

The short view The long view The interviews

10 years of analysis supported
by 10 in-depth interviews

Introduction



I am delighted to welcome to you to a special tenth anniversary edition of our Global Sovereign Asset Management Study. Over the past ten years this study has documented the evolution of one of the largest and fastest growing segments of institutional asset owners.

For this special anniversary edition of the study, we have brought together key data from the past ten years and combined it with a series of in-depth interviews with prominent sovereign investors to understand how the segment has evolved over this period and what the next decade might look like.

As this report will re-emphasise, sovereign wealth funds and central banks aren't a homogenous group. Each has its own heritage and invests to a different investment – and often societal – objective giving rise to different priorities, investment horizons and asset allocations. Yet despite this, from our conversations several common themes emerged, including:

- The long-term macroeconomic outlook and impact on returns and asset allocations
- The influence of a more challenging geopolitical environment and shifting demographics
- The impact of growing scale and public awareness
- The role of sovereign investors in driving the energy transition

Within this report we explore how sovereign investors are considering these issues at a high level and then drill down to understand the additional implications for each type of sovereign organisation. These topics throw up several questions and, while this report does not provide all the answers, it gives an insight into how sovereigns are thinking about these issues and explores how these investors will look to approach the challenges and opportunities of the next decade.

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Overview



Over the past 10 years sovereign investors have benefitted from a secular bull market, with average annual returns above 6.5%.¹ However, 2022 is seen as a potential turning point, with high inflation and tighter monetary policy putting downwards pressure on long-term expected returns



Sovereign wealth funds and public pension funds now account for \$33 trillion in assets under management.² Growing scale is leading to increased public awareness, driving a need for increased transparency and a demand for leadership on driving the energy transition



Over the past decade the US has replaced Western Europe as sovereign investors' preferred destination for capital, thanks to steady economic growth, a strong currency and regulatory stability. India is now the most favoured emerging market, having overtaken China

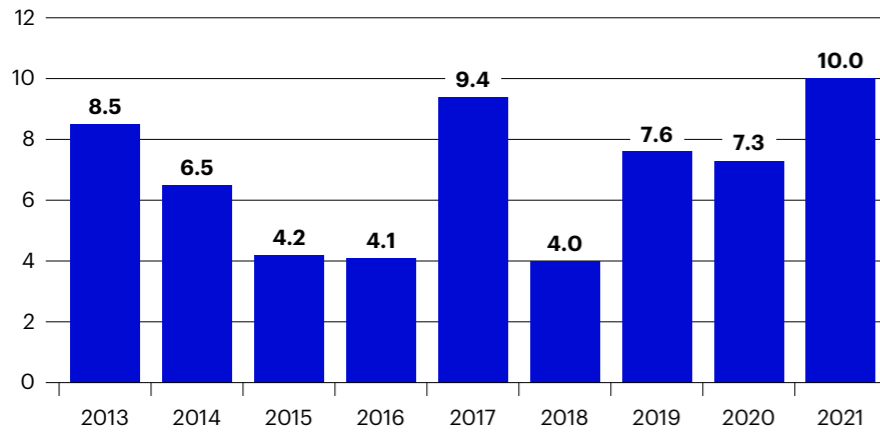
¹ Figure 1.1, page 05.
² Global SWF.

A woman in silhouette stands on a balcony, looking out at a city skyline. The skyline includes several tall buildings, with the most prominent one being a very tall, slender skyscraper. The sky is blue with some clouds. The balcony has a metal railing. The overall scene is in a cool, blue-toned color palette.

The next tailwind

Over the last 10 years sovereign investors have invested with the wind at their backs thanks to the secular bull market that emerged from the global financial crisis.

Figure 1.1
Average returns, sovereign wealth funds only, %



Source: Invesco Global Sovereign Asset Management Study.

Average annual returns for sovereign investors over this period were consistently positive, regularly reaching high single figures (figure 1.1).

Throughout this decade, yields continued a downward trend (figure 1.2). Debt was cheap while globalisation and economic interconnectedness helped companies access low-cost labour and leverage supply-chain improvements with relatively subdued geopolitical risk. Inflation remained subdued and consumer demand healthy.

