of the emerging world, we think there are incipient inflation risks," said one Middle East based investment sovereign, adding: "We do think the bias is toward higher-than-expected inflation for the next decade".

Figure 1.13
Macro themes influencing asset allocation decisions (% citations, sovereigns only)



Are any of the following themes influencing your asset allocation decisions?
Sample size: 66

Juggling climate and rate risks, post-pandemic

As with the financial crisis of 2008, the lessons learnt from the pandemic will likely have a long-lasting impact on how sovereigns think about risk, with liquidity pushed much higher up the agenda for many. The importance of maintaining liquidity to take advantage of market opportunities as they arise, and being open to these kinds of opportunities, has also come to the fore. At the same time, generating sufficient returns in the face of an extremely low interest rate environment is having a substantial and potentially long-lasting impact on strategic asset allocations and perception of market risk. While inflation was not top of mind at the time of fieldwork, it was a factor in the significantly reduced appetite for investing in fixed income, with interest rates seen as only likely to move in one direction. Stimulus measures, combined with successful vaccine rollout, could bring this scenario to the fore. Managing these and other risks, including climate and geopolitical risk, while also delivering on return objectives is a central challenge facing sovereigns and is explored further throughout this report.

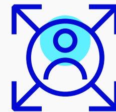
Theme 2

Pandemic catalyses ESG adoption while impact investments grow in importance

Around a third of respondents say that the pandemic has led to an increased focus on ESG, shining a spotlight on the environmental impact of human activity and the role of inequality and labour standards on health outcomes.

Many respondents believe climate change is not fully factored into market prices, offering opportunities for additional returns.

Sovereigns have adopted a range of ESG strategies, with 'impact' investments of growing importance among development sovereigns.



Central bank ESG adoption has begun to push against the constraints of mandates as climate concerns increasingly become integral to the macro framework.

This study has tracked a significant increase in the incorporation of environmental, social and governance (ESG) principles into sovereign and central banks portfolios since 2017 (Figure 2.1). In just four years the proportion of respondents adopting an ESG policy at the organisational level has increased dramatically, rising from 46% to 64% among sovereigns and from 11% to 38% among central banks.

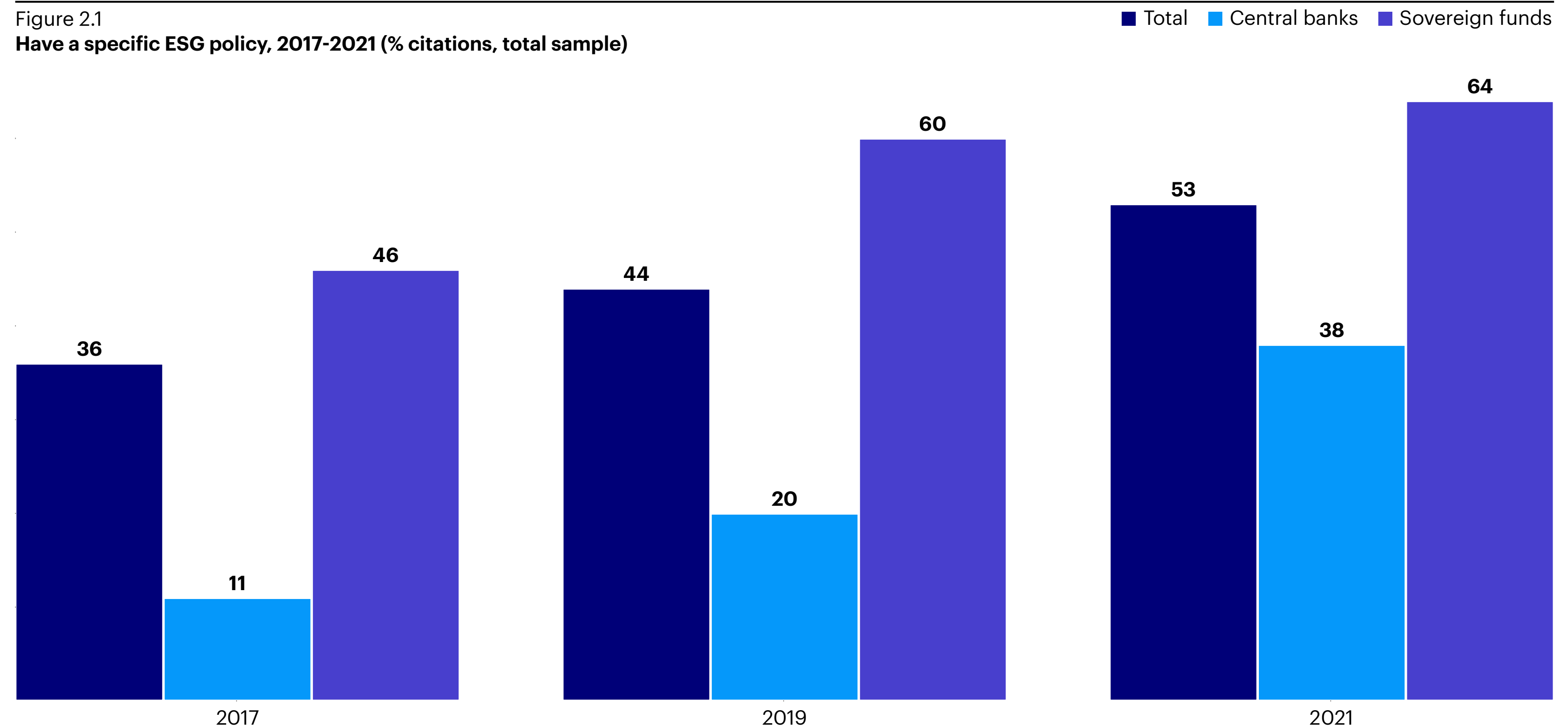
Our 2017 study saw sovereigns divided on the case for ESG, despite often possessing characteristics well-aligned to its principles (size, scale, reach, long-term investment horizons). The supporters pushed adopting ESG into their investment processes while others hesitated, citing an insufficient fact base by which to assess the impact on risk and returns.

By 2019, ESG had gained traction among both sovereigns and central banks. Increased focus, research and investment provided previous non-supporters with confidence that they would derive value from its application, with the 'E' as the focal point.

Last year's study found this focus among sovereigns and central banks had zeroed in on climate change, in particular climate-proofing their portfolio by tracking carbon exposure, setting carbon standards, and finding assets to meet their stated climate-related objectives. Furthermore, we found these sovereigns looking for 'winners' in the shift to a low-carbon economy, sometimes with direct investment. ESG had taken hold and, while some had still to adopt formal policies, the divide had skewed to action and impact.

In just four years the proportion of respondents adopting an ESG policy at the organisational level has increased dramatically.

Figure 2.1
Have a specific ESG policy, 2017-2021 (% citations, total sample)



Do you have an ESG policy?
Sample size: 75

The pandemic sharpens ESG focus amidst competing priorities

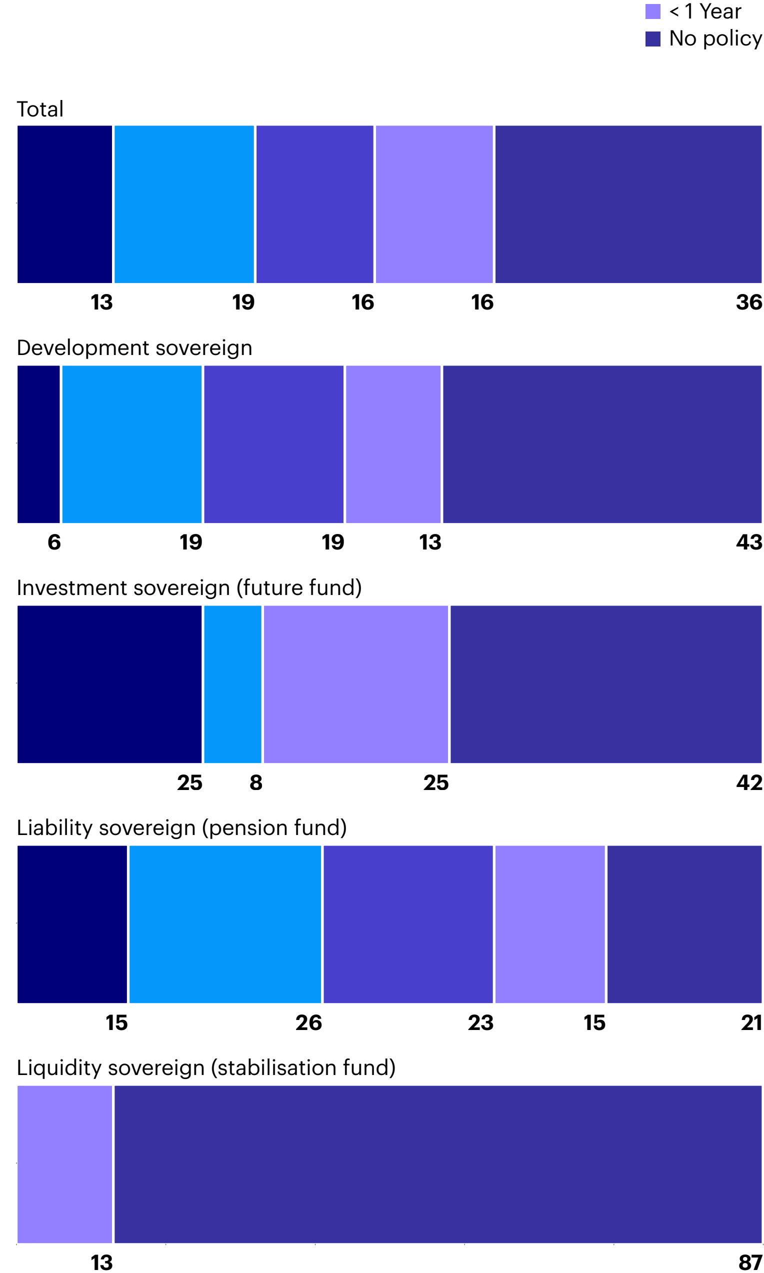
The pandemic has catalysed greater ESG adoption, supported by a spree of product launches. This has been true of sovereigns and central banks **(Figure 2.3)**. Even as they surveyed the impact of the pandemic on their portfolios and opportunities in a recovery, Covid-19 increased their ESG focus. As **Figure 2.3** highlights, nearly a quarter (23%) of sovereigns and 44% of central banks increased their focus on ESG through the pandemic.

Sovereigns' ESG commitment is in stark contrast to the attitudes observed in the 2017 edition, which pointed to persistent reluctance by some to pursue ESG considerations at all, let alone during a crisis that exacerbates competing priorities.

Idiosyncrasies arising from differences in the purpose of sovereign wealth funds is a consideration and helps explain the extent to which ESG has been adopted in the first place, and how it conditions the response to Covid-19. The relative focus on liabilities, liquidity, development, or 'pure' investment is the most important distinction between them and is the most important factor underpinning this Study's continued segmentation of sovereigns into liquidity, development, investment, and liability sovereigns.

As described in theme 1, liquidity (or stabilisation) sovereigns are more focused on maintaining liquidity to assist funding budget shortfalls, for example. Indeed, only 13% of liquidity sovereigns have a formal ESG policy and among the 13% that do, their policies have been adopted only in the last year **(Figure 2.2)**. As reported by one emerging market liability sovereign, "our focus on ESG shifted to more urgent needs such as liquidity management".

Figure 2.2
Length of time having a specific ESG policy (% citations, sovereigns only)

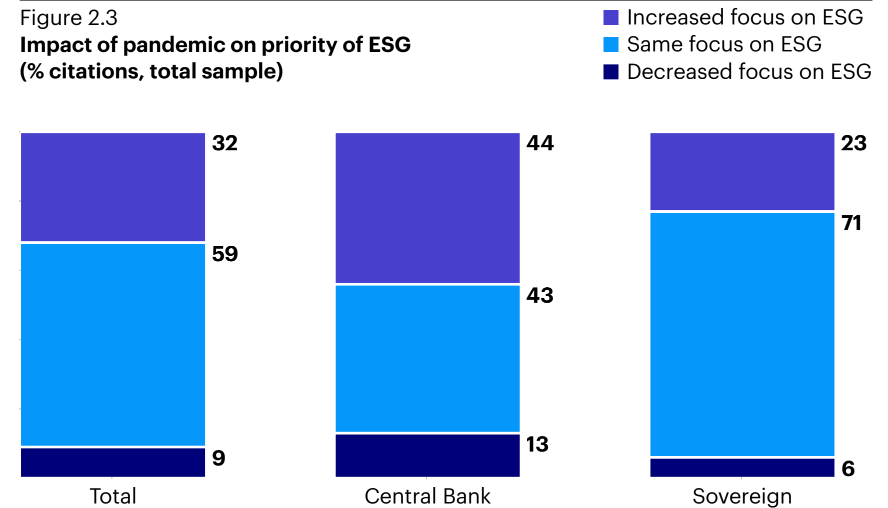


How long have you had your ESG policy?
Sample size: 75

...our focus on ESG shifted to more urgent needs such as liquidity management.

Liability sovereign
Emerging market

Figure 2.3
Impact of pandemic on priority of ESG (% citations, total sample)



How has the pandemic impacted your focus on ESG?
Sample size: 104

We do not think Covid-19 is a driver in itself of investment, economic or social paradigm shifts. We do think it may have accelerated some of those structural shifts which were already underway, including many of the factors which constitute ESG.

Liability sovereign
APAC

Also influencing emphasis on ESG has been the relative ESG maturity and sophistication of sovereigns. Indeed, the more mature and experienced an investor is in their ESG integration, the greater the likelihood the pandemic increased their focus on ESG considerations **(Figure 2.4)**. Already considered an extra dimension of risk management, if not a potential to enhance returns, for these sovereigns the pandemic served to catalyse ESG issues already being integrated or earmarked for future consideration, should the data show them to be identifiable, material and manageable.

As one APAC liquidity sovereign saw it, "We do not think Covid-19 is a driver in itself of investment, economic or social paradigm shifts. We do think it may have accelerated some of those structural shifts which were already underway, including many of the factors which constitute ESG."

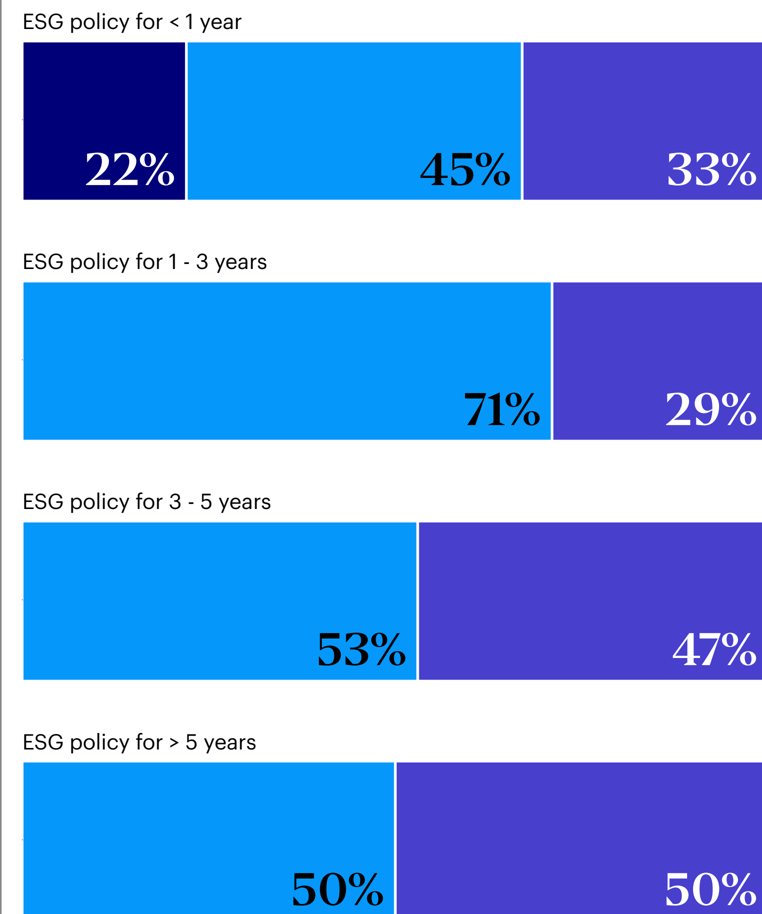
Overall, however, there is general recognition among sovereigns as well as central banks that Covid-19 has accelerated underlying ESG-related considerations in civil society and the global economy, not least their amplification in media coverage and public discourse. Sudden disruptions to economic activity lowered carbon emissions, often improving visibility in polluted cities or those recently under siege from wildfires. These served to highlight the environmental impact of human activity, while the health crisis and unemployment, visibly concentrated in vulnerable and low-paid groups, shone a light on inequality.

The result has been greater scrutiny of private enterprise. At the same time, public announcements of support for social causes and the commitments to carbon reduction goals pointed to the growing awareness by investors and businesses of the potential impact on enterprise value from management of risks highlighted by the pandemic.

The pandemic led some investors to focus on concerns that overlap, or are adjacent to, ESG. Indeed, for one APAC liability sovereign, Covid-19 had sharply elevated regulatory risk, noting, "Official institutions like regulators and even central banks are more willing to be interventionist than we had anticipated". This led to broader concerns, as "our dividend futures positions were jeopardised by European central bank actions to ban dividends, which greatly reduced our confidence. So, we accept carbon taxes as a given and we've recognised for some time that if that doesn't happen, the planet is in trouble".

Those deprioritising ESG tended to be more recent adopters who were more likely to prioritise the immediate investment concerns highlighted previously. Among them were a number of central banks for whom liquidity in the management of reserves became a prime concern.

Figure 2.4
Impact of pandemic on ESG focus by ESG maturity (% citations, total sample)



How has the pandemic impacted your focus on ESG?
Sample size: 100

Central banks aim to increase rate of ESG adoption; liquidity is a handbrake

Increased central bank interest in ESG has translated into investment activity. Many have a longstanding interest in green bonds due to the latter's explicit link to sustainable projects. Indeed, several respondents referred to the launch of green bond funds for central banks in US dollars and euros by the Bank for International Settlements (BIS). Funds such as these offer easier ESG implementation. "It's an interesting initiative and allows us to act quickly with a degree of certainty," said one EMEA central bank.

While the impacts of projects funded through green bond issuance vary, as does the degree in which investors can quantify this, many central banks stress such bonds provided an acceptable level of liquidity. Others, however, are more cautious: "We have not invested in BIS' green bond fund (for internal reasons) but probably will have a second look at it," explained one EMEA central bank: "the fund helps to develop this market among central banks but does not add significant liquidity."

Liquidity is still a key consideration for central banks. Several we spoke to were concerned that the wider and deeper they took ESG investing, the more it led them to ESG policy requirements that were too specific and involved more illiquid investments.

This spread of opinion is indicative of the nuance in ESG integration. Adoption may be increasing but it is neither universal nor being rolled out into investment processes in a uniform manner or speed. In fact, Covid-19 has forced ESG down the priority list for some central banks, with their attention diverted to other matters. "The last year has thrown up too many issues for us to focus on ESG," said another EMEA central bank: "Our attention has been directed to new asset classes in search of additional income." One reason for this was the low yields available from green bonds, a pervasive issue for fixed income that we explore in Theme 1.

Where central banks are increasing their focus on ESG and it is constituting a larger portion of their portfolio, their attention remains on environmental factors, particularly climate change, highlighted in our 2020 study. "Our primary focus is on the E in ESG, with climate the priority in the first stage," explained one EMEA central bank representative.

For both central banks and sovereigns, interest in climate change as an investment opportunity continues, buttressed by the belief in the prospect for enhanced returns. There is, however, some disagreement over the valuations of companies likely to benefit from climate change regulation **(Figure 2.5)**.

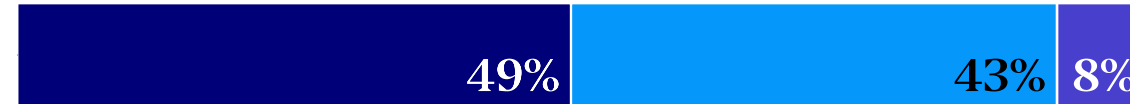
Central bank sentiment has shifted significantly over the past year. In 2021, 63% saw climate change as falling within their remit **(Figure 2.6)**. In 2020, it was 46%. The proportion that saw climate change as being a monetary policy objective were 45% and 41% respectively; and the percentage that viewed green bonds as a desirable foreign reserve objective were 64% and 35% respectively. The past 12 months has seen the dial shift on these objectives like we have seen with no other study. This can be partly ascribed to a significant number of European banks introducing ESG in anticipation of mandatory requirements by the ECB, as one respondent explained: "Monetary policy implementation of ESG is gaining traction in the Eurozone and we see this as an interesting and important issue. This is likely to be driven by the policies of the European commission, implemented through the criteria related to collateral framework. For example, adding ESG criteria to the existing minimum requirements in terms of credit risk."