Over the past decade this report has delivered insight into how sovereigns and central banks managed through these trends. But that was then, and this is now.

For many of our respondents, the future is arriving rapidly. It brings considerable challenges but equally, exciting opportunities. So, what does the next ten years look like?

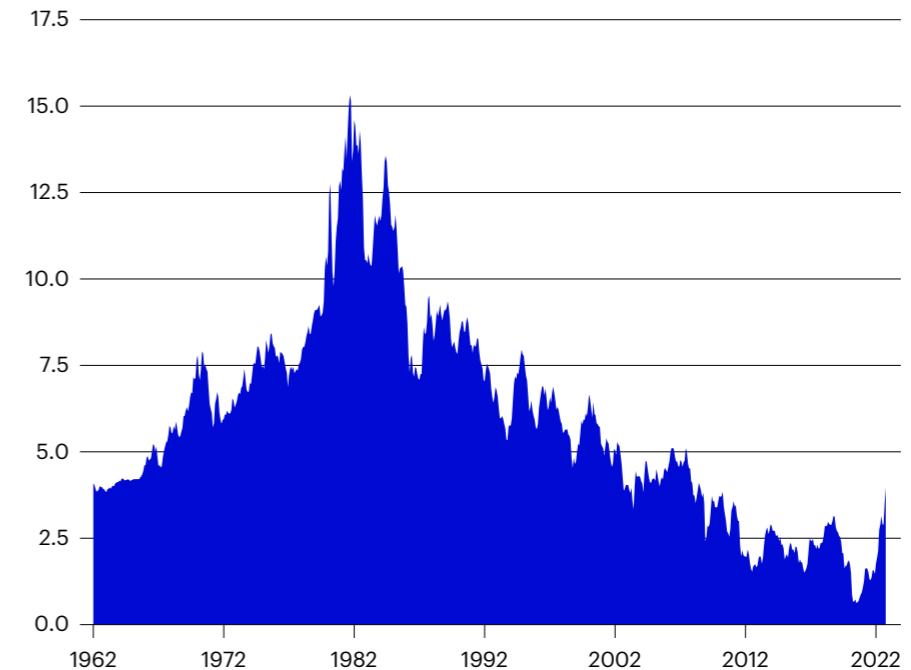
In many ways, the answer to this question can't ignore the past, which our respondents believe helped carve the challenging path ahead as they look to the next decade. Several pointed to the start of 2022, and one of the worst years on record for the traditional 60:40 portfolio, as the end of that era and beginning of the next. "We are coming out of an era of cheap debt, cheap labour, and cheap energy" suggested one European sovereign investor.



We are coming out of an era of cheap debt, cheap labour, and cheap energy.

European sovereign investor

Figure 1.2
Market yield on U.S. treasury securities at 10-year constant maturity



Source: FRED.



Challenges to overcome but opportunities emerging

Sovereigns interviewed for this report see a much more challenging environment, in which tighter monetary policy exerts downwards pressure on asset prices and challenges the macroeconomic assumptions that they have been working under for the past decade.



The outlook for growth is challenging and it is also difficult to evaluate how this high inflation period will affect investments.

European sovereign investor

“The outlook for growth is challenging and it is also difficult to evaluate how this high inflation period will affect investments. I think it will be harder to meet real return targets. I’m not sure it’s enough to trigger a change in long-term return targets but it will certainly be much more of a challenge” said one European sovereign investor.

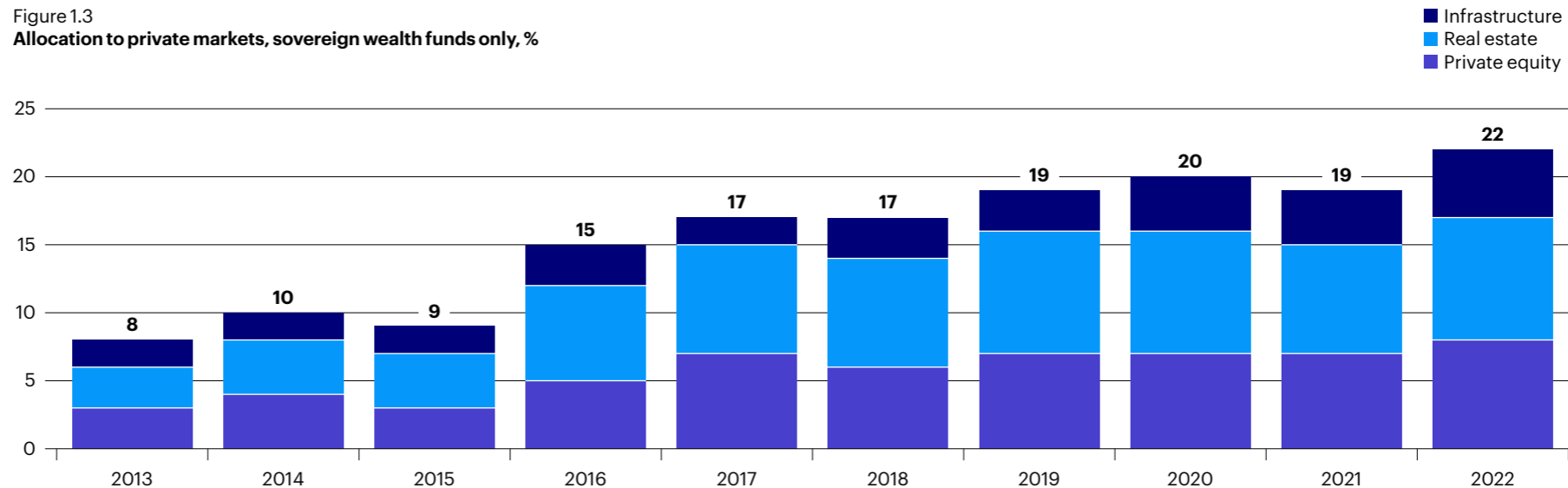
That said, many sovereigns are long-term investors and price retracements create opportunities. It is notable that most of the best performing sovereigns of the past ten years have been those that have been able to invest against the wind. Many sovereign investors have an almost

unparalleled ability to take a very long-term perspective as one Middle East-based sovereign investor explained: “Most risk management systems are driven by volatility, so when you have stressed market conditions, the risk management systems will produce more red flags and force a reduction in exposure at the worst time. As very long-term investors we do not have to follow these conventions but the only way to get this discussion right is to have an investment philosophy and systems in place that allow you to lean against the wind. You are helping to stabilise the financial system if you do the job well and you are also going to deliver better returns in the long run”.

Fixed income now more attractive

Across this past ten years of low and falling yields, this study observed sovereigns and central banks seeking greater diversification in search of additional returns.





Source: Invesco Global Sovereign Asset Management Study.

Private market assets such as real estate, private equity and infrastructure have been the major beneficiary, offering the potential for additional returns, a shield from volatility, and inflation pass through. Average sovereign private market allocations increased from 8% in 2013 to 22% in 2022 (figure 1.3).


This trend has not been isolated to sovereign wealth funds, however, who have competed with other large institutional investors for these assets. Several question whether this pace can be maintained over the next decade.

One APAC-based respondent articulated: "It looks clear that capital formation in private markets hasn't kept pace with the required rate of return. So there's ever greater demand for private markets and supply that's not able to keep pace with that demand, which tilts against asset owners in terms of pricing and is likely to create challenges over the long term."

Rising yields, however, might offer a release valve with fixed income once again showing defensive, long-term diversification potential: "It is now more appealing as a long-term investor to

invest in fixed income, and I think that's an interesting ongoing shift. You are not paid as much for taking risk as you were 10 years ago, when the risk return curve was a lot steeper. Increased yields make the job easier for those focused on long-term portfolio construction" said a European sovereign investor.

This view was echoed by an APAC-based interviewee "There is a term premium returning and in many major markets you can now achieve a nice real interest rate over the long-term which starts to look attractive."



Growing scale and increased public awareness

Sovereign wealth funds and public pension funds now account for over \$30 trillion in assets under management (figure 1.4, overleaf).





If you want to be part of the global community, increased transparency is not a choice, it's a requirement.

Middle East sovereign

Over the past decade we have seen a massive increase in scale that has been underpinned by both inflows and strong returns.