Figure 2.5
Agreement with statements on ESG (% citations, total sample)

■ Agree ■ Neutral ■ Disagree

The market has not fully priced in the long-term implications from regulation related to climate change

Meeting interim 2030 emission-reduction targets will be a critical turning point for global warming



Concern that ESG lowers returns prevents wider integrating within our portfolio

To what extent do you agree with the following statements?
Sample size: 118

Figure 2.6
Central bank agreement with statements on climate change (% citations, central banks only)

■ Agree ■ Neutral ■ Disagree

Tackling climate change falls within the mandate of central banks

Mitigating the consequences of climate change should be a monetary policy objective

Green bonds are a desirable foreign reserve investment

To what extent do you agree with the following statements?
Sample size: 118

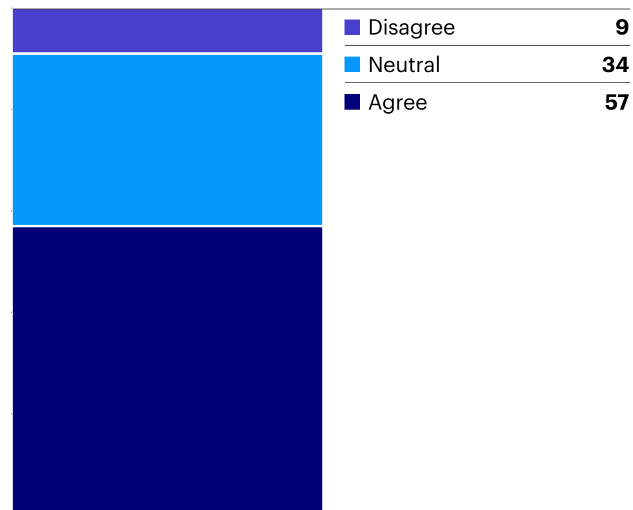
Sovereign investment in climate deepens, in pursuit of alpha opportunities; development sovereigns lead the way

Sovereigns have pushed on in their search for sustainable investment opportunities, such as carbon reduction. A growing appreciation of the opportunities in climate-related investments has contributed to a shift in their motivations for ESG integration towards its potential to improve investment returns **(Figure 2.8)**.

Some 57% of sovereigns believe the market has not fully priced in the long-term implications of climate change, offering opportunities for alpha, with only 9% disagreeing (34% remained neutral: **Figure 2.7**).

Several sovereigns said their investment activity had driven a cautiously positive return mindset, as ESG broadly correlated with smaller losses and greater overall returns over the course of the year **(Figure 2.8)**. "The outcomes from our investments in areas such as renewable energy has led to a real focus on impact investing and a re-evaluation of our definition of 'good returns'," according to one APAC development sovereign.

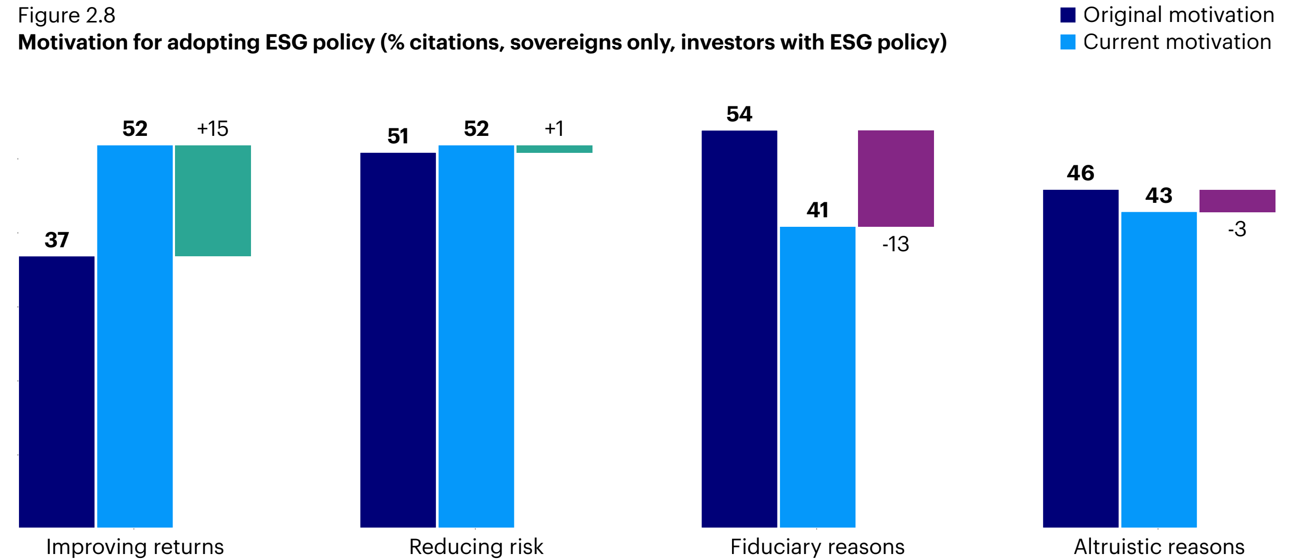
Figure 2.7
Agreement that market has not priced in implications of climate change (% citations, sovereigns only)



Disagree	9
Neutral	34
Agree	57

To what extent do you agree with the following statement: The market has not fully priced in the long-term implications from regulation related to climate change.
Sample size: 118

Figure 2.8
Motivation for adopting ESG policy (% citations, sovereigns only, investors with ESG policy)



What was your original motivation for considering ESG?
Sample size: 44

Leading the way are development sovereigns, who are embracing private equity-style investments driven by net-zero commitments – one of the highlights of our 2020 study. "It's a critical time; the clock is running on our carbon neutral and net zero goals," according to one APAC development sovereign. Net-zero commitments have been a feature of the past year, and not just within the sovereign segment. An increasingly long list of private companies and governments have made similar commitments.

If those commitments are to be met, investment capital will be required. Not all investments will be successful. Few, if any, institutional investors have the risk appetite for, or experience in, investment in innovative, often early stage, companies that development sovereigns do. The latter's primary objective is generally to support the development of their domestic economies by partnering with private sector firms to deliver a commercial return and, in doing so, promote economic growth, employment, and skills. One way they implement this is with direct strategic investments in industries identified as high growth, where they can build sustainable competitive advantages.

"There's still some work to do develop a sound framework for how we approach the opportunity, but it hasn't prevented us from a relentless pursuit of sustainable ideas and solutions with our partners who are helping us drive capital into, say, clean energy and mobility," said one APAC development sovereign.

The opportunities for relatively early-stage themes such as mobility, electrification and carbon reduction were also a focus for this EMEA development sovereign, who explained "we have a goal of delivering substantial reductions and breaking the link between economic growth and carbon emissions. This includes a 'positive' allocation to climate change to help deliver a low carbon future. Across various sectors such as energy and transport we look to get a commercial return while reducing the country's carbon footprint".

Agriculture and alternative proteins are also of interest. "We are aiming to make profitable investments in new, climate friendly technology, with focus on agriculture, aqua tech and renewable energies", said another EMEA development sovereign. While this APAC development sovereign said, "we've been involved in pure-play solution providers in the alternative protein space".

Although development sovereigns are accustomed to this style of investing and the associated risks, they have only recently embraced carbon-related targets. This, in turn, has led many to seriously consider responsible investing and ESG-related objectives for the first time. As their objectives balance development and investment returns with very long-term investment horizons, they are natural candidates to consider ESG. As such, several are increasingly allocating capital in more sustainable ways, and in some instances adopting impact investments.

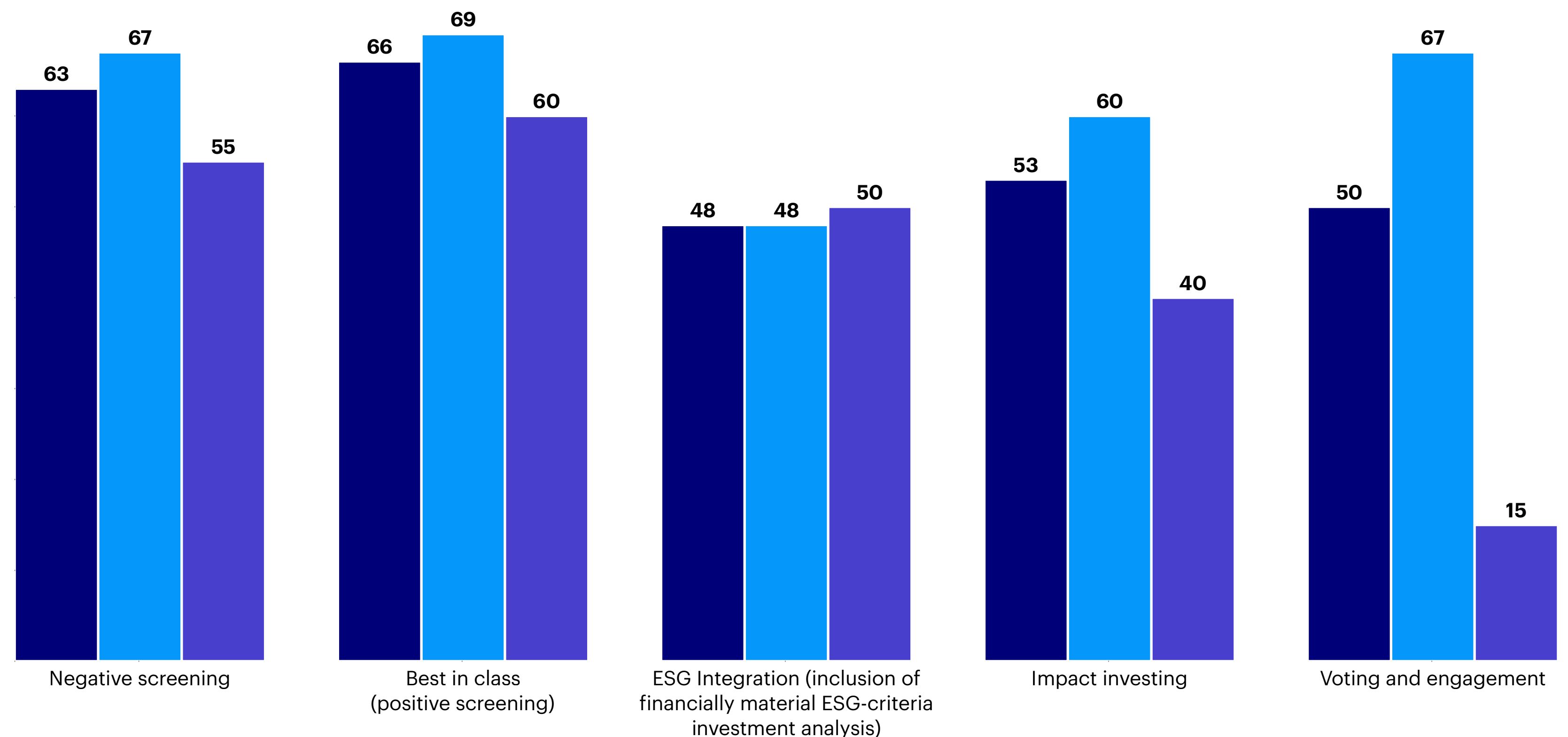
Sovereigns go in search of greater impact in climate

Some 60% of sovereigns expressed interest in impact investing **(Figure 2.9)**. This is a strategy that has not always been supported by activity: as with other large institutional investors, sovereigns often cite the paucity of scalable, investable opportunities in this area. Investments are frequently viewed as difficult to assess, understand and implement. These investment opportunities are frequently community based and the small parcel sizes, even in best case scenarios, would contribute little to overall portfolio returns. "Given our scale, these investments are not going to move the needle in terms of total portfolio returns," said one APAC development sovereign. Nevertheless, it's something they retain a strategic interest in, "which is why we set up a dedicated impact investing team to explore a partnership approach. We are working with them to delve deeper into these opportunities, establish a presence and reputation, and contribute to developing this area."

The consideration of impact investing is often an extension of ESG policy adoption, which frequently begins as exclusions and negative screening in public market portfolios, moving towards engagement as investors become more active in their approaches, seeking greater influence over outcomes. However, recognition that climate-related investments could solve certain scale and return challenges has certainly helped drive the process for some. They see opportunities in backing early-stage ventures where returns could be significant but will only come on stream over the longer term. Thematic opportunities that will mature over time are identified by specialist teams, assisted by strategic partners that together build their capabilities and reputation as impact investors.

"We began a long-term equity strategy five years ago in which we aim to fully integrate stewardship, impact investing and sustainable development. It wasn't really available in the market and we started that and it has created change in the right direction," said one EMEA investment sovereign, while an APAC development sovereign added: "Our focus on impact is really about a societal as well as environmental impact. And, of course, the ability to generate a healthy return goes alongside it."

Figure 2.9
Approaches to ESG used (% citations, total sample, investors incorporating ESG)



Which of the following ESG strategies do you use?
Sample size: 62

Our focus on impact is really about a societal as well as environmental impact. And, of course, the ability to generate a healthy return goes alongside it.

Development sovereign
APAC

...cooperation is necessary, not least to tackle climate change. We will continue to research and analyse the effects of climate change on both the local and global economies; we will cooperate with others to regulate the financial sector, and will continue to scrutinise assets on our balance sheet.

Development sovereign
APAC

Greater resources required but investors move ahead with tracking carbon footprints and climate change modelling

Not all investors have made the same types of large-scale investments in climate-related opportunities. Many are yet to establish a baseline from which to measure carbon reduction such as assessing their portfolio's carbon footprint. As such, they remain in the early stages of development; however, this year's study finds appetite to move in this direction.

Some 21% of investors now measure their portfolio's carbon output, while 38% are thinking about doing so **(Figure 2.10)**. Meanwhile 19% of respondents are incorporating a climate change model when making investments, with a further 42% considering introducing one **(Figure 2.10)**. As one North American sovereign explained, "we now review our portfolio and new investments to understand if and how they will be exposed in the future to climate change. We didn't do this the last time we spoke."

The diversity in approach is noteworthy. Initiatives such as the Task Force on Climate-related Financial Disclosures (TCFD) and Project Drawdown were cited as useful frameworks for helping to incorporate climate change into portfolios, including this North American investment sovereign, "TCFD is our guide. We look at what part of our portfolio is impacted by climate, it's long term impact, and how we can re-balance."

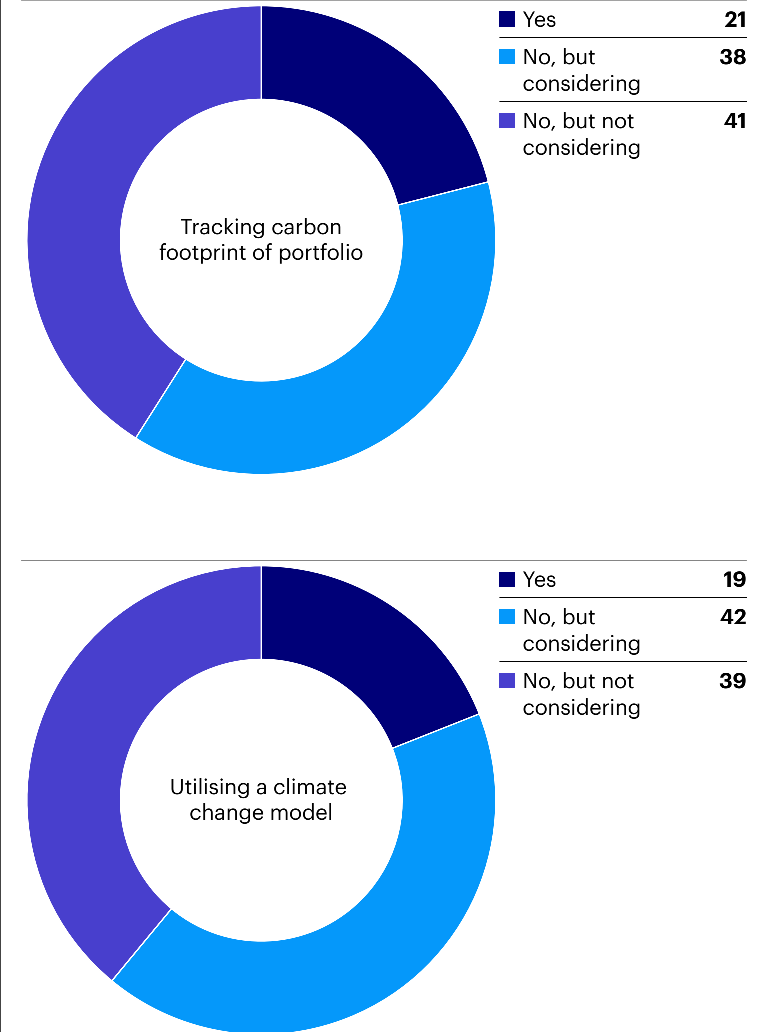
However, these frameworks were not always viewed as comprehensive, with sovereigns likely to be using these frameworks to help develop their own bespoke solutions rather than something that could be easily applied 'off-the shelf'.

As an example, one European development described using the TCFD framework to create their own survey of investee companies: "We have a tool that can estimate each company's carbon emissions and we use this to create a portfolio overlay for average carbon intensity. However, this is not based on real data and is therefore highly modelled, so we are now enhancing this model with a climate and carbon questionnaire based on TCFD guidelines that we are asking all our portfolio companies to complete."

A lack of data and standardisation has long been a barrier to ESG integration, as expressed by one Latin American central bank, who explained, "We need more data. Data for the kind of assets we currently hold is scarce; the market hasn't yet reached that level of sophistication."

In addition, several investors felt global cooperation and unified frameworks would help. One EMEA central bank explained that "cooperation is necessary, not least to tackle climate change. We will continue to research and analyse the effects of climate change on both the local and global economies; we will cooperate with others to regulate the financial sector, and will continue to scrutinise assets on our balance sheet."

Figure 2.10
Use of carbon footprint and climate change models (% citations, total sample)



Do you attempt to capture your carbon footprint of your portfolio? Do you utilise a climate change model to incorporate the risks of climate change within your portfolio?
Sample size: 2021 = 119

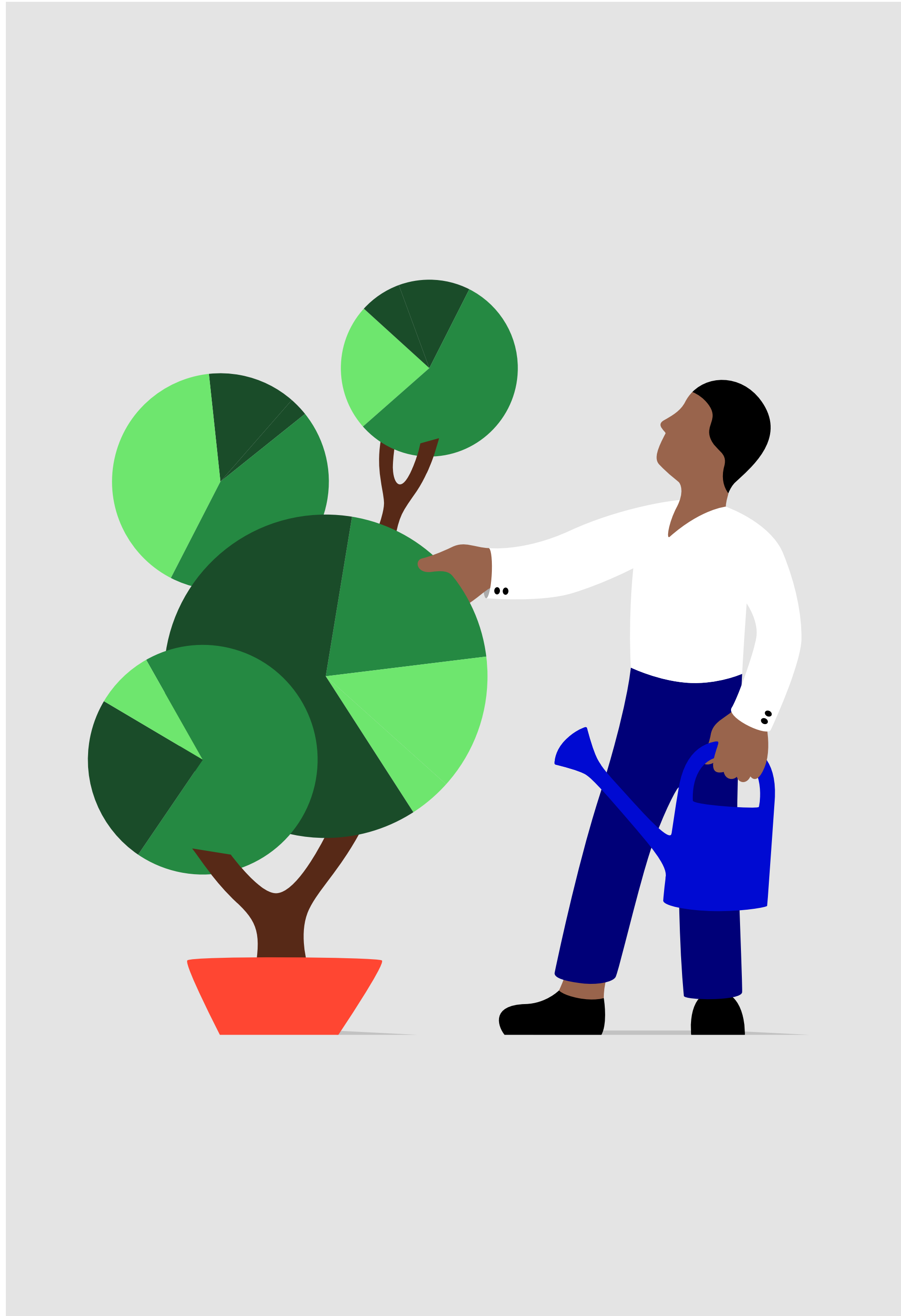
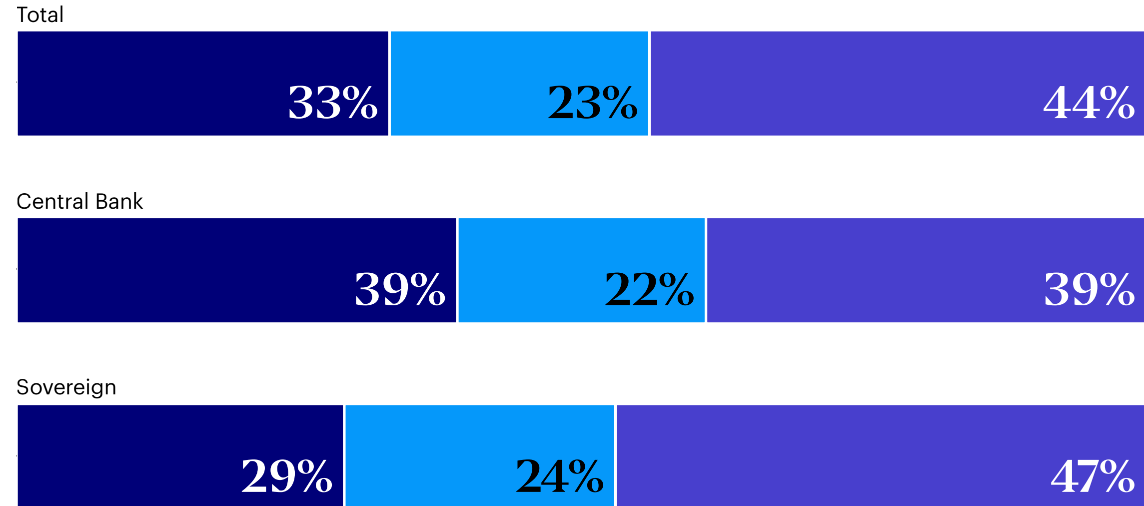