At this scale sovereign investors can now be characterised as universal owners of assets, representing a significant proportion of capital across nearly all geographies and asset classes. With new sovereign funds being established, and many funds continuing to see strong inflows on the back of high commodity prices, the relative position of sovereign wealth funds as one of the largest sources of institutional capital looks set to continue rising. In contrast, many defined benefit pension funds, previously a dominant force in the investment universe, are now in outflow and are likely to see their relative position decline as the next decade progresses.

With increased scale and importance comes greater levels of public awareness and scrutiny. In response sovereigns now often take a leading role in conversations around issues such as tax transparency, as one Middle East sovereign revealed: "We are supporting the introduction of a global minimum tax and we are joining the

movement to make certain tax data public. This is the direction the global community is moving. If you want to be part of the global community, increased transparency is not a choice, it's a requirement."

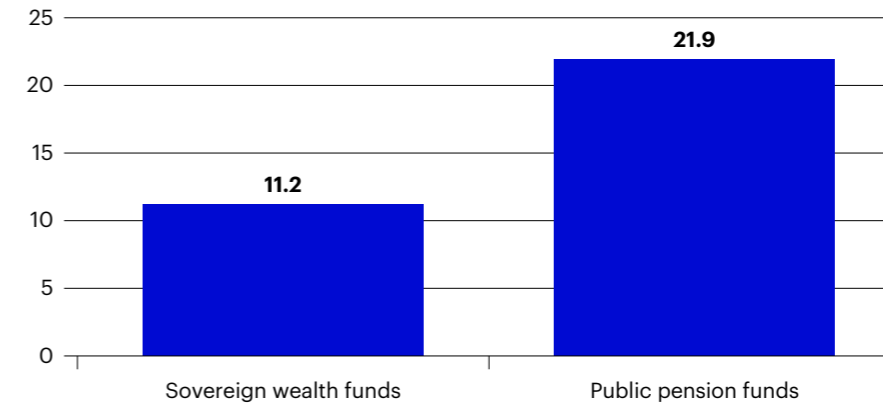
Climate change and the energy transition is another area where sovereign investors are increasingly being expected to provide global leadership. Despite significant progress in this area over the past decade sovereign investors sometimes lag other large institutional investors in driving changes in their portfolio, often due to a desire to not front-run government policy. For example, in our 2022 study just 30% of sovereign wealth funds and 16% of central banks had put in place carbon targets for their portfolio (figure 1.5).

The next decade looks likely to be very different. As more governments pass legislation defining their carbon commitments sovereign investors will be driven to enact concrete carbon targets and, in many countries, will likely become an important vehicle for funneling investment into low carbon solutions. One European sovereign investor detailed their current approach and challenges that they face in moving

the needle in their own portfolio: "Step one has been encouraging our portfolio companies to set Paris-aligned targets which is very important for a long-term investor like us. However, step two will see us take much more responsibility in providing energy solutions. We have invested too little in renewable energy projects and the energy crisis in Europe can be partly attributed to that. The crisis is also highlighting how important it is for legislation to make it easier to invest in energy projects that will enable all companies to move towards net zero."

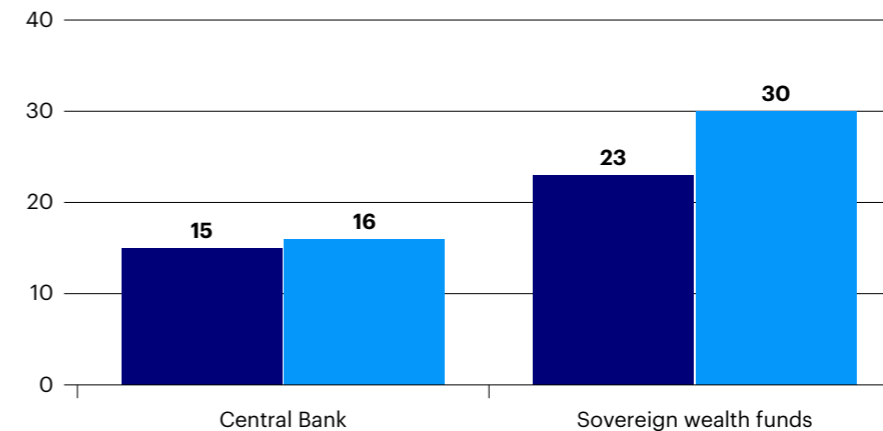
The interaction between carbon targets and inflation was also seen as an area of important consideration for the decade as one APAC-based sovereign discussed: "There is a general belief that the cost of carbon will increase significantly and that will be inflationary as we strive toward net zero. However, I would never underestimate human capacity for innovation and technologies that are able to disintermediate the existing energy complex faster than we might otherwise believe. Sovereign investors can play a role in fostering that innovation and making the energy transition affordable."