Figure 2.11
Agreement that mandate limits ability to further consider ESG factors (% citations, total sample)



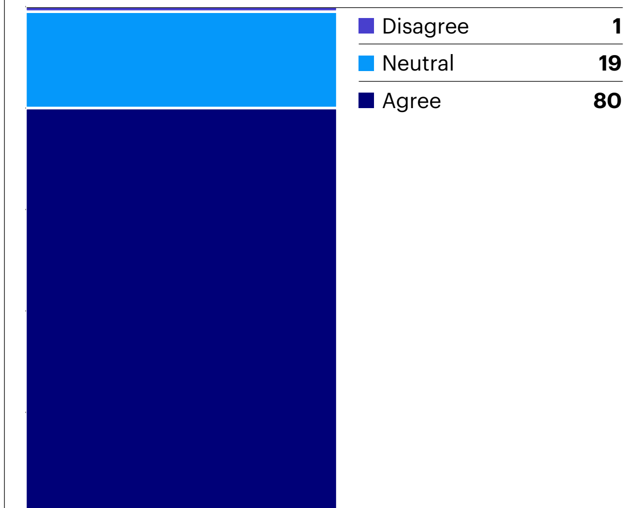
To what extent do you agree with the following statement: The legislation governing our mandate limits our ability to further consider ESG factors.
Sample size: 116

These sentiments were echoed by an APAC central bank: "We need global support. We can only do so much. If the US leads, then everyone will have to do more with climate change."

Nevertheless, a minority of investors remain on the sidelines, and are not seriously integrating climate change. They are often unable to, due to a lack of support from stakeholders and investment committees. In fact, one third of investors in our study cited that mandates that limited their ability to further consider ESG factors such as climate **(Figure 2.11)**.

For these investors in particular, advancements in data and global cooperation are likely to pave the way by providing greater certainty to internal stakeholders. A liability sovereign in APAC expressed this well, arguing that "a more rigorous, data-led scientific consensus and a stronger commitment from large countries would help me make the case internally". However, as **Figure 2.12** shows, institutional ESG leaders have the responsibility to drive broader adoption within the industry, a task that must be taken up with gusto to enact meaningful change.

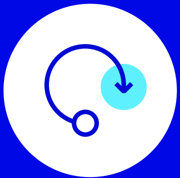
Figure 2.12
Agreement that institutional ESG leaders can do more to drive adoption (% citations, total sample)



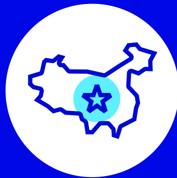
To what extent do you agree with the following statement: Institutional ESG leaders can do more to help broader overall industry adoption.
Sample size: 118

Theme 3

Sovereigns return to China as Covid-19 threat abates, though geopolitical risks remain



Covid-19 induced a flight to safety for sovereign capital, leading to increased allocations to North America. However, having taken stock, sovereigns are returning to emerging APAC, led by interest in China.



China's popularity has increased since our 2019 study; sovereigns continue to highlight that they see the country as an attractive source of alpha.

However, heightened political risk is seen as a barrier to investment, with US-China tensions keeping western sovereigns underweight China.

The appeal of China as a destination for capital, premised on its impressive economic growth and higher asset returns than Western markets, has been evident among sovereigns in recent years. In 2019, this study reported an improvement in China's rating among sovereigns. They were repositioning away from the constraints to growth in Europe's negative yield environment towards emerging APAC markets, of which China is the largest market.

The China opportunity set then, as it is now, was complicated by political tensions with the US. Tension remains, and while Covid-19 has presented new challenges and geopolitical issues have evolved, western sovereign allocations to China have not.

Sovereigns signal increased focus on Emerging APAC, led by China, in 2021

In the first few months of 2020 when the implications of Covid-19 pandemic were still opaque sovereigns were among those investors making tactical shifts away from markets perceived as vulnerable, including China, to less risky investments, notably the relative quality and safety of North America, and US bonds in particular **(Figure 3.1)**. However, it did not take long for fortunes to reverse and the long-term trend towards APAC, and specifically emerging APAC, which we have noted in previous editions of this study, quickly regained momentum.

The rapid response to the worsening health crisis by emerging APAC nations such as China, Taiwan and South Korea gave rise to the possibility of a sharp recovery, which is indeed what happened.

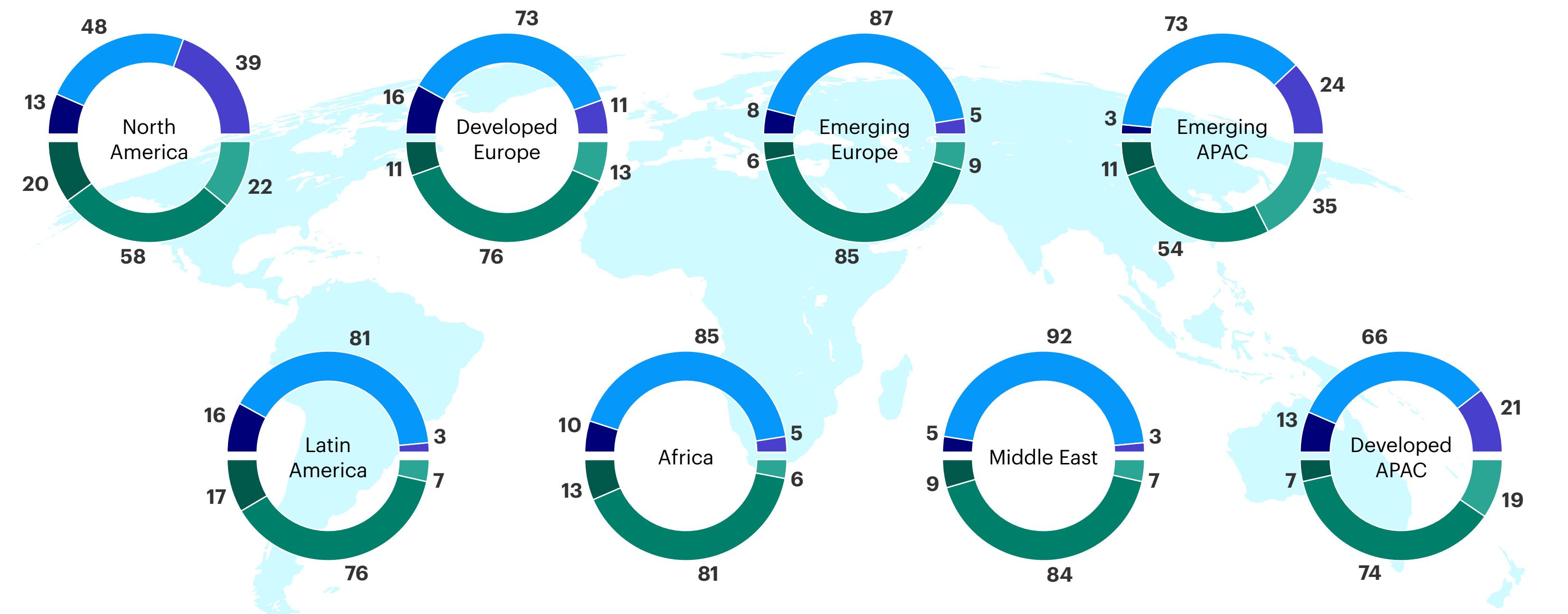
As these countries emerged from rapid shutdowns and strict self-isolation, and with masks and tracking and tracing in place, the virus was relatively well contained and their economies began to bounce back.

This was the view of one North American liability sovereign: "We were focused firmly on the Asia recovery. There was – and still is – a strong argument that select countries managed 2020 risks very well. South Korea and China were appealing from a return point of view before the pandemic, so that helped. From a macro perspective, many are doing better regarding a return to employment."

Increased allocations to the region came at the expense of Europe, the Middle East and other emerging markets such as Latin America and Africa, which were deemed to have presented a less appealing investment case **(Figure 3.1)**.

Come 2021, with vaccinations being rolled out, albeit at variable pace and degrees of success, sovereigns have focused on Emerging APAC and China in particular. Sovereigns expect to finance increased allocations to China both with new capital and by drawing on North America and Developed Europe allocations, which together comprise the bulk of sovereign portfolios.

Figure 3.1
Change in regional allocations (% citations, sovereigns only)



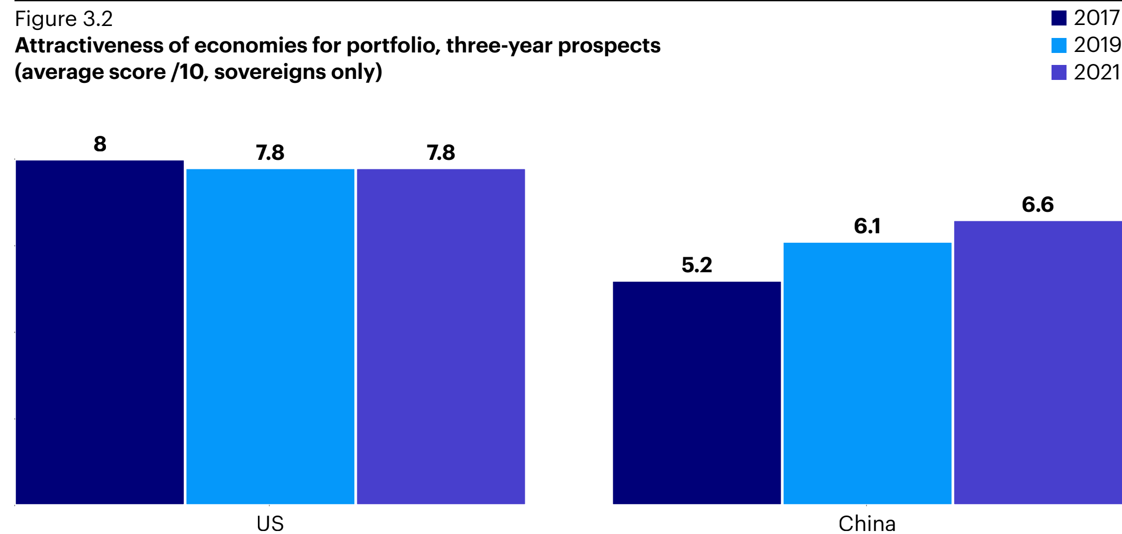
For each region how did this change in 2020? 2.08 For each region how do you expect this to change in 2021?
Sample size: 54

China's attractiveness continues to increase, spurred by Covid-19

Sovereigns' intention to increase allocations to China over the next 12 months is unsurprising, continuing the rising trend over the past four years **(Figure 3.2)**. Sovereigns see increasing potential in the country, as the score for its economy has risen from 5.2 in 2017 to 6.6 in 2021. Indeed, in 2021, China was perceived to be the second most attractive economy in which to deploy capital within the major economies surveyed. Conversely, the US, while remaining the most attractive global economy, has stood relatively still.

Figure 3.3 indicates that Covid-19 has influenced the uptick of China's score since 2019, as China's response to the pandemic has positively impacted sovereigns' view of the country. China acted swiftly to minimise transmission and reaped the rewards through comparatively strong economic performance, as life continued relatively unscathed. This was explained by a Middle Eastern investment sovereign who detailed that "Covid-19 exposed weakness in developed markets, as their institutions are not as strong and resilient. Though China has enormous challenges, it is still a huge driver for overall growth."

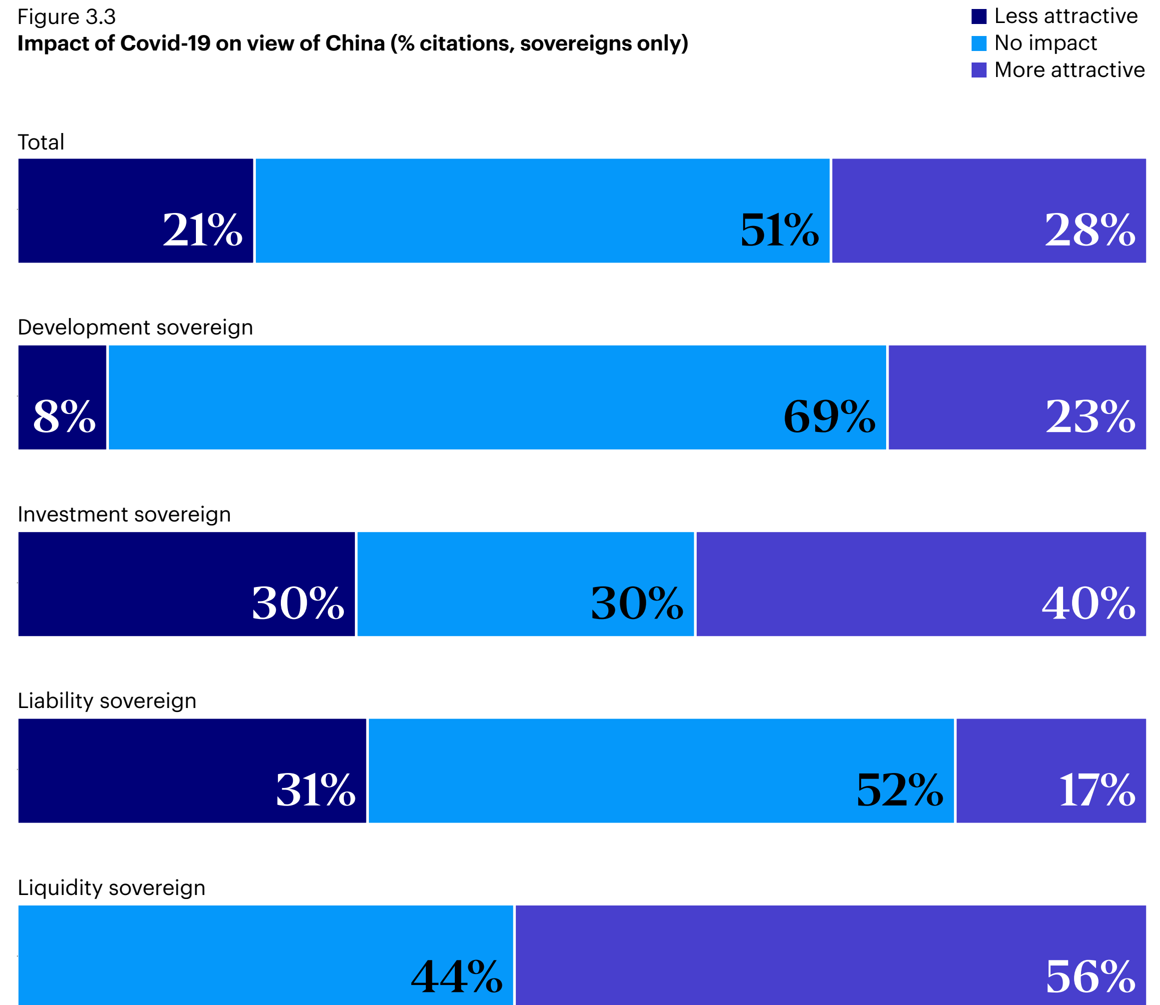
Figure 3.2
Attractiveness of economies for portfolio, three-year prospects (average score /10, sovereigns only)



Please rate the following economies (score 1-10) in terms of their 3-year prospects based on potential for your portfolio either for additional investment, or new allocations (where 10 = very attractive).
Sample size: 2017 = 58, 2019 = 33, 2021 = 104

> **...Covid-19 exposed weakness in developed markets, as their institutions are not as strong and resilient.**
>
> **Development sovereign**
> APAC

Figure 3.3
Impact of Covid-19 on view of China (% citations, sovereigns only)



How has Covid-19 impacted your view of China?
Sample size: 61

Sovereign allocations to China are fuelled by the prospect of attractive local returns **(Figure 3.4)**. Over the past year, domestic stock indices have performed well, buoyed by innovative technology companies, and the increasing access enjoyed by sovereigns has also revealed private market opportunities, particularly within infrastructure. One APAC investment sovereign said they "have been investing in private equity opportunities in China since 2016 and returns have almost been as phenomenal as the growth in volume of capital being deployed to Chinese private equity itself." Favourable consumer themes such as an emerging middle class and a highly digitalised economy only strengthen sovereign appetite for China allocations.

China's rise as an economic and political superpower has inevitably influenced sovereign allocation decisions. Sovereigns are proactively diversifying their portfolios to take this into account, while passively increasing exposure through China's increasing representation in broad emerging market equity and bond indices. The pros to increased China allocations are numerous and offer a compelling investment case. However, sovereigns stress that the positives must be weighed against obstacles to investment.

Figure 3.4
What is driving investment within China? (% citations, sovereigns only)

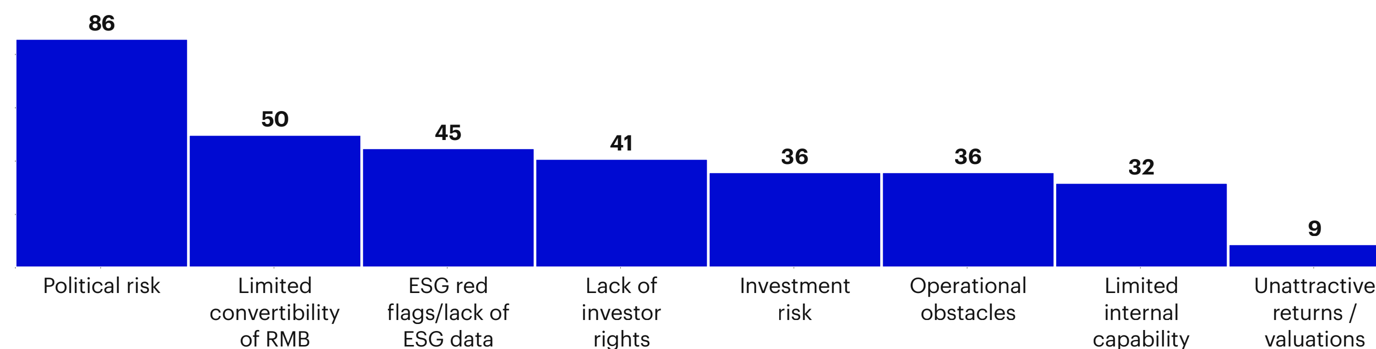
Which of the following encourage you to make allocations to China?
Sample size: 28

Political risk is the most significant obstacle to China investment, increasing over the past two years

Obstacles to investing within China are centred on political risk **(Figure 3.5)**. Sovereigns point to the rising political tensions with the US as a significant barrier, with 86% indicating that the tensions are influencing their asset allocation decisions. Indeed, an APAC liquidity sovereign said, "we have wanted to invest more in China but we find it increasingly difficult to do so due to rising trade tensions, especially those between the US and China." Furthermore, despite the recent change in US government, the relationship remains strained and will likely continue to affect allocation decisions.

Outside of political risk, obstacles can be grouped into two segments: operational and investment risks. Operational risks encompass the inability to convert RMB, a lack of personnel on the ground and restrictive mandates preventing investment outside of approved regions. Roughly one third of sovereigns indicate that limited internal resources are preventing increased investment. Investment risks include a lack of alignment of investments with ESG considerations, the comparative lack of investor rights and the risk attributed to the underlying investment. However, **Figure 3.4** shows near-consensus among sovereigns that attractive returns are pulling them towards China, while very few (9%) perceive returns as unattractive.

Figure 3.5
Obstacles to investing in China (% citations, sovereigns only)



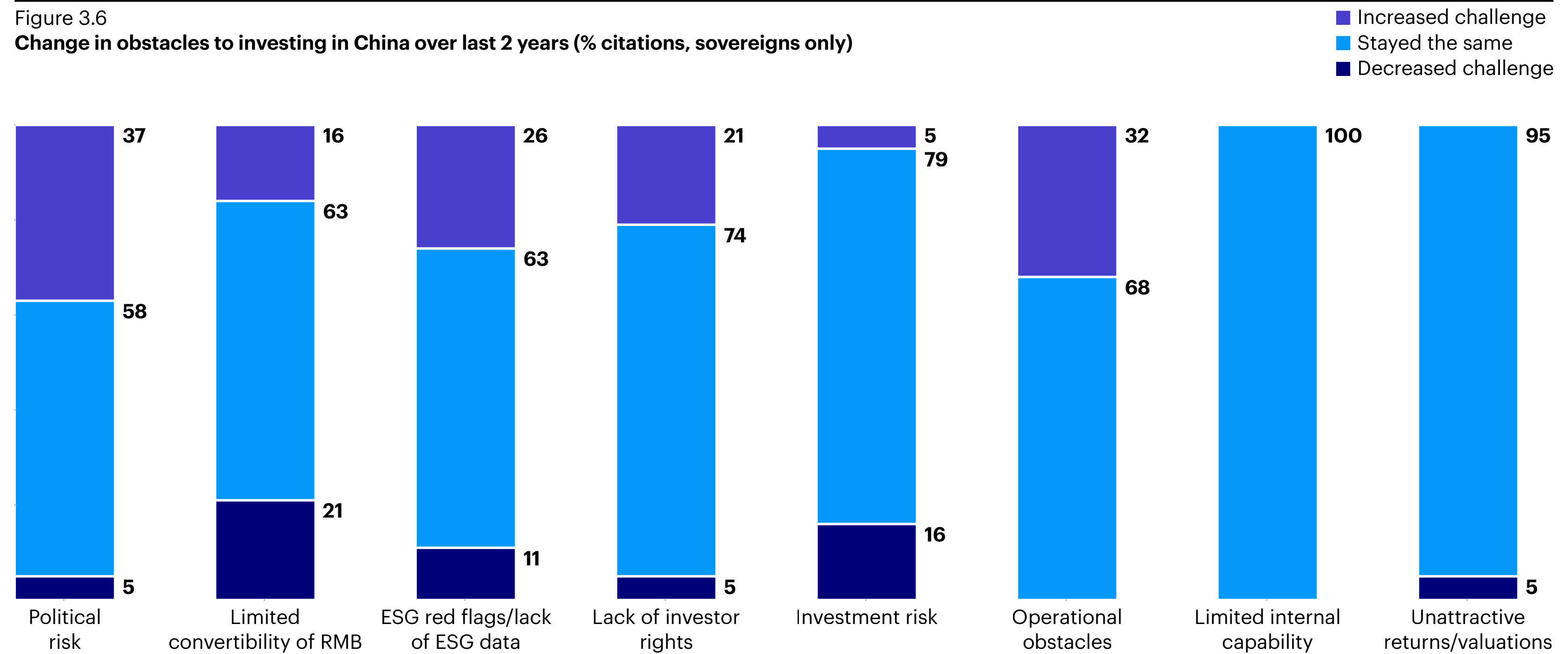
What are the obstacles to investing in China?
Sample size: 22

As well as being the most significant barrier to investment, political risk was the obstacle most commonly cited as having changed for the worse in the past two years **(Figure 3.6)**. Sovereigns noted the increased domestic scrutiny of any investments made within China, with this a particular concern among western sovereigns.

As ESG grows in importance, unsatisfactory data and the presence of red flags was also seen as impeding investment. Chinese companies were seen as having made improvements in addressing environmental issues. However, transparency around corporate governance was highlighted as continued area of concern. Meanwhile, a rise in operational obstacles demonstrates the unique nature of the Chinese market, which often demands a local presence that smaller sovereigns are unable to facilitate.

The volatility induced by the pandemic has also increased the scrutiny of sovereign investment committees and restricted the deployment of capital outside regions deemed safe havens. This was outlined by a development sovereign in Latin America, who explained that "operational obstacles have increased over the past 12 months, as our mandate has become even more conservative as a result of Covid-19."

Figure 3.6
Change in obstacles to investing in China over last 2 years (% citations, sovereigns only)



How have each of the obstacles changed over the last 2 years?
Sample size: 19

...there is no way you can ignore this market. Even with this geopolitical environment, China still offers the largest market for sustainable energy, infrastructure, and an abundance of development property and luxury lodging opportunities.

Liability sovereign
North America

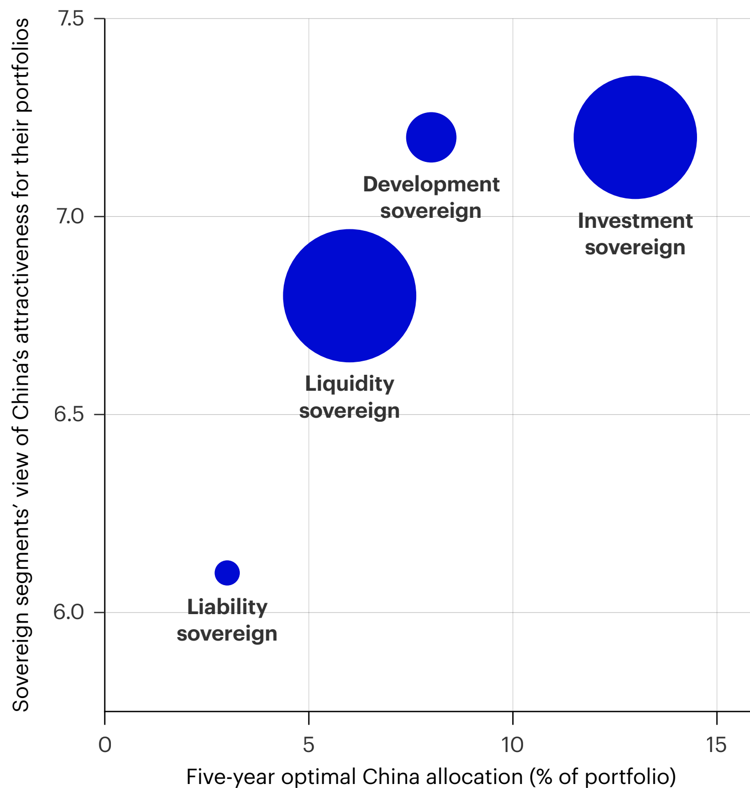


Figure 3.7
Optimal China allocations vs. attractiveness (sovereigns only)

Please rate the following economies (score 1-10) in terms of their 3-year prospects based on potential for your portfolio either for additional investment, or new allocations (where 10 = very attractive). What is your current allocation to China? What is your long term (5 year) optimal allocation to China?
Sample size: 59

Should the obstacles ease, investment and liquidity sovereigns would increase China allocations

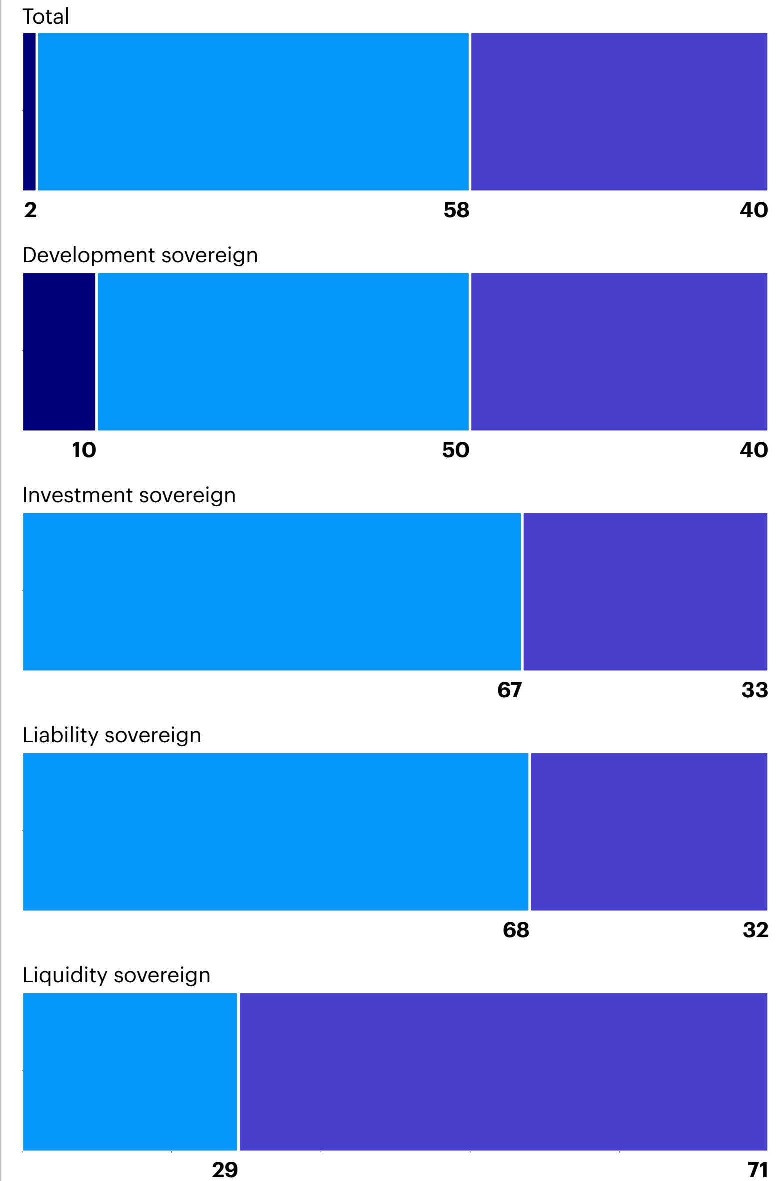
Investment sovereigns are bullish on the China opportunity and are keen to build upon what are often sizeable existing allocations. **Figure 3.7** plots the sovereign segments' view of China's attractiveness for their portfolios on the y-axis against their five-year optimal China allocation on the x-axis. The bubble size represents the gap between the sovereign's optimal China allocation and the current allocation: the larger the bubble, the greater the gap between optimal and current allocation to China.

Currently investment sovereigns and development sovereigns have the largest allocations to China, at 7.2% and 6.8% respectively. Liability sovereigns and liquidity sovereigns are further back at 2.8% and 0.7%. Going forward, investment sovereigns are the most bullish on the China opportunity and are keen to build upon what are often sizeable existing allocations. Similarly, liquidity sovereigns outline a large gap in their allocations and, should investment challenges retreat, expect to increase flows considerably. Conversely, development sovereigns, while deeming the China opportunity attractive, have proactively built up their current China allocations and are largely at optimal allocations. Liability sovereigns are also just below their optimal allocation, which at 3.3% is the lowest of the segments. Most liability sovereigns interviewed are domiciled in the West, and in general believe the investment opportunity in China to be both less attractive than investors domiciled elsewhere and were less likely to want to increase their China allocations.

Sovereign attitudes towards China allocations are nicely encapsulated in **Figure 3.8**: having weighed the investment drivers against the obstacles, all except one say the expected direction of their China allocations will either remain consistent or increase over the next five years. As one North American liability sovereign explained, "there is no way you can ignore this market. Even with this geopolitical environment, China still offers the largest market for sustainable energy, infrastructure, and an abundance of development property and luxury lodging opportunities."

With China's growing economic standing and the potential attractive returns available on the mainland, it seems likely China will be top of mind for years to come. To address uncertainty, some are continuing with the establishment of offices in the region, notably in Hong Kong as this North American sovereign explained, "We make most of these investment decisions internally and will look more closely at the opportunities there. We opened up Singapore and Hong Kong offices to looks closely at Asia and especially China to see where it is going before putting capital at risk there."

Figure 3.8
Expectation of direction of China allocation over the next 5 years (% citations, sovereigns only)

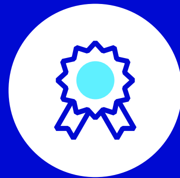


How do you expect the size of your China allocation to change over the next five years on an absolute basis?
Sample size: 42

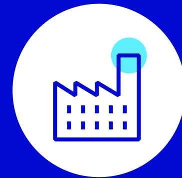
Theme 4

Real estate still on solid ground, with climate change risk the primary concern

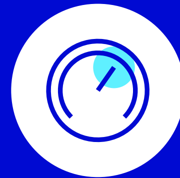
Sovereigns see opportunities in real estate, looking through pandemic-led concerns and taking advantage of their long-term time horizons.



The mature markets of North America and developed Europe are the preferred regions for investment, with sovereigns attracted to stable regulatory regimes and wide supply of high-grade assets.



Retail assets have seen a reduction in their appeal with industrial, residential and data centre opportunities now seen as offering the most attractive yields over the next 5 years.

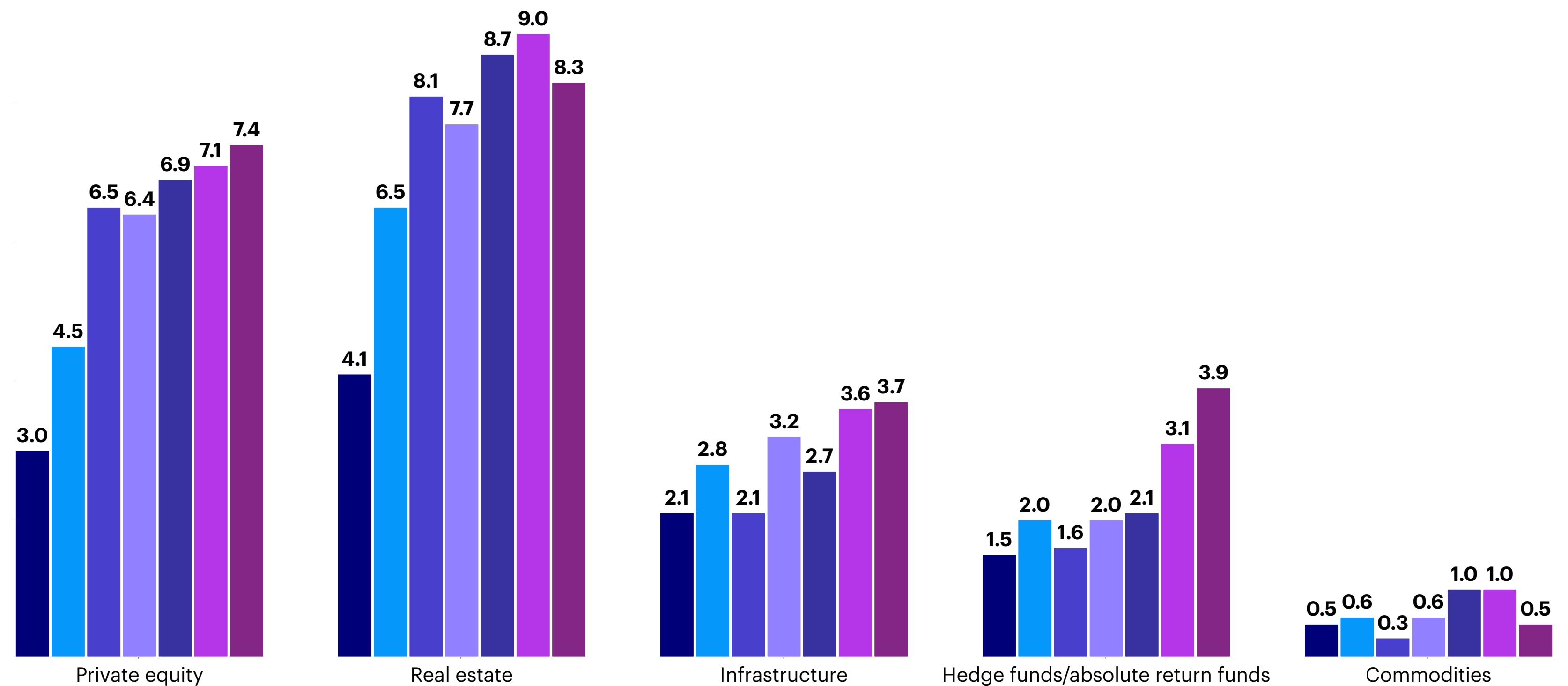


Climate change is seen as a significant risk and sovereigns increasingly incorporate climate risk assessments within their real estate valuations and due diligence.

A shift towards illiquid private markets in the form of real estate, private equity, and infrastructure, has been a central theme of this report over the past eight editions with sovereigns seeking to diversify returns, offset low returns on fixed income and access liquidity premiums. Of the three asset classes, real estate allocations have increased the furthest (Figure 4.1). As identified previously in this study, real estate has benefitted from fewer execution challenges and superior supply-side dynamics (particularly in comparison to infrastructure) with broad access to investment grade opportunities across both major developed and emerging markets.

Of the three asset classes, real estate allocations have increased the furthest.

Figure 4.1
Alternative asset allocations (mean %, sovereigns only)

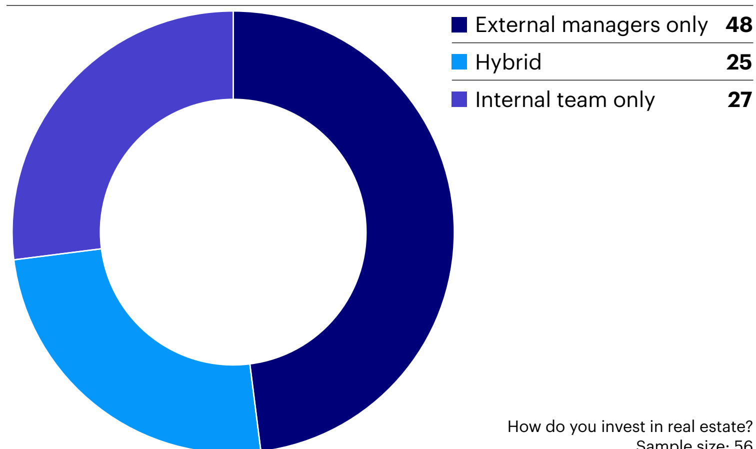


What is the current allocation for the following assets?
Sample size: 2015 = 44, 2016 = 57, 2017 = 62, 2018 = 63, 2019 = 53, 2020 = 78, 2021 = 54

Execution in real estate has been supported by the number of alternative routes to investment including direct activity, joint venture partnerships with developers and asset manager mandates. External mandates remains the preferred approach, with 48% of sovereigns using this approach exclusively, while 27% of sovereigns invest exclusively via internal teams and 25% use a combination of approaches **(Figure 4.2)**.

That only 27% of sovereigns are willing to forgo the use of asset managers points to large global asset managers often having access to the best deals, with the development of these relationships often key for sovereigns that have had the most success in driving up allocations. Nevertheless, direct investing through internal teams (including via partnerships with developers and operators) has become increasingly common with sovereigns attracted by control benefits alongside higher potential returns. This has driven a need for internal resources and more than half of sovereigns are planning an increase in the size of their internal real estate team **(Figure 4.3)** and a battle for talent in this part of the market was a key theme of the 2020 edition of this study.