Figure 1.4
Total assets under management, US\$ trillion



Source: Global SWF.

Figure 1.5
Have carbon targets, % citations



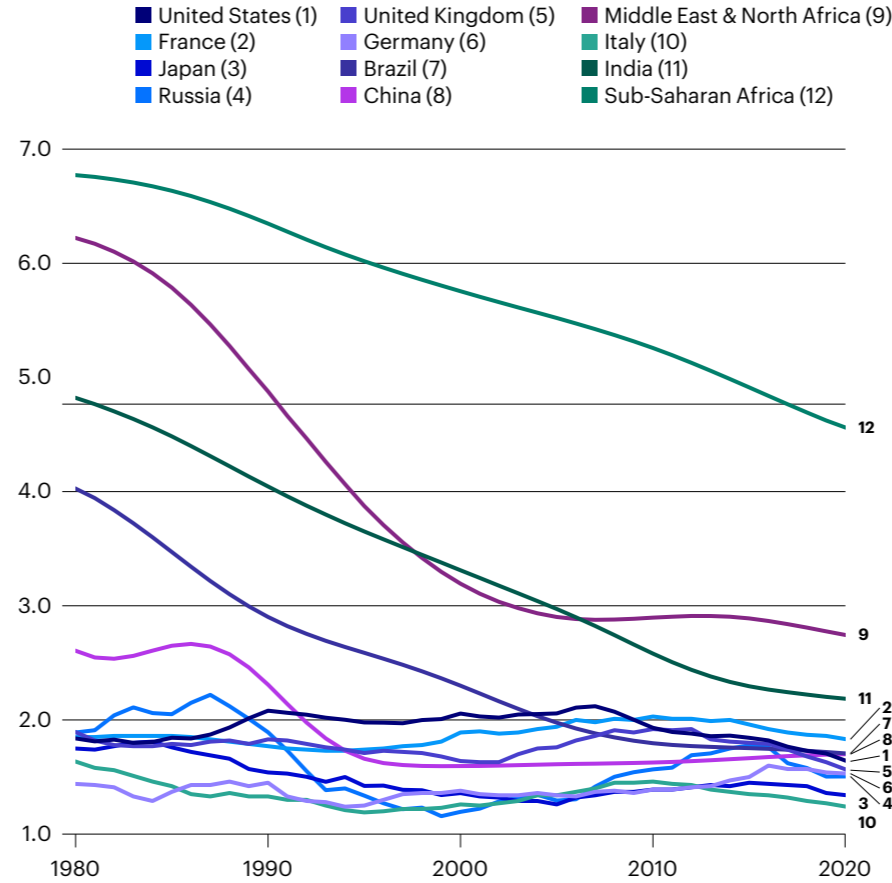
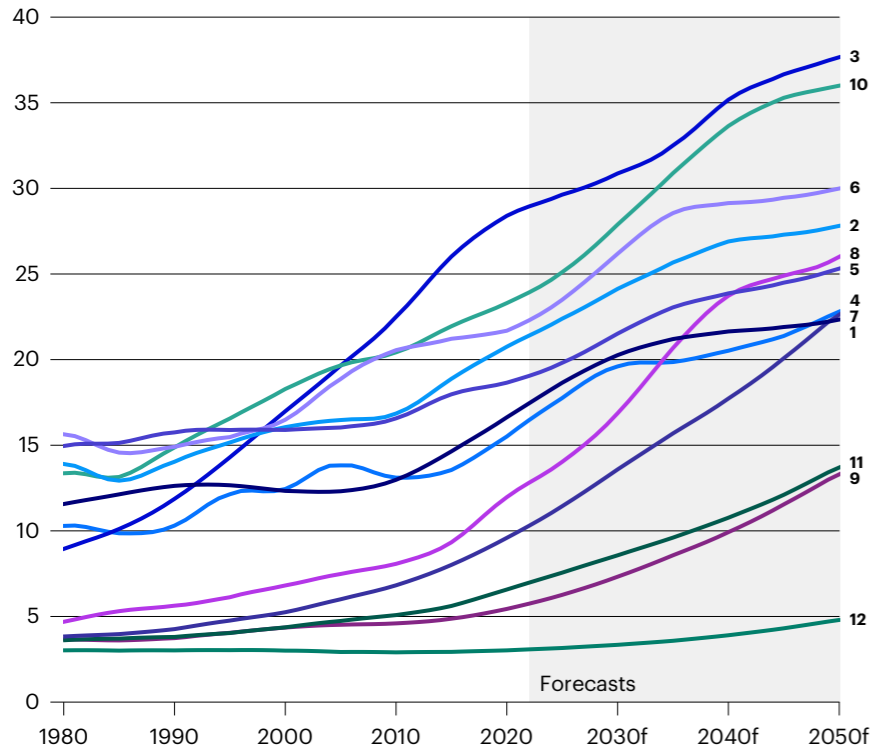
Source: Invesco Global Sovereign Asset Management Study 2021 and 2022.