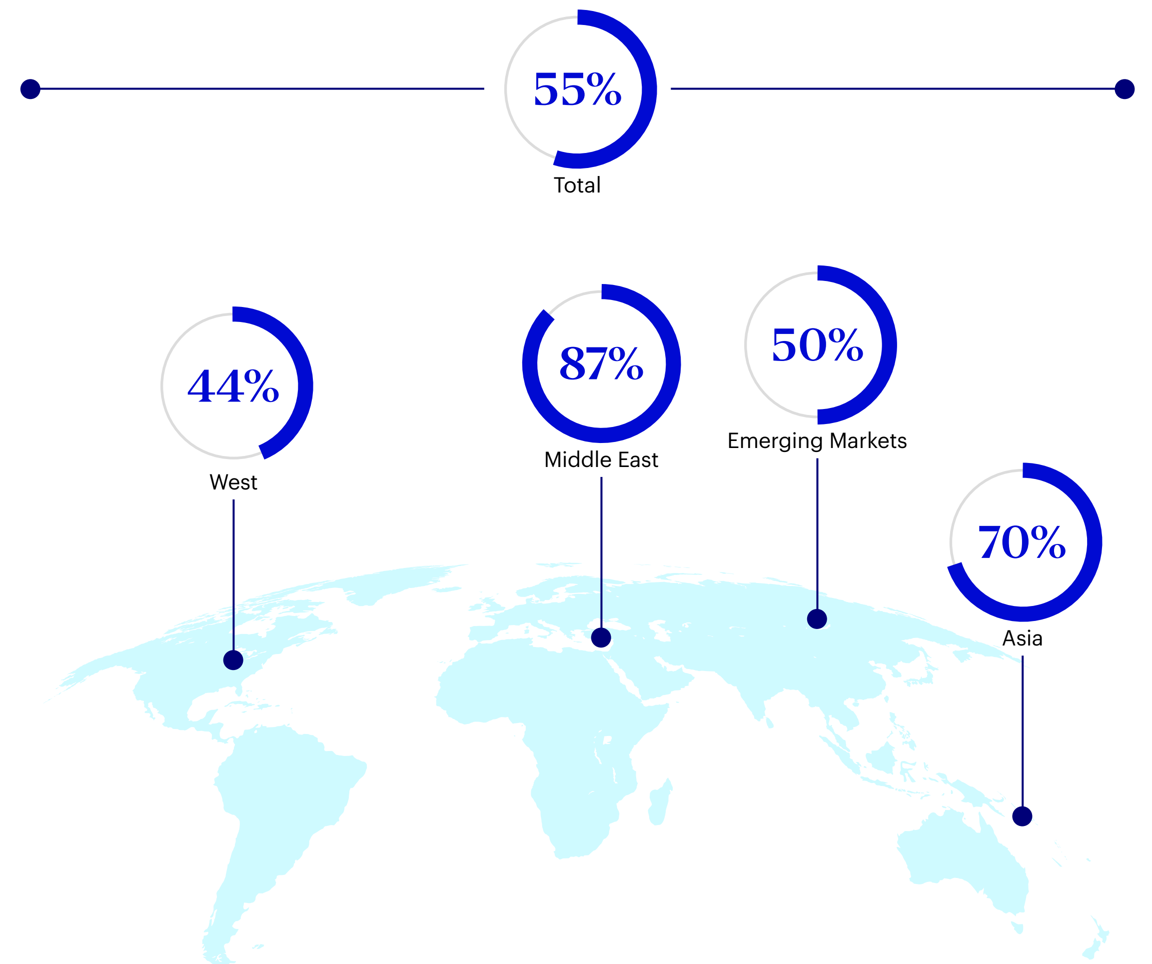
Figure 4.2
Method of investing in real estate (% citations, sovereigns only)



External managers only	**48**
Hybrid	**25**
Internal team only	**27**

How do you invest in real estate?
Sample size: 56

Figure 4.3
Planning to expand internal real estate team (% citations, sovereigns only)



Do you plan to expand your internal property investing team?
Sample size: 56

...pandemic led to considerable uncertainty around the fund's time horizon and therefore illiquid assets could not be justified.

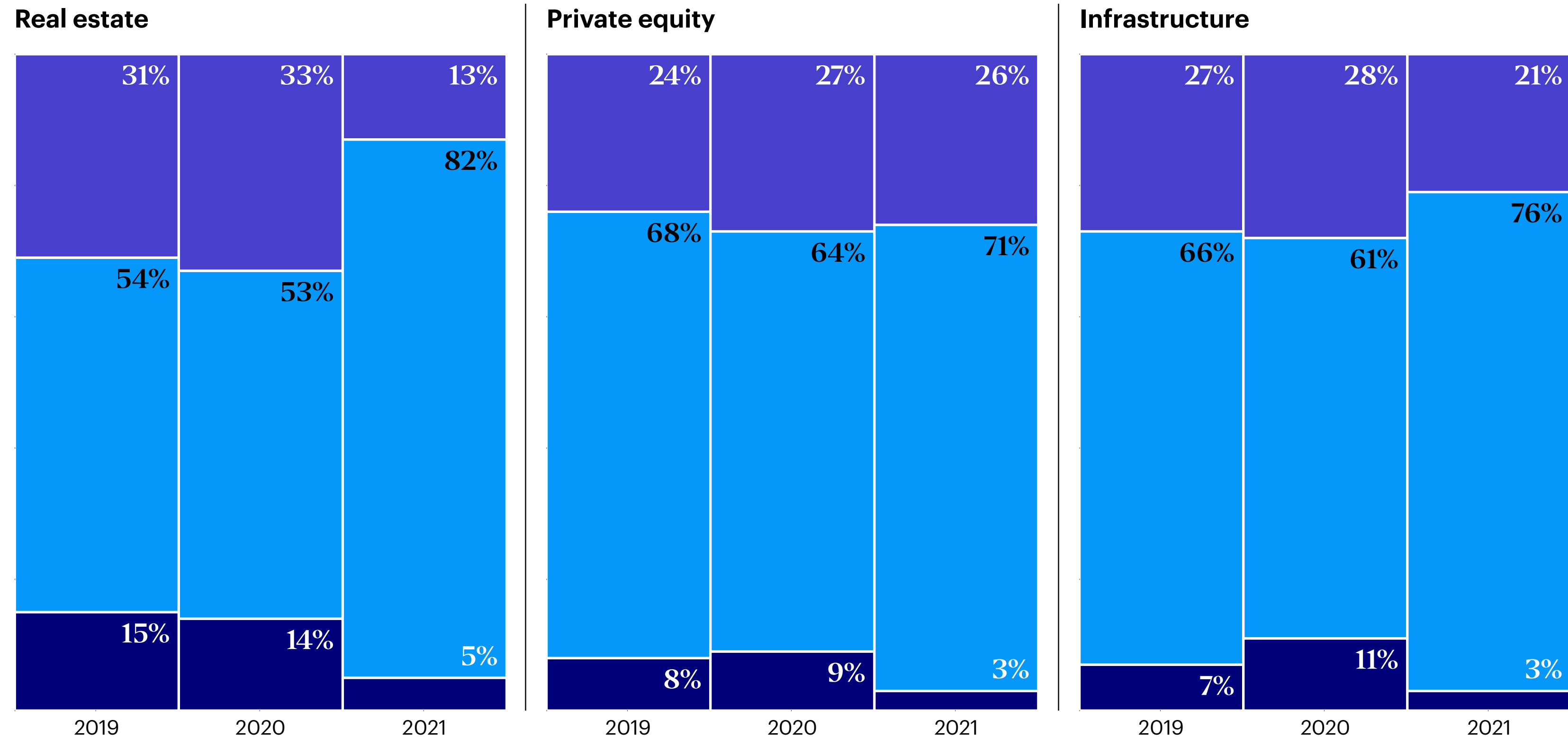
Liquidity sovereign
Latin America

Covid-19 raises questions, particularly for liquidity funds

The impact of the pandemic on real estate investments has been widely discussed over the past year. The exodus of employees from city centres, alongside shuttering of retailers and hospitality venues has depressed yields and raised questions about the long-term attractiveness of real estate as an asset class. Although performance across different regions and sectors has been highly variable, with many tenants in arrears or going out of business some real estate funds have seen outflows and a number have had to be shuttered due to a lack of liquidity to meet redemptions. Among sovereigns, allocations to real estate have fallen for the first time since 2018 and there has been a reduction in sovereigns classing themselves as underweight relative to their allocation targets **(Figure 4.4)**.

This has been driven by a reduction in appetite for real estate among liquidity funds in particular. Among this segment allocations to real estate had been rising steadily from a low base. However, over the past year these allocations have been rolled back and for many looks likely to be put on a semi-permanent hold, with investment committees placing an increased significance on an asset's liquidity characteristics in the context of drawdowns. With many liquidity funds having only recently started investing in the asset class this has also been compounded by a lack of internal capability. One Latin American liquidity sovereign noted that they were considering investing within real estate prior to Covid-19 but that the "pandemic led to considerable uncertainty around the fund's time horizon and therefore illiquid assets could not be justified."

Figure 4.4
Weight relative to strategic asset allocation (% citations, sovereigns only)

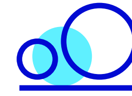


For each asset class, are you currently overweight, at target or underweight relative to your current SAA?
Sample size: 2019 = 59, 2020 = 64, 2021 = 39

Real estate retains its appeal

However, for other sovereign segments high quality real estate remains in demand. As long-term investors, sovereigns were keen to stress that they had only limited concerns about short-term reductions in valuation and yields, citing instead the attractiveness of the asset class as a diversifier, a shelter from volatility and, in some instances and a substitute for low-yield fixed income portfolios. Indeed, with valuations depressed some 72% said that now was actually an ideal time to invest in the asset class **(Figure 4.6)**. In contrast to some bearish predictions emerging in the press sovereigns were generally sanguine about the long-term impact of the pandemic on real estate portfolios believing that:

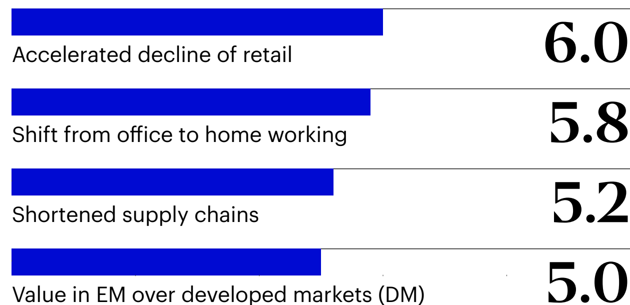
Office city centres will eventually regain their pre-pandemic pomp. Sovereigns acknowledge the shift from office to home working will impact real estate portfolios, as changes in working models and a move to more flexible working patterns impact office space requirements **(Figure 4.5)**. However, sovereigns disagree with the sentiment that office city centre investments represent potentially stranded assets, with a consensus that occupancy and usage of commercial real estate will return to pre-Covid-19 levels in two years, as spaces are re-purposed **(Figure 4.6)**. "In the long term, metro centres will return to full speed. Although office culture may change, clusters of opportunities will still emerge" suggested a North American investment sovereign.



Urban investments still trump non-urban. Sovereigns believe predictions of the death of urban areas is overdone, outlining that in the short-term cities still offer considerable promise as an investment opportunity due to the concentration of talent and a higher ceiling for real estate prices **(Figure 4.6)**. This was supported by a North American liability sovereign, who explained that the "city decline thesis is wrong, even with short term depreciation," adding, "in three to four years a mid-sized office or residential area will outperform cheaper land and housing in Tier 2 areas. Lower short-term prices will mean more people will flock to metro when things are calmer."

A shift in retail habits will create winners and losers: sovereigns were likely to acknowledge that the accelerated decline of some types of retail had impacted their real estate portfolio **(Figure 4.5)**. However, many stressed that this was a sector where it was particularly important to judge each investment on its merits, with flagship locations in major cities seen as holding up much better than out of town shopping centres and those in secondary conurbations. Sovereigns also pointed to potential for outperformance in sectors supporting digital and cloud-based services in line with the accelerated take-up of online retailing over the past 12 months **(Figure 4.6)**.

Figure 4.5
Anticipated impact of trends on real estate investments (average score/10, sovereigns only)



What impact do you think the following trends will have on your property portfolio? (Score 1-10 – 1 being low impact, 10 being high impact).
Sample size: 40

Figure 4.6
Agreement with statements on real estate (% citations, sovereigns only)

Agree / Neutral / Disagree

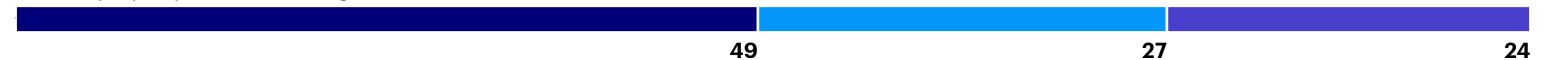
It is currently an ideal time to invest in property as a long-term investment

Investments in office city centres are potential stranded assets

Short-term, non-urban areas are more attractive than urban areas

Cities are no longer a promising opportunity for investing in real estate

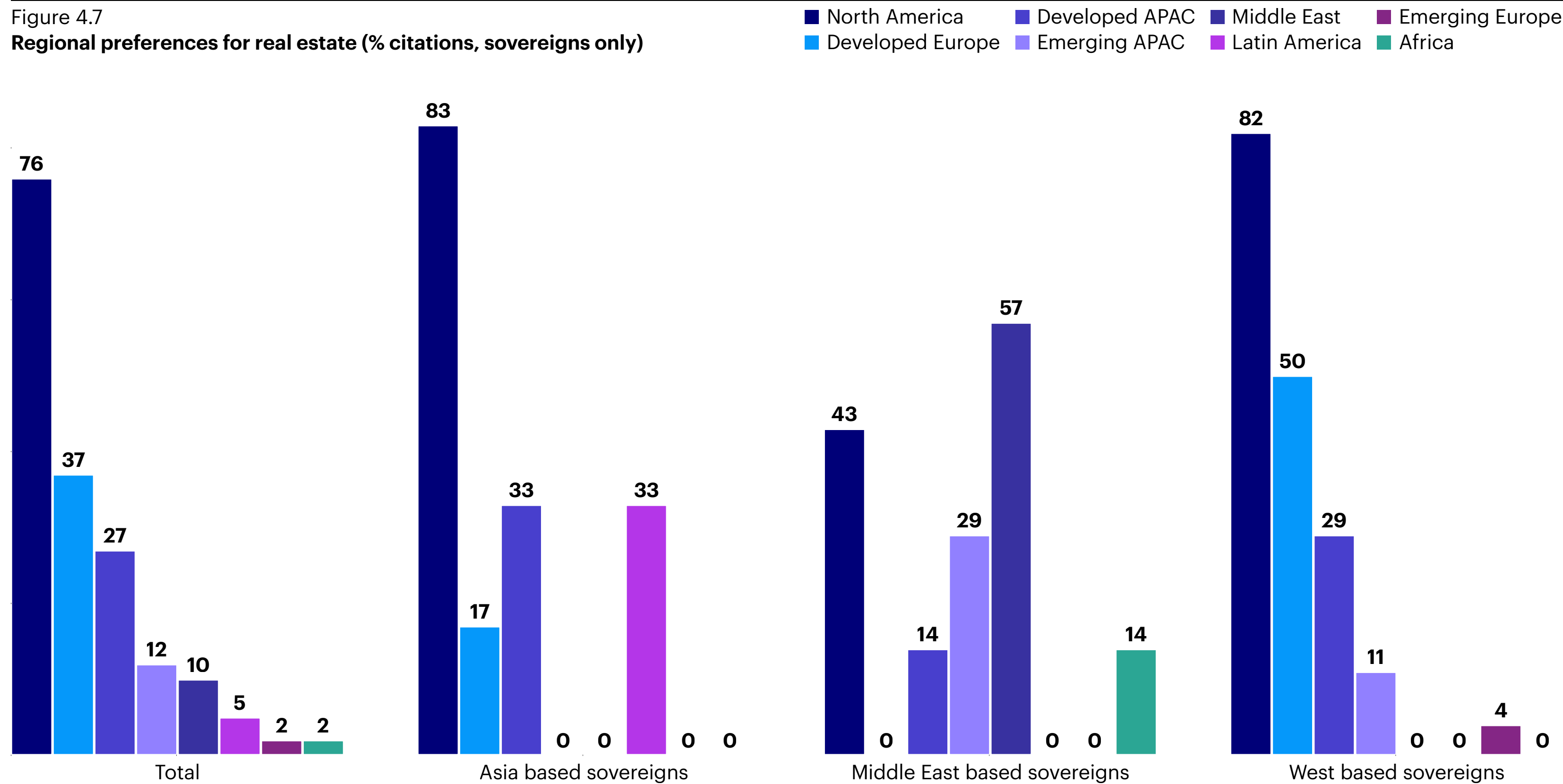
Current property trends make digital and cloud-based investments more attractive



Occupancy and usage of commercial and residential property will return to pre-COVID levels in 2 years

To what extent do you agree with the following statements?
Sample size: 49

Figure 4.7
Regional preferences for real estate (% citations, sovereigns only)



Rank the region in terms of attractive investment options for property.
Sample size: 49

...stability is important. Though prices are much lower in emerging APAC or the Middle East, the regulatory landscape is far easier to navigate in the US market.

Liquidity sovereign
West

Developed markets continue to hold most appeal

In previous editions of this study we have highlighted a prevalent market home-market bias among sovereigns investing in real estate. Sovereigns often have access to the best opportunities in their domestic market while for those looking to match liabilities home markets offer the advantage of not needing to hedge currency exposures. For funds developing internal teams domestic expertise is generally the first to be built out which in turn affords greater comfort in higher risk real estate segments.

This home market bias remains in evidence, particularly evident among investors in the middle east **(Figure 4.7)**. However, as real estate allocations have grown, sovereign investors have increasingly developed international capabilities and most now look beyond their home market when assessing opportunities. For the sovereign segment as a whole mature markets with stable regulatory environments are the most appealing, with North America and Developed Europe singled out as the most attractive destinations for investment **(Figure 4.7)**. In both of these markets sovereigns are attracted to the presence of transparent legal systems and known regulatory environments as one liability sovereign explained "stability is important. Though prices are much lower in emerging APAC or the Middle East, the regulatory landscape is far easier to navigate in the US market." Notably, North America is rated much more highly than developed Europe among sovereigns based in both Asia and the Middle East, with North America's position supported by higher growth rates prior to the pandemic as well as a relatively positive view of vaccine rollouts.

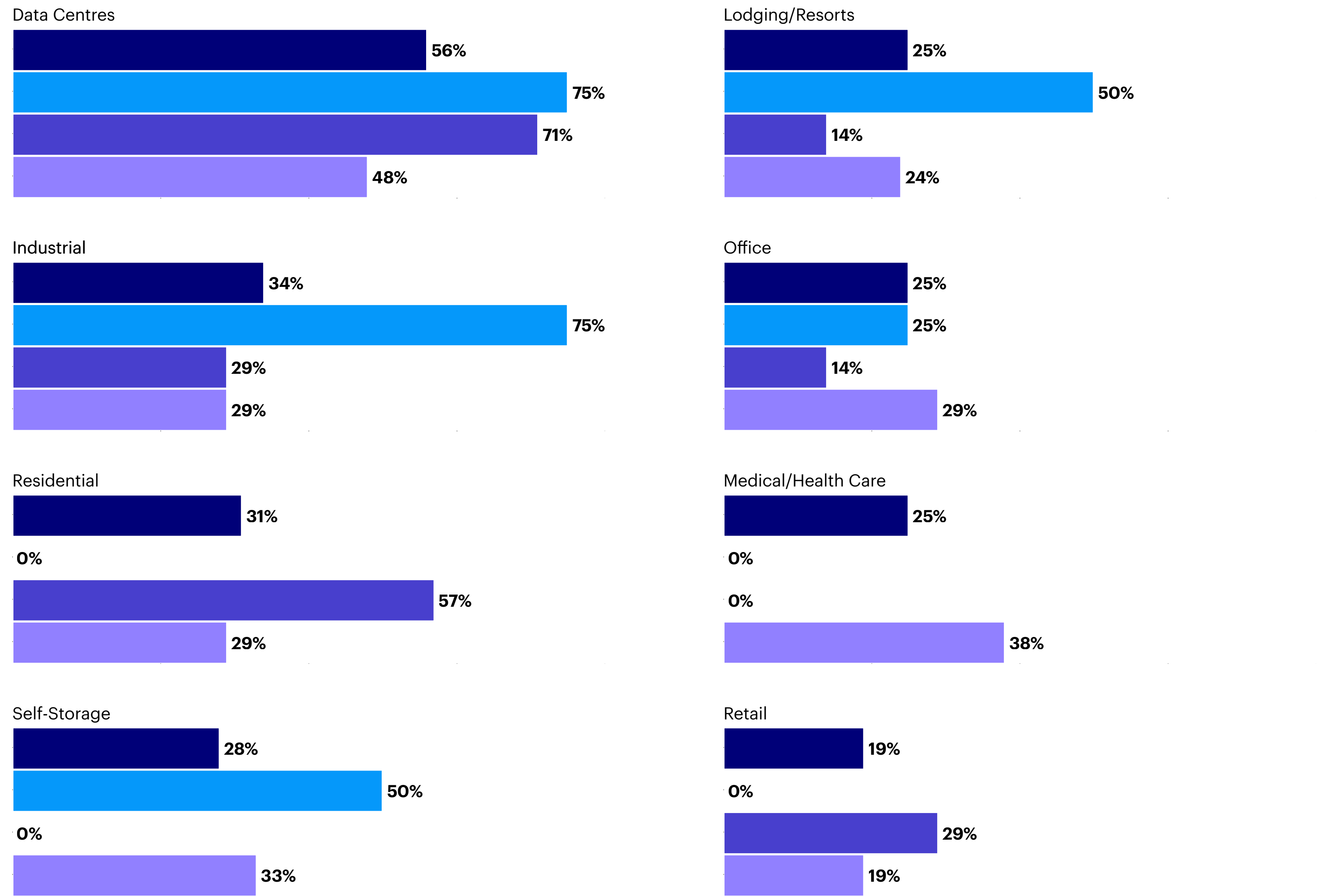
Rotation in sectors seen as most attractive

When deciding on sectors investors also have an eye on future trends and diversification, with data centres perceived as the most desirable real estate segment based on expected yields over the next five years (**Figure 4.8)**. This is a category that is growing rapidly in line with an increasing demand for cloud-based services and requires special-purpose units with tightly defined building requirements, such as close proximity to central internet exchange points and fail-safe air conditioning. Sovereigns noted that once established data-centres are rarely (if ever) relocated and therefore offer secure long-term yields, with many expressing a desire to build up both expertise and exposure.

The 2017 version of this study identified a preference among sovereigns for high grade office and retail real estate over industrial or residential categories. With the former generally supported by long-term tenancies that underpin income generation they tend to offer more stability and therefore an easier entry point for less experienced investors. However, the pandemic, which has disproportionately impacted retail and office categories, has led to a shift in this dynamic, with industrial and residential categories now rated as the more attractive options. These two categories were seen as offering higher yields, while also offering more potential for asset growth and development.

On a regional basis, Asian investors were particularly bullish on industrial properties given their expected growth trajectories, while Middle Eastern sovereigns were attracted to opportunities in residential. Meanwhile, given aging demographics, Western sovereigns saw opportunities in medical/healthcare to alleviate this burden. However, Covid-19 has demonstrated to sovereigns the importance of assessing market trends on a regular basis, with one APAC liquidity sovereign commenting "Covid-19 has changed how we refresh our model. It used to be every year, but now we do this every quarter. There are going to be new real estate opportunities coming fast and we have to grab them."

Figure 4.8
Most attractive yields over the next five years (% citations, sovereigns only)



Which types of property do you think will offer the most attractive yields over the next five years?
Sample size: 32

Sovereigns are focusing on positioning their real estate portfolios to mitigate climate risk

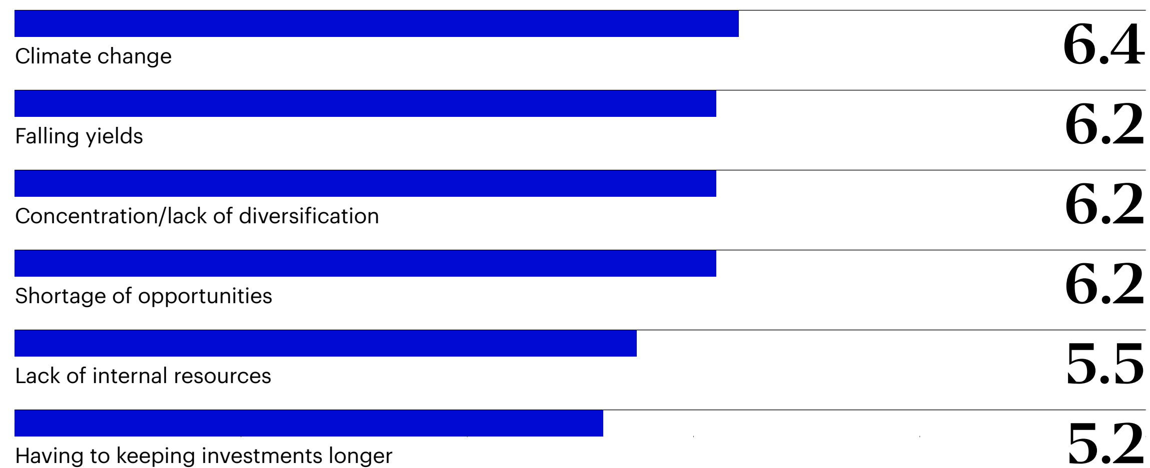
Sovereigns report that the most significant risk to their real estate portfolios is that of climate change, with this seen as even more pressing risk than falling yields as a result of the pandemic **(Figure 4.9)**. As a result the vast majority (84%) are currently increasing their consideration of climate when making real estate investments **(Figure 4.10)**.

As long-term investors sovereigns widely acknowledged the threat posed by climate change to future real estate valuations, with physical risks from rising sea levels and the increased prevalence of natural disasters high on the radar. "Climate change will be at the forefront of our real estate investments over the next five years and sustainability will be the only factor considered in three years. As a result, we will have to reposition our assets to adhere to our sustainability standards" said one APAC liability sovereign.

Sovereigns are increasingly incorporating climate risks within due diligence processes. Currently only 23% of sovereigns fully incorporate climate risks at the due diligence stage, with this concentrated among Western and Asian respondents **(Figure 4.11, page 41)**. However, 70% of respondents plan to increase their consideration of climate risks over the next five years **(Figure 4.12, page 41)**. The rationale was summarised by a North American liability sovereign: "we know it's important for our fund, for our people, and our planet. I don't see how we can ignore climate change any longer."

Alongside this is an appreciation of a need to increase the sophistication of climate risk evaluations, with sovereigns recognising that the long-term impact of climate change could be fundamental to a valuation. Alongside the assessment of an investment's carbon credentials sovereigns were now likely to be incorporating an assessment of an investment's exposure to extreme weather events and any potential impact from rising temperatures.

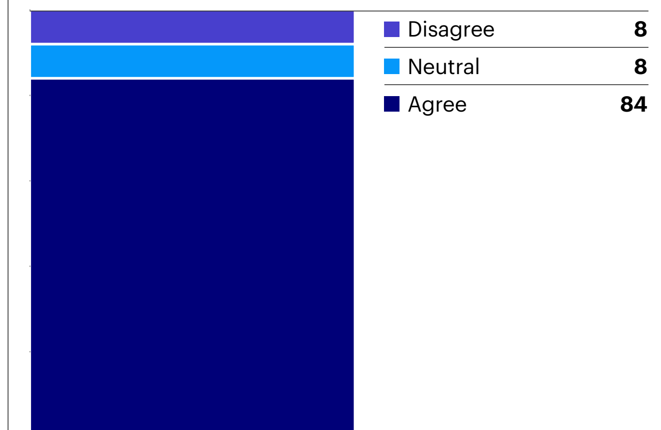
Figure 4.9
Significance of risks to real estate (average score/10, sovereigns only)



Rate the following portfolio risks in terms of importance to you right now.
Sample size: 43

> **...we know it's important for our fund, for our people, and our planet. I don't see how we can ignore climate change any longer.**
>
> **Liability sovereign**
> North America

Figure 4.10
Increasing consideration of climate change when making real estate investments (% citations, sovereigns only)



To what extent do you agree with the following statement: we are increasing our consideration of climate change when making property investments?
Sample size: 49

Demand for assets set to intensify

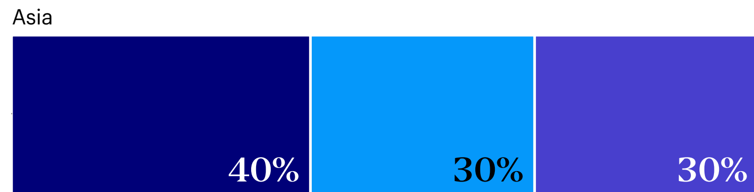
Covid-19 has undoubtedly presented a challenge for real estate investors and prompted many questions about the long-term impact on existing trends, such as moves towards flexible working and online retail. While allocations to the asset class have shown some signs of softening, particularly among funds hit by withdrawals and those re-evaluating their liquidity needs, in general sovereign investors remain enthusiastic. Indeed, with valuations depressed, nearly three- quarters see it as the ideal time to be investing. This suggests any pause in dealmaking resulting from the pandemic is likely to be brief and may in fact be followed by a period of more intense competition as sovereigns look to make up for lost time **(Figure 4.13)**.

Figure 4.11
Extent of climate considerations within real estate (% citations, sovereigns only)

Total

West

Asia



Middle East

How much are climate risks incorporated into your due diligence when making property investments?
Sample size: 47

Figure 4.12
Expected consideration of climate risks over the next five years (% citations, sovereigns only)

Total

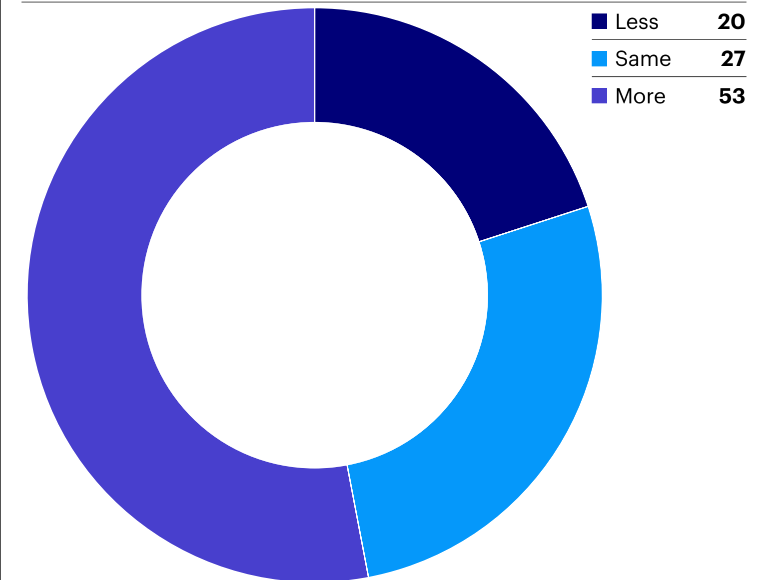
West

Asia

Middle East

How is this likely to change over the next five years?
Sample size: 43

Figure 4.13
Expected number of real estate deals in 2021 vs 2020 (% citations, sovereigns only)



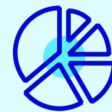
How many property deals do you expect to do in 2021 in comparison to 2020?
Sample size: 41

Theme 5

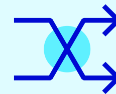
Central banks refocus on risk with larger, more diversified and more liquid reserves

Covid-19 has pushed central banks to focus on risk; a third of central banks see a need for larger reserves, while allocations to liquidity tranches have also increased. For some this is a reaction to a deterioration in their country's own financial position.

Central banks are increasingly viewing risk on a portfolio basis rather than at the single asset level. Allocations to non-traditional 'risk assets' have increased with these perceived as lowering risk at the portfolio level.



As a result some 40% of central banks invest in equities, up from 32% last year; Covid-19 has pushed them to the more liquid solutions of broader indexes and ETFs.



Diversification away from the US dollar continues, with allocations at a 25-year low and RMB a key beneficiary. Despite growing allocations to RMB these holdings are generally not actively managed and are typically held within investment portfolios.

In last year's study we identified that the Covid-19 crisis had emerged at an important time for central banks, intersecting with a longer-term story of diversification and adaptation of central bank foreign reserves via the introduction of non-traditional asset classes. The pandemic represented an important test of this new model and therefore a signpost for the future trajectory of reserve portfolios. With the pandemic proving to be both more severe and long-lasting than many had predicted we revisit this theme to see what lessons have been learnt and how the pandemic has shaped thinking going forward.

We are worried that certain countries have needed a lot of government help and seen an increase in debt. We have minimum credit requirement for issuers, and some Eurozone countries are right on the edge of these requirements. If they were to be downgraded, we would be left with a lot of debt that is not eligible for us to hold.

Liability sovereign
North America

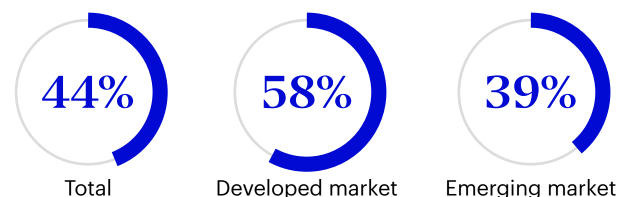
Risk takes centre stage

One notable reaction to the pandemic has been much more scrutiny around risk, with 58% of developed market banks and 39% of emerging market banks changing their approach to risk management as a result of the crisis. **(Figure 5.1)**. Some 59% of banks reported they had assigned more importance to liquidity risk due to the pandemic, with many referencing how even liquidity of the US Treasury market had deteriorated at the height of the crisis **(Figure 5.2)**.

At the same time, there is concern about rising national debt, with many fiscal deficits ballooning as a result of governments intervening to soften the impact of the pandemic. Coupled with uncertainty about future growth trajectories, this has led many central banks to assign more importance to market risk **(Figure 5.2)**.

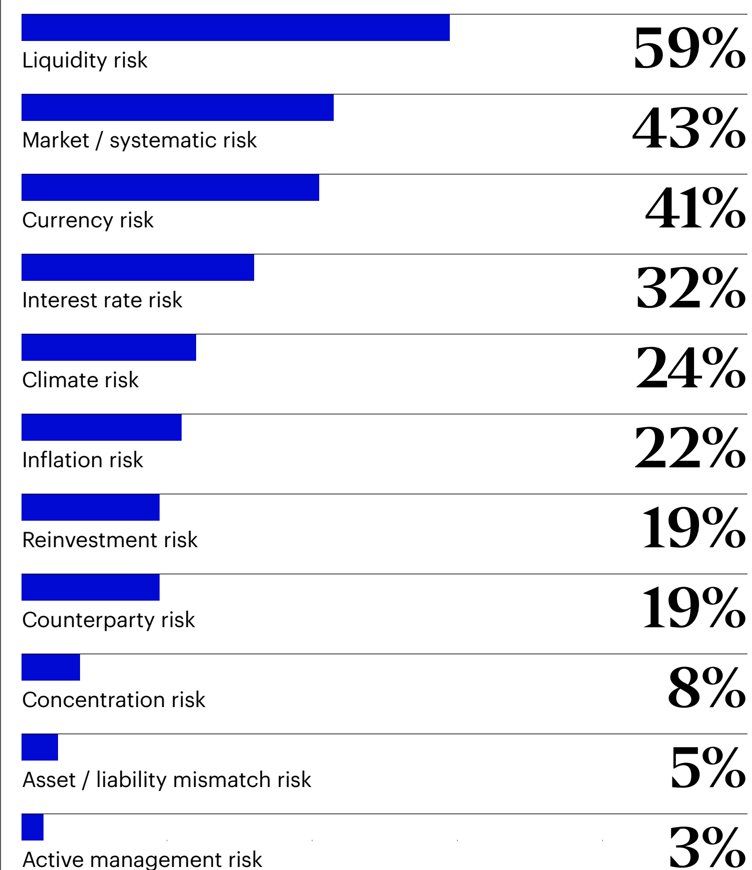
In some cases this has led to exclusions of countries with widening debt-to-GDP ratios. As one European central bank explained, "We are worried that certain countries have needed a lot of government help and seen an increase in debt. We have minimum credit requirement for issuers, and some Eurozone countries are right on the edge of these requirements. If they were to be downgraded, we would be left with a lot of debt that is not eligible for us to hold".

Figure 5.1
Changed approach to risk due to Covid-19
(% citations, Central banks only)



Has your approach to risk management changed as a result of Covid-19?
Sample size: 43

Figure 5.2
Risks assigned more importance due to Covid-19
(% citations, central banks only)

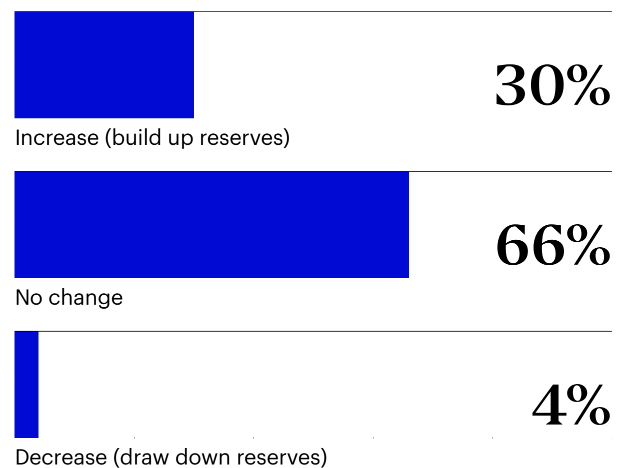


Have any of these risks been assigned more importance as a result of Covid-19?
Sample size: 37

Central banks are making changes to accommodate these elevated levels of risk, with a third planning to increase the size of their reserves **(Figure 5.3)**. For some this is a direct reaction to a deterioration in their own countries' financial positions, with EM-based banks in particular increasing liquidity positions to respond to potential short-term shocks and increasing their level of reserves to mitigate domestic economic risk over the medium term. "The pandemic has highlighted again the importance of having adequate reserves capability," said one African central bank.

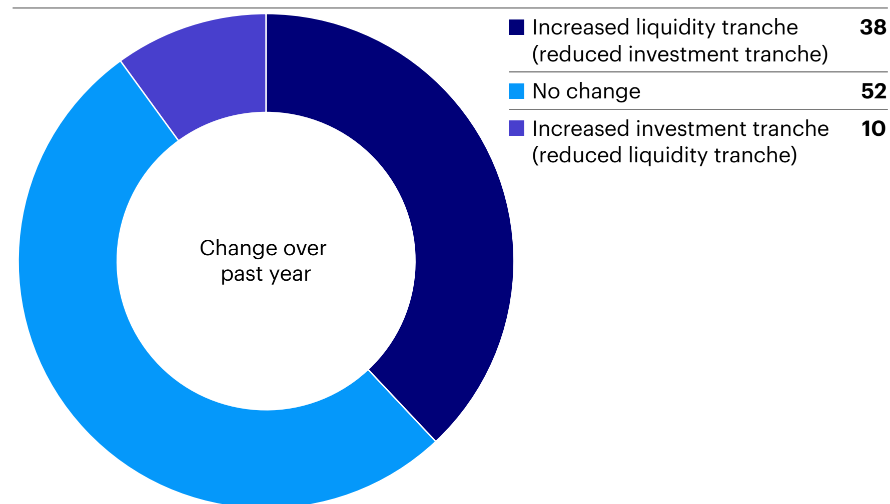
Many central banks indicated that they had made changes in how they tranche their reserves to increase liquidity within their portfolios. Of the banks that tranche their reserves, nearly two-fifths increased the size of the liquidity tranche as a response to the pandemic and there is no indication that these changes will be rolled back over the next 12 months **(Figure 5.4)**. Some central banks also indicated that they had adjusted the criteria for qualification for liquidity tranches, with only securities that maintained liquidity throughout the challenges of the pandemic now included.

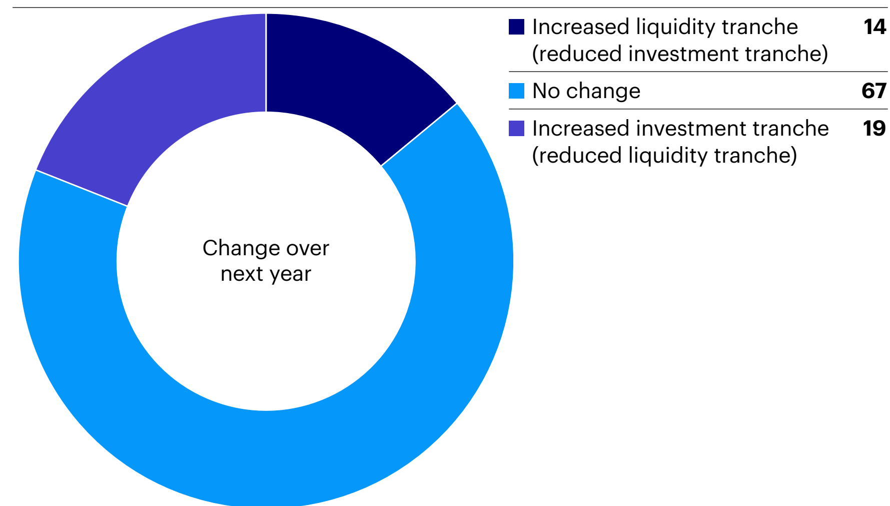
Figure 5.3
Impact of Covid-19 on plans for size of reserves (% citations, central banks only)



How did Covid-19 impact on future plans for the size of your reserves?
Sample size: 46

Figure 5.4
Change in tranching (% citations, central banks that tranche reserves only)





How has this changed as a result of Covid-19 over past year? How do you expect this to change over the next year?
Sample size: 21

> **The pandemic has highlighted again the importance of having adequate reserves capability.**
>
> **Central bank**
> Africa

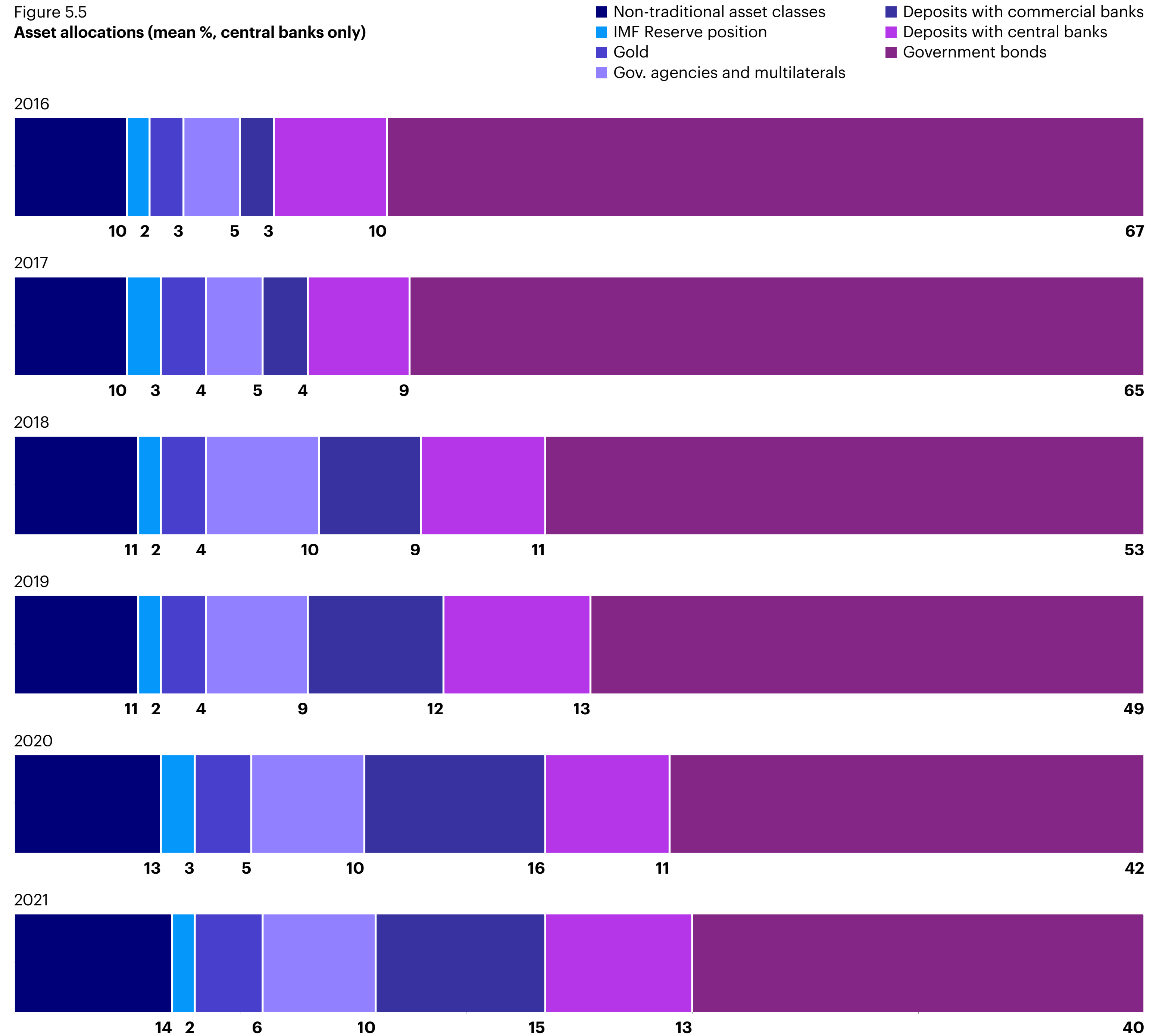
Asset allocations reflect these concerns as central banks reframe risk

This demand for more liquidity is reflected in asset allocations, with central banks reducing government bond holdings and increasing central bank deposits **(Figure 5.5)**. "After the pandemic hit, we wanted to make sure we had enough liquidity to cover short term needs," said one Latin American central bank: "So if a security matured, we kept that cash in a current account rather than investing. Since the middle of 2020 we have started to reinvest but we have changed our investment limits and increased our holdings in deposits and very short-term securities".