Changing demographics a key consideration

For many sovereign investors another significant consideration for the next decade and beyond is the changing demographic profile of major investment markets.

Figure 1.6
Population aged 65 and above as % of total population (LHS) and fertility rate (RHS)



Source: World Bank.

Aging populations and birth rates below replacement rate is a feature of nearly all developed markets, and particularly pronounced in several economies such as Japan and Italy (figure 1.6).


As long-term investors most sovereigns are focused on understanding the implications of these changes on their investment portfolio. "We underestimate how fast these changes are working through many geographies. We are used to demographic changes being quite slow and not influencing things in our own lifetime" said one North American sovereign investor.

This is seen as directly impacting the attractiveness of markets and was also seen as a factor in company level investment decisions. "If you are investing in a healthcare company that has developed a popular drug among the older demographic then the trend is that there is larger potential within that demographic" suggested one Middle East interviewee.

Declining fertility rates and aging populations were seen as directly influencing projections for economic growth, and hence long-term expected returns, as one European sovereign

identified: "We are heading towards a lower population growth rate on the global scale, and I think that's very important for our expectations for long-term economic growth. The rate of population growth has been declining and is now entering an accelerating phase. The global population may now peak around 2060 at around 9.5 billion people which is quite a lot lower than previous projections. Even in emerging markets we are seeing fertility rates falling and globally we are going to see a lot more older people relative to younger people and relative to the labour force."

What are some of the impacts of these changing demographics on sovereign portfolios? Several cited the impact on projections for interest rates and potential yields from investments. "Over the past decade we have had this long stretch where interest rates were a lot lower than would be predicted based on the levels of economic growth. This can be partly attributed to a baby boomer 'savings glut' that has kept interest rates down. Eventually there should be some liquidation of holdings especially as people spend money to support their retirement and this should move the equilibrium interest rate higher."



Geographic diversification amid heightened geopolitical tension

Over the past 10 years sovereign investors across all segments have pursued geographic diversification, with a focus, generally, first on the developed markets of North America and Western Europe followed by major emerging markets including China and India.



When combined with growing scale this diversification has led to sovereigns becoming major cross-border investors, often owning major stakes in key infrastructure and high-profile real estate.

This pursuit of international reach has often included the establishment of local offices and teams of regional investment specialists. Notably, this trend coincided with a rise in globalisation and increased interconnectedness of the world's major economies.

Rising geopolitical tensions in more recent years, along with an associated focus on re-shoring, has led to greater uncertainty that the pace of globalisation will be maintained (and indeed whether this trend may start to reverse). As a result there are questions around where sovereigns will focus their resources when pursuing their international ambitions over the next decade. In the coming period of potentially lower asset class returns, geographic considerations will become increasingly important.