While deposits with central banks have increased, deposits with commercial banks have fallen, due partly to concerns about credit risk, as one European central bank explains: "Commercial deposits used to represent about 30% of counterparty risk. That has reduced to about 20%, as we are only keeping those with higher credit quality".

Covid-19 has also accelerated an existing shift in the way that central bank reserve managers perceive investment risk, with central banks increasingly viewing risk on a portfolio basis rather than at the single asset level. The deterioration in the fiscal position, low growth and low bond yields in traditional reserve currency countries has contributed to diversification away from government bonds (traditionally considered risk-free) towards 'risk assets' which are now perceived as lowering risk at the portfolio level. This is manifested in a decline in government bonds as a share of reserves (and corresponding increase in non-traditional assets) as well as the continued slow but steady decline in USD as a share of total reserves.

Figure 5.5
Asset allocations (mean %, central banks only)



For the total reserves portfolio, please indicate the % allocation across asset classes.
Sample size: 2016 = 15, 2017 = 33, 2018 = 55, 2019 = 36, 2020 = 36, 2021 = 38

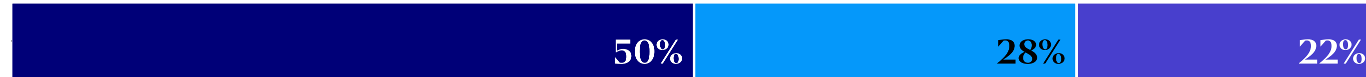
Non-traditional assets, including equities, EM debt and corporate bonds, now account for 14% of portfolios, up from 11% two years ago **(Figure 5.5, previous page)**. The drop in fixed income yields means that non-traditional assets are often now seen as reducing absolute levels of risk, rather than just a source of additional returns; 56% of central banks say the low yields on fixed income mean that they can reduce risk by diversifying into other asset classes **(Figure 5.6)**, while 71% say that introducing non-traditional assets has either reduced their risk profile or had no impact **(Figure 5.7)**. Notably, around two-thirds say that non-traditional assets positively impacted their performance during the year, with a third saying that Covid-19 has pushed them to pursue greater diversification **(Figures 5.8 and 5.9)**.

Figure 5.6
Agreement with statements on risk (% citations, central banks only)

■ Agree ■ Neutral ■ Disagree

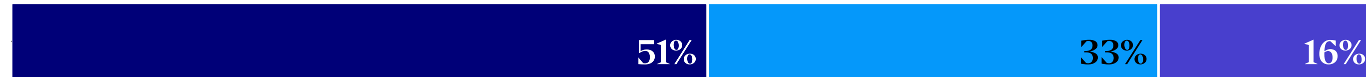
Low and negative yields on fixed income mean that we can reduce risk by diversifying into other asset classes

Equities offer an attractive opportunity to grow the reserves



Low returns on traditional government bonds are a key driver of increasing diversification into other assets

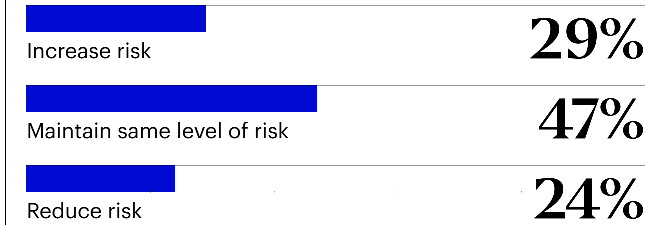
We are looking at other asset classes to perform the risk reducing role of fixed income



Falling yields mean that fixed income allocations no longer act as a natural buffer in a risk-off environment

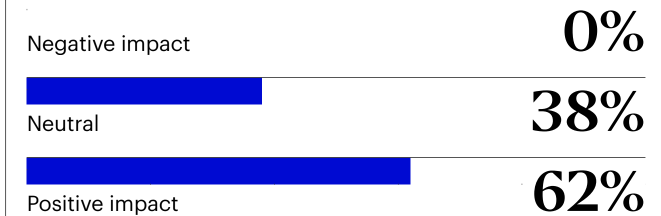
How is this likely to change over the next five years?
Sample size: 43

Figure 5.7
Impact of introducing non-traditional assets on risk profile (% citations, central banks only)



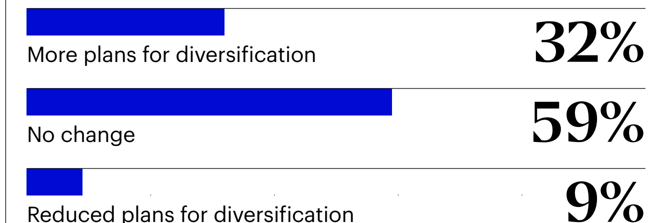
What impact do you think introducing non-traditional assets has on your risk profile?
Sample size: 38

Figure 5.8
Impact of non-traditional asset on performance over last year (% citations, central banks)



How have non-traditional asset classes impacted your performance over the last year in light of Covid-19?
Sample size: 32

Figure 5.9
Impact of Covid-19 on plans for diversification (% citations, central banks only)



How has Covid-19 impacted your plans for asset class diversification?
Sample size: 44

Over the next 12 months, these trends look set to continue, with banks planning to further reduce allocations to government bonds and increase allocations to other asset classes, including EM debt, equities, central bank deposits and gold (**Figure 5.10**).

Figure 5.10
Expected change in allocation in next 12 months (% citations, central banks only)

	Decrease	Maintain	Increase
Deposits with central banks	8	73	19
Deposits with commercial banks	14	78	8
Government bonds	38	40	22
Government agencies, multilaterals and supra-nationals	8	73	19
Gold	3	78	19
IMF reserve position	8	84	8
US agency mortgage-backed securities	14	75	11
Corporate debt	14	78	8
EM sovereign debt	5	68	27
Equities	8	70	22
Alternatives (including real estate, infra, PE, commodities)	14	72	14

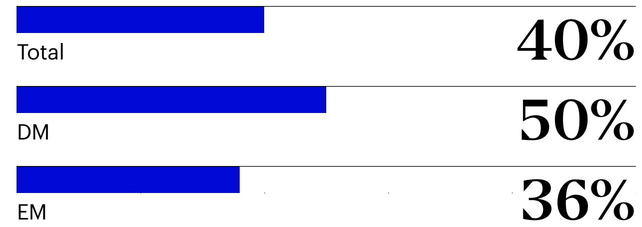
For the total reserves portfolio, please indicate the % allocation across asset classes.
Sample size: 2016 = 15, 2017 = 33, 2018 = 55, 2019 = 36, 2020 = 36, 2021 = 38

Our board has asked us to look at real estate as a new asset class. We would be likely to invest either through a REIT or a privately managed fund.

Central bank
Europe

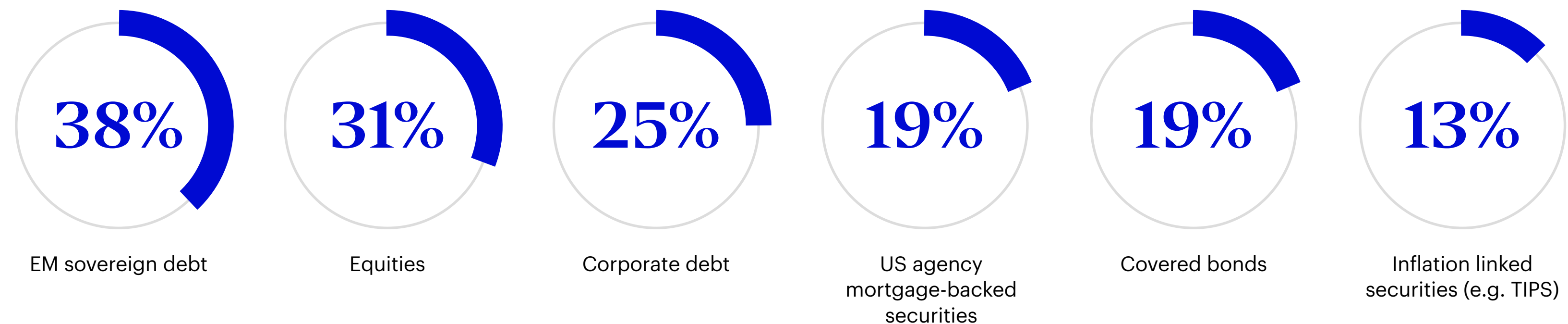
Over the next two years, two-fifths of central banks are considering introducing new asset classes **(Figure 5.11)**, with EM sovereign debt the most popular, driven by banks making their first allocations to China **(Figure 5.12)**. For the first time, real estate was regularly mentioned as an asset class under consideration, being valued for its fixed income-like dividends and low volatility in comparison to equities (see Theme 4). "Our board has asked us to look at real estate as a new asset class. We would be likely to invest either through a REIT or a privately managed fund," said one Europe-based central bank.

Figure 5.11
Considering introducing new asset classes in next two years (% citations, central banks only)



Are you considering introducing any new asset classes into the portfolio over the next two years?
Sample size: 45

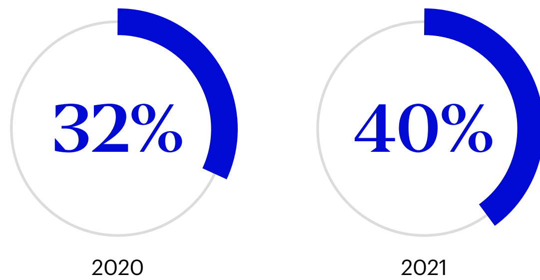
Figure 5.12
New asset classes being considered (% citations, central banks considering new asset classes only)



[If yes] Which ones?
Sample size: 16

A push into equities has been a key trend among central banks over the past three years, and 40% of our central bank sample now invest in the asset class, up from 32% last year **(Figure 5.13)**. Generally held within an investment tranche, equities are become an increasingly central asset class for both delivering returns and providing diversification.

Figure 5.13
Invest in equities (% citations, central banks only)



Do you currently invest in equities?
Sample size: 47

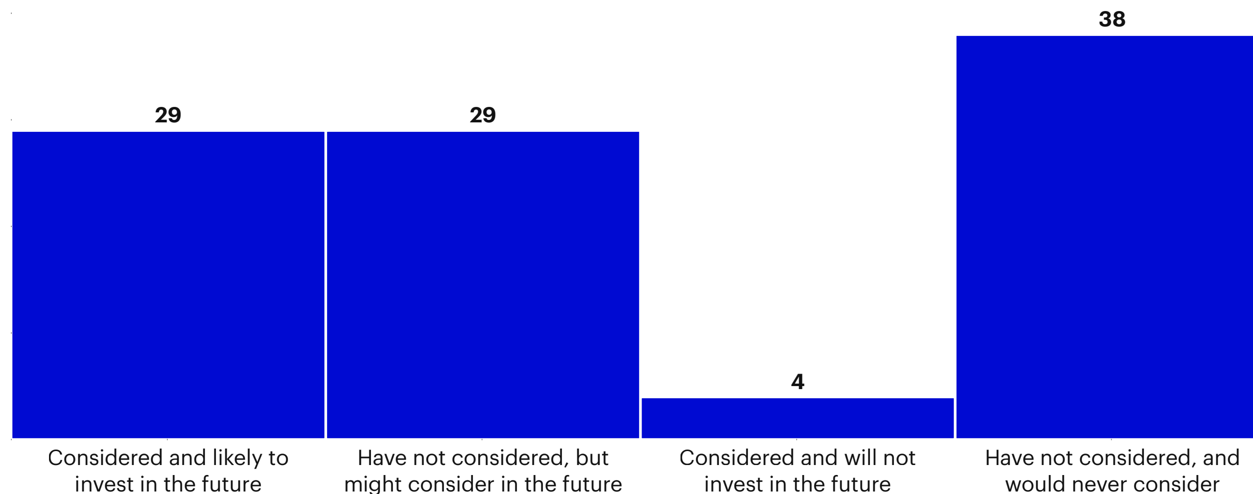
There is no indication that Covid-19 has reduced this appetite, **(Figure 5.15)** but the pandemic has had an impact on the manner of implementation, with a renewed preference for the largest, most liquid indexes. "Previously we were quite diversified in terms of indexes and had exposure to emerging markets," explains one European bank: "We have made a switch to focus on the big leading markets and this is a reaction to the lack of liquidity that was saw as a result of Covid which also affected our ability to hedge."

The liquidity benefits of ETFs have also come to the fore, with some banks moving into ETFs and away from other types of pooled fund. "We switched into an ETF and one of the main drivers was that it is more liquid," said one Asian central bank, adding: "If you want to make a very large investment in equities, there are surprisingly few options if you don't want to do a mandate (which we don't want for accounting reasons). We therefore found a good ETF that can accommodate a large investment".

We have made a switch to focus on the big leading markets and this is a reaction to the lack of liquidity that was saw as a result of Covid which also affected our ability to hedge.

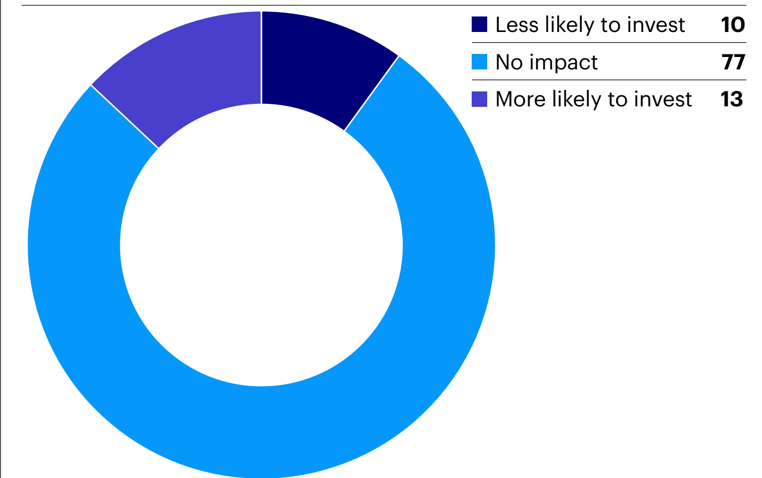
Central bank
Europe

Figure 5.14
Attitude to equities if not currently investing (% citations, central banks only)



If not currently invested, have you considered introducing equities into the portfolio?
Sample size: 24

Figure 5.15
Impact of Covid-19 on plans to invest in equities (% citations, central banks only)



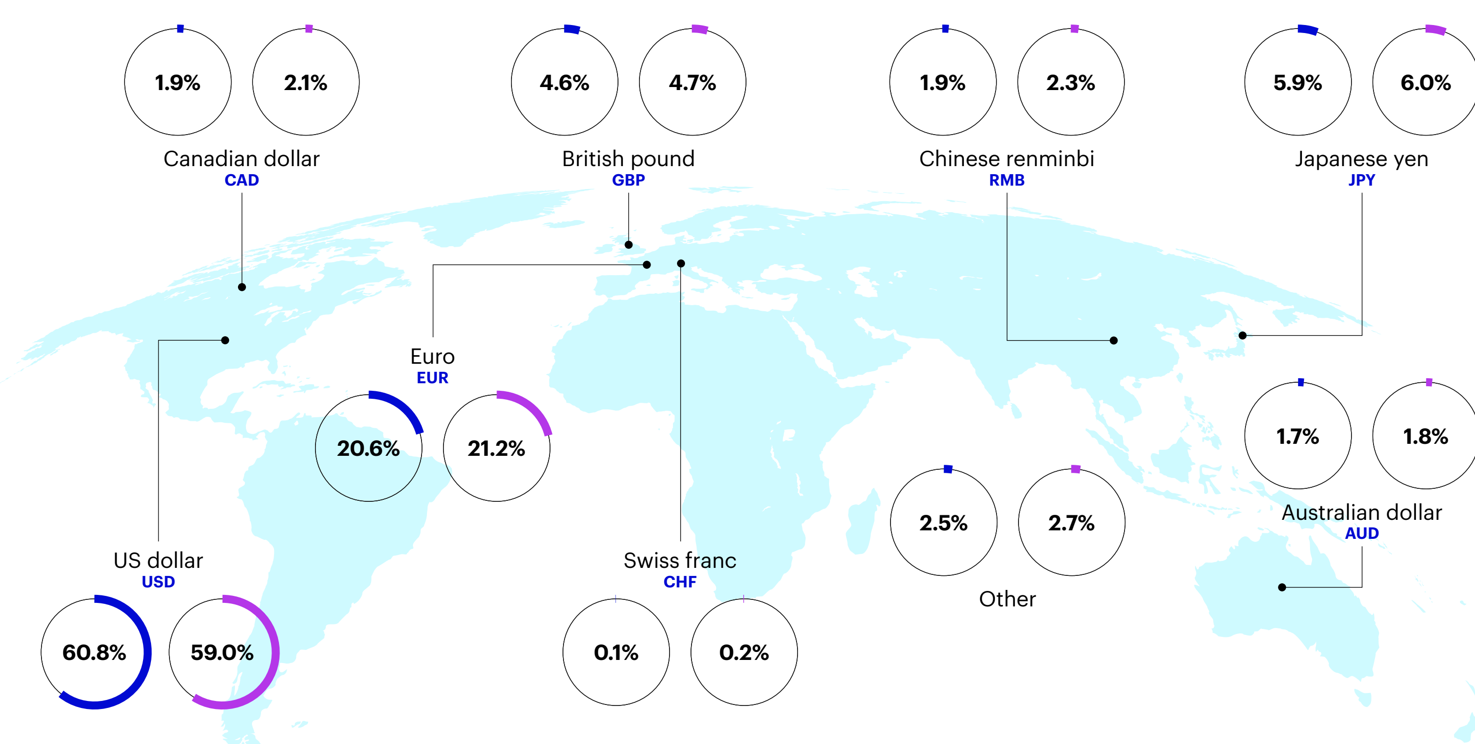
Less likely to invest	**10**
No impact	**77**
More likely to invest	**13**

How has Covid-19 impacted your appetite to invest in equities?
Sample size: 40

Trading RMB is different to trading other reserve currencies, and it is still difficult to apply active management to the currency. However, the dynamics of the region make it an interesting investment area and it fits with our ideas around diversification.

Central bank
Europe

Figure 5.16
Foreign reserve currency allocations (% total qualifying reserves)



Source: IMF COFERS, as of 31st December.

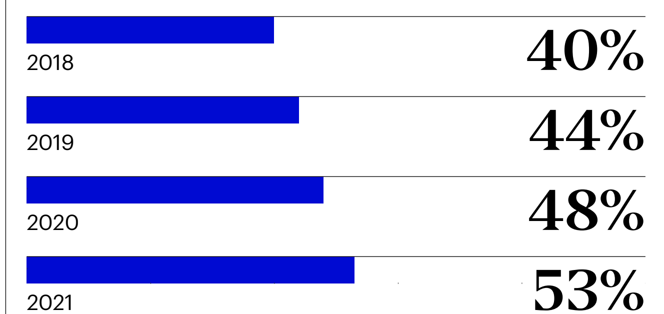
Diversification away from US dollar continues, benefitting RMB

The US dollar's share of global reserves fell to a 25-year low at the end of 2020 (Source, International Monetary Fund), as perceptions of US economic, political and market risk increased. Concerns were centered on the sustainability of US debt levels, with fiscal spending increasingly dramatically in response to the pandemic, as well as the short but surprising reduction in the liquidity of US treasuries in March 2020. This has pushed central banks to diversify to the benefit of all other major currencies **(Figure 5.16)**. "We added sterling, based on reduced tail risk from Brexit and we are undergoing an optimisation exercise to diversify to other currencies. Currently, we are too heavily tilted to US market and, as we have expanded size of reserves, are looking for greater diversification," said one European central bank.

RMB was one of the main beneficiaries, with average allocations at the end of Q4 2020 standing at 2.3%, compared to 1.9% a year ago. More than half of our respondents now hold RMB, up from 40% in 2018 **(Figure 5.17)**.

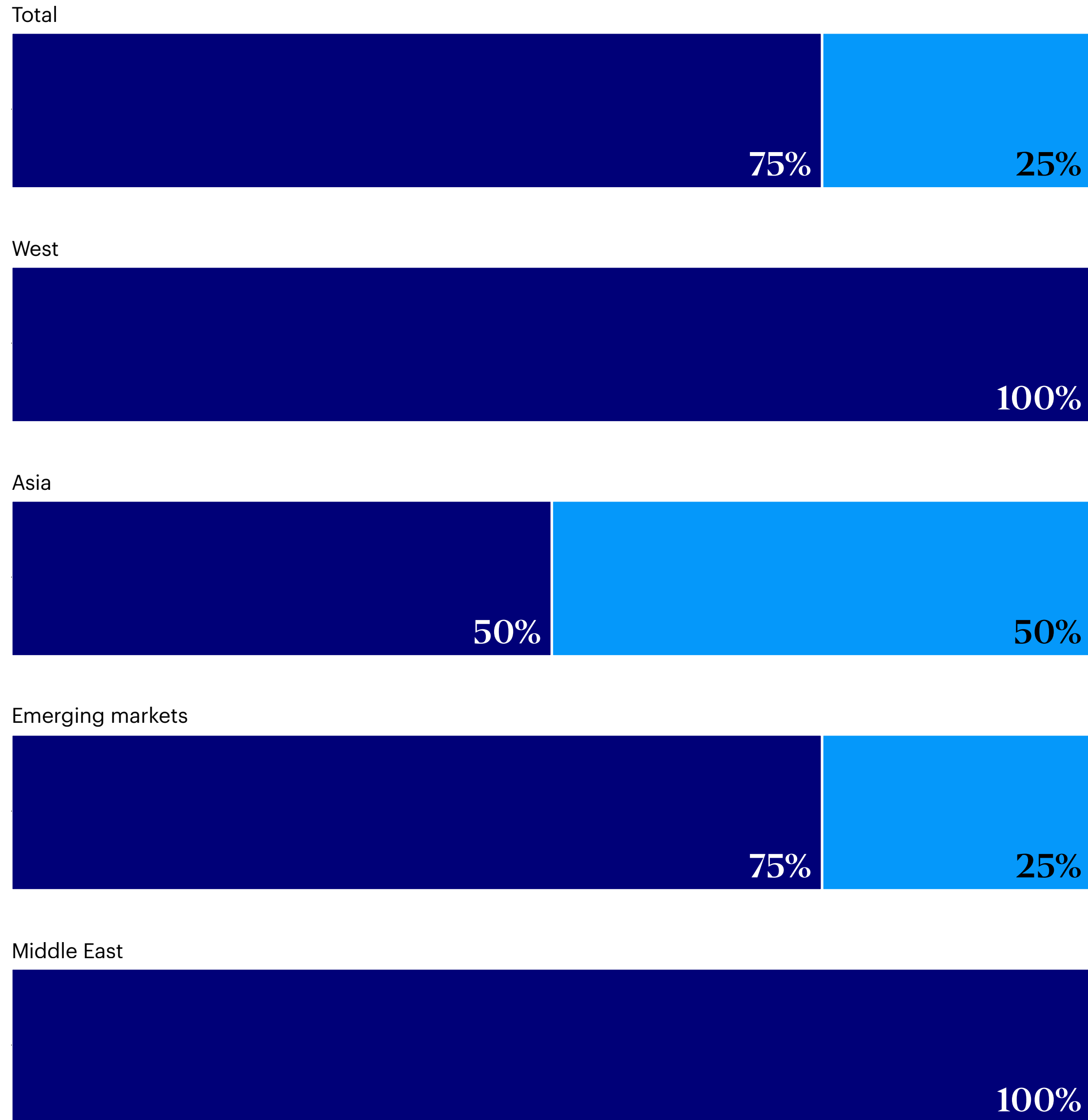
"We have a strategic allocation to China and plan is to increase this allocation over the medium term to the weight of the SDR basket. This is perhaps a bit ambitious and it depends on how the market develops – there are still some gaps to bridge to reach international standards, and there continue to be operational issues," said one European central bank, adding: "Trading RMB is different to trading other reserve currencies, and it is still difficult to apply active management to the currency. However, the dynamics of the region make it an interesting investment area and it fits with our ideas around diversification."

Figure 5.17
Central banks holding RMB (% citations, central banks only)



Do you invest in China/RMB?
Sample size: 2018 = 56, 2019 = 44, 2020 = 55, 2021 = 53

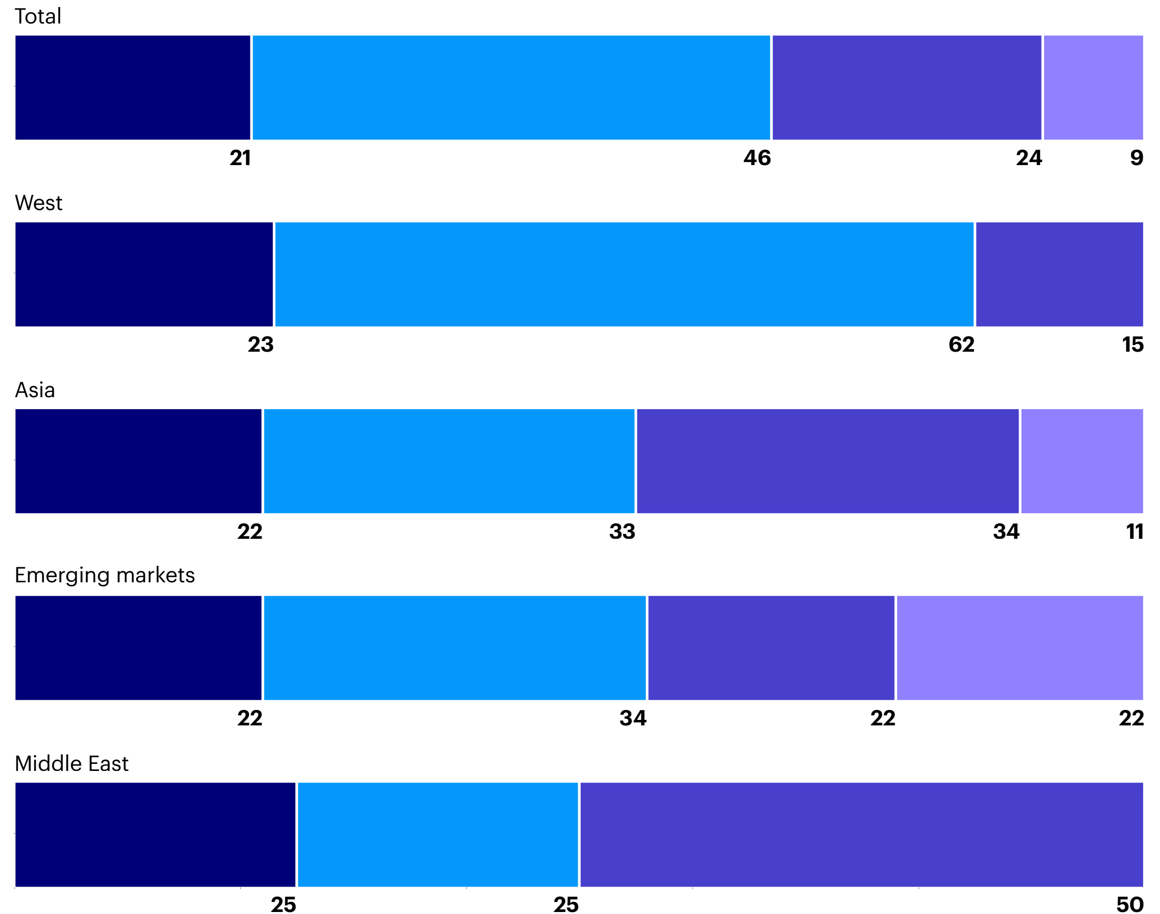
Figure 5.18
China allocations in central bank portfolios (% citations, central banks only)



Are China allocations held in liquidity portfolio or investment portfolio?
Sample size: 16

Despite rising allocations, central banks remain hesitant to classify RMB within the same bracket as other traditional reserve assets, with just 9% of respondents saying that it is now on a par with other reserve currencies **(Figure 5.19)** and average allocations remain relatively low. RMB holdings are typically not actively managed due to operational and liquidity challenges and as a result most central bank respondents hold their China allocations within their investment portfolio, rather than their liquidity portfolio **(Figure 5.18)**. However, while the majority indicate that RMB is yet to evolve into a traditional reserve asset, there was a consensus is that this will occur in the next five to 10 years **(Figure 5.19)**.

Figure 5.19
RMB now in same class as traditional reserve assets (% citations, central banks only)



Do you think RMB is now in the same class as traditional reserve assets?
Sample size: 33

Diversification across asset classes and currencies to continue

Diversification across asset classes remains a core goal for many central banks. Although the pandemic has impacted approach in some cases, for example with a greater focus on the most liquid indexes and a preference for more liquid vehicles such as ETFs, it has not impacted on the rationale or on central banks underlying appetite for diversification. Indeed, with diversification into non-traditional asset classes seen as a way of boosting returns while also reducing risk the pandemic looks likely to add additional impetus to this trend. At the same time diversification across currencies has become more pressing, with rapidly increasing US debt levels pushing central banks to diversify away from the dollar and into other currencies. RMB has been a key beneficiary and is widely seen as likely to eventually take a place within central bank portfolios that better reflects China's importance as an economy and as a trading partner.

Appendix

Sample and Methodology

The fieldwork for this study was conducted by NMG between January and March 2021. 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 decision makers within sovereign wealth funds and central banks, conducting interviews using experienced consultants and offering market insights rather than financial incentives
- In-depth (typically 1 hour) face-to-face (video) 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 overstated preferences
- Results interpreted by NMG's team with relevant consulting experience in the global asset management sector.

In 2021, we conducted interviews with 141 funds: 82 sovereign investors and 59 central banks. The 2021 sovereign sample is split into three core segmentation parameters (sovereign investor profile, region and size of assets under management). The 2021 central bank sample is broken down by region.

Figure 6.1
Sovereign investor sample, by segment

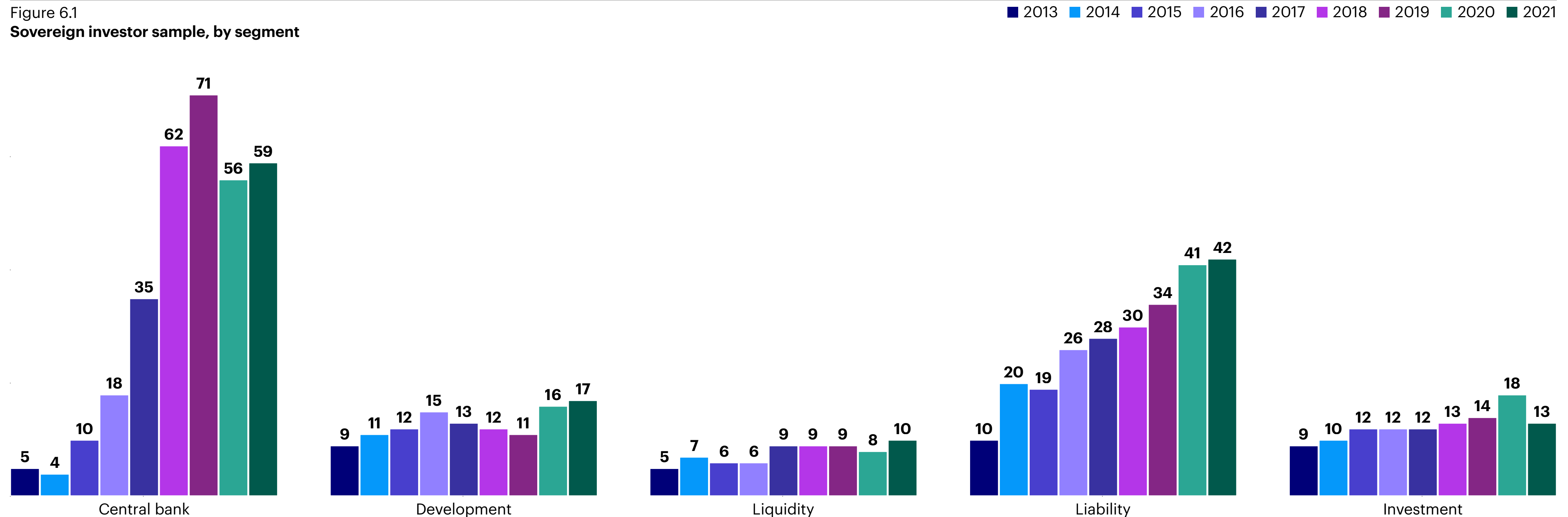
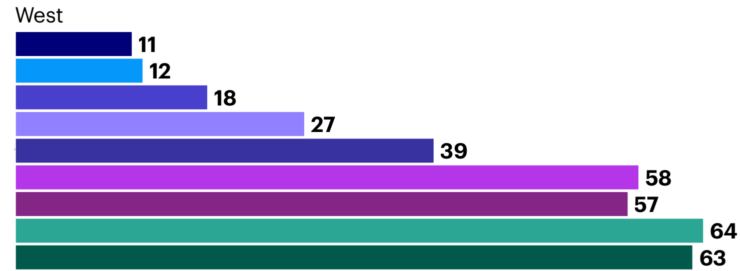
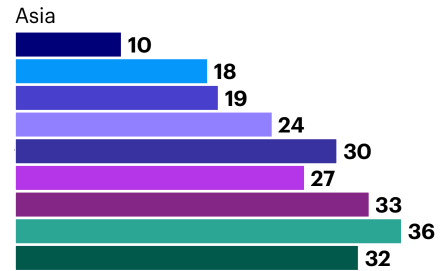
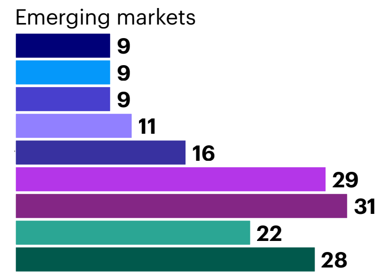


Figure 6.2
Sovereign investor sample, by region

2013 2014 2015 2016 2017 2018 2019 2020 2021







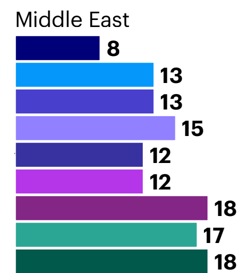
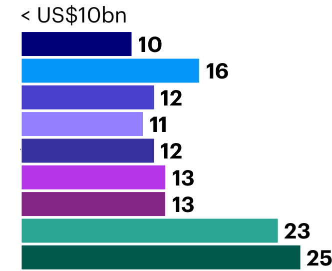
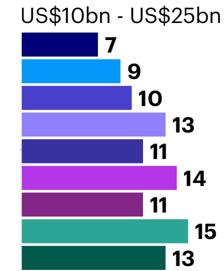
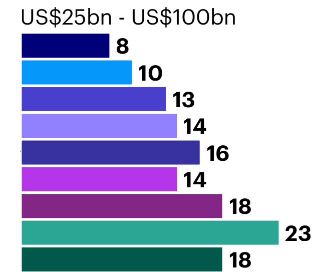


Figure 6.3
Sovereign investor sample, by assets under management

2013 2014 2015 2016 2017 2018 2019 2020 2021







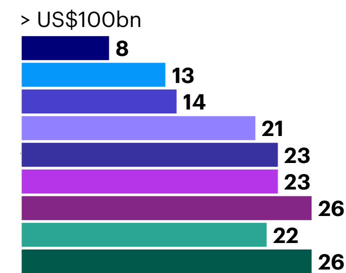
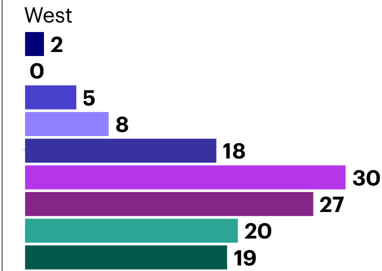
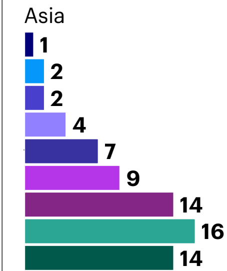
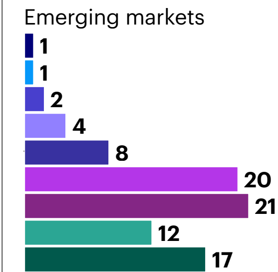


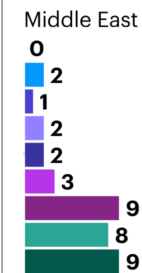
Figure 6.4
Central bank sample by region

2013 2014 2015 2016 2017 2018 2019 2020 2021









Defining sovereign investors

There are distinct segments of sovereign investors, determined in the first instance by their objectives. This framework is outlined below.

Investment sovereigns
Investment sovereigns have no specific liabilities that they are intended to fund. This typically means this segment invests with a particularly long-time horizon and high tolerance for illiquid and alternative asset classes. Long investment return objectives tend to be high, reflecting an ability to capture additional return premia.

Liability sovereigns
Liability sovereigns in contrast are intended to fund specific liabilities. Liability sovereigns are sub-segmented into those which are already funding liabilities (current liability sovereigns) vs those where the liability funding requirement is still in the future (partial liability sovereigns). Liability sovereigns generally seek to match their portfolio with the duration of the liabilities they are funding. Those where funding requirements are still well into the future resemble investment sovereigns in their approach; those with significant current funding requirements tend to still have a diverse long-term portfolio but will be more liquid and higher yielding.

Liquidity sovereigns
Liquidity sovereigns operate so they can act as a buffer in the event of economic shocks They are most commonly located in emerging markets which are prone to exchange rate volatility and / or in resource-based economies which are highly exposed to fluctuations in commodity prices. Because of the priority placed on being able to deploy capital predictably and at short notice liquidity sovereigns invest with a much shorter time horizon and with a focus on liquidity ahead of returns.

Development sovereigns
Development sovereigns are only partial portfolio investors. Their principle objective is to promote domestic economic growth rather than achieve an optimal risk / return portfolio trade-off. This is pursued by investing in strategic stakes in companies which make a significant contribution to the local economy to promote expansion and growth in employment. They pursue portfolio strategies with their other assets which are usually influenced by the size and characteristics of their strategic stakes.

Central banks
Central banks have a range of domestic roles in their economy – banking to government, issuance of currency, setting of short-term interest rates, managing money supply, and oversight of the banking system. Central banks also have a range of external facing roles, including managing foreign exchange rate policy and operations, payments for imports / receipts for exports and government overseas borrowings. Central banks hold substantial reserves to support those functions and ensure they are seen as credible. Those reserves have traditionally been invested with a priority on capital preservation and liquidity.

Figure 6.5
Sovereign profile segmentation

Primary objective	Capital presentation and liquidity	Investment and liquidity	Investment and liability funding	Investment and development	Investment only
Global sovereign segment	Central banks	Liquidity sovereigns	Liability sovereigns	Development sovereigns	Investment sovereigns

Time horizon and illiquidity tolerance →

For illustrative purposes only

Investment risk

The value of investments and any income will fluctuate (this may partly be the result of exchange rate fluctuations) and investors may not get back the full amount invested.

Currencies generally are volatile and are not suitable for all investors.

Important information

This document is intended only for Professional Clients and Financial Advisers in Continental Europe (as defined below); 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.

Issuing information

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.

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.

All data provided by Invesco as at 31 March 2021 unless otherwise stated.

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 001693 232), Level 26, 333 Collins Street, Melbourne, Victoria, 3000, Australia, which holds an Australian Financial Services Licence number 239916.

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

Belgium, France, Finland, Greece, Luxembourg, Norway, Portugal, Italy, the Netherlands, Spain, Sweden and Denmark, by Invesco Management S.A., President Building, 37A Avenue JF Kennedy, L-1855 Luxembourg, regulated by the Commission de Surveillance du Secteur Financier, Luxembourg.

Canada by Invesco Canada Ltd., 120 Bloor Street East, Suite 700, Toronto, Ontario, M4W 1540.

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.

Hong Kong by Invesco Hong Kong Limited 景順投資管理有限公司, 41/F, Champion Tower, Three Garden Road, Central, Hong Kong.

The Isle of Man, Jersey, Guernsey, Ireland and 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.

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 (Kinsho) 306; Member of the Investment Trusts Association, Japan and the Japan Investment Advisers Association.

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.

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

GL1696143