This study has tracked how sovereign investors rate the relative characteristics of the world's major economies as a destination for capital (figure 1.7). In 2014 the UK was viewed the most favourably, followed by Germany and the US. However, in the years since, European markets have seen their relative position decline, hit firstly by the European debt crisis in the aftermath of the global financial crisis and more recently by Brexit, an energy crisis, and fears of an overspill from the conflict in Ukraine. In contrast the US has built a preminent position supported by steady economic growth, a strong currency and regulatory stability.

Over this period the attractiveness of major emerging markets has proven to be volatile. For example, China had been gradually climbing up the rankings and was seen as the fourth most attractive destination for capital in 2019. However, it has since fallen back because of rising political tensions and concerns around increased regulatory risk following interventions in sectors such as technology and education. The role of China within sovereign portfolios over the next decade remains an open question but many investors also identify a potential cost in overlooking China given its size and the growing importance of Chinese capital markets. "The Chinese capital account is gradually opening, and the Chinese economy is the second largest in the world in market price terms. Chinese capital markets are going to be very significant players in the next century. Any knee-jerk reaction due

to increased tension between China and the West is potentially very short-sighted. Excluding China from consideration could prove to be a dangerous opportunity cost" suggested one APAC-based sovereign fund.

In contrast to China's volatile ranking India has seen steady improvement in its position, rising to second place in the most recent study, thanks partly to favourable economic reforms and a strong demographic profile. "India has been a beneficiary of what is happening in China as investors often have a dedicated allocation for Asian emerging markets. Some of the extra allocation that is coming out of China is going to India. In the last 2 years there has been a lot of interest in Indian investment. It is a big economy and growing so there definitely is a case for investment" suggested a sovereign based in North America.

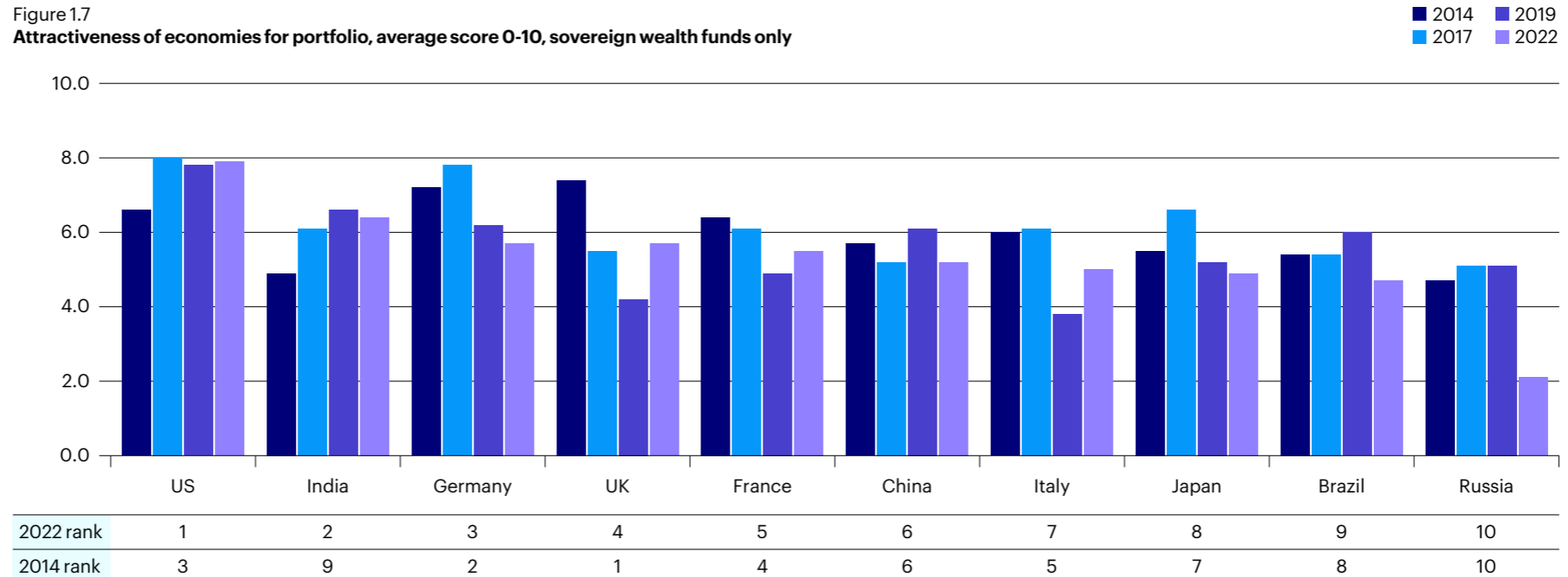


India has been a beneficiary of what is happening in China as investors often have a dedicated allocation for Asian emerging markets.

North American sovereign

Figure 1.7

Attractiveness of economies for portfolio, average score 0-10, sovereign wealth funds only



Source: Invesco Global Sovereign Asset Management Study.



The next decade

When viewed through the prism of 2022 the investment environment of the past decade may look relatively benign (particularly if considering investment returns in isolation).

However, this would be to overlook the market uncertainty that prevailed for many years following the global financial crisis (including concerns over whether the Eurozone itself would survive) as well as the huge economic and market shock caused by the Covid-19 pandemic, which in turn led to unprecedentedly low and negative interest rates. Throughout this period sovereign investors have adapted and evolved, developing new strategies to accommodate changing market conditions and harness opportunities.

With 2022 looking like an inflection point, there is no doubt that in the next 10 years sovereigns will need to continue evolving, not least to help deal with the ongoing climate crisis. Having built experience sovereign investors are well placed to meet this challenge and assume the global leadership role commensurate with their scale and importance as global investors.



A perspective from the International Forum of Sovereign Wealth Funds

Since the commodity price spike of 2006, we have seen a doubling in the number of sovereign wealth funds, resulting in the scale and reach of this type of investor expanding dramatically. This trend has been accompanied by the diversification of sovereign wealth fund mandates.



Victoria Barbary
Director of Strategy
& Communications,
International Forum of
Sovereign Wealth Funds



In 2008, the founding members of the International Forum of Sovereign Wealth Funds were almost exclusively traditional state-owned investors. These institutions' assets were generated from fiscal surpluses to save for future generations, diversify and provide higher long-term returns on reserves than could be achieved by a central bank or to stabilise government spending and support the local currency in a commodity downturn. Today, however, IFSWF members are much more diverse: currently, about half our full and associate members have a primarily domestic mandate. These institutions may steward state-

owned enterprises to create national and regional champions, enhance local stock-market liquidity by listing portfolio companies or anchoring local initial public offerings, invest in strategic sectors or attract long-term foreign direct investment as a promoter or partner. The focal point of the formation of strategic funds has been the continent of Africa. In the past decade, 12 new sovereign wealth funds have been established in Africa, of which 11 have a strategic role in their local economies.

The expansion of sovereign wealth fund mandates into their local economies

and their frequent exposure to unlisted companies has been mirrored by traditional sovereign wealth funds. During over a decade of stubbornly low interest rates, sovereign wealth funds with a mandate to generate long-term returns diversified their portfolios from traditional listed fixed-income and equity markets into private markets. Following the global financial crisis, the most sophisticated sovereign wealth funds from the Arabian Gulf and East Asia looked to allocate to real assets, such as property and infrastructure, as well as private equity to increase returns to meet their mandates.



IFSWF data from the first half of 2022 suggests that sovereign wealth funds continue increasing allocations to private markets to insulate their portfolios from volatility in the current market conditions.

Their view was that higher returns are driven partly by the illiquidity of private markets but also because they are less efficient and thus provide the potential to exploit information asymmetries to generate above-average returns.²

For both types of investors, substantial experience in private markets has led to changes in sovereign wealth fund governance processes. IFSWF research from 2016 revealed that while these investors viewed the management of traditional assets as a commodity, they believed that the management of private or alternative assets is an area that requires specialised resources and competencies, needing greater oversight and understanding.³

As a result, there has been a trend towards building in-house capacity to assess private-market managers, to co-invest and invest directly and lead funding rounds across a range of private markets.⁴ As investment teams have built their expertise and understanding of investing in unlisted assets, investment committees and boards have also had to upskill themselves. They have had to understand the complex range of issues to be considered in private markets and how they measure and manage portfolio risk, given the illiquidity of private markets.

As sovereign wealth funds' private-market capabilities have matured, they have uncovered a conflict between the need for speed when co-investing – private equity firms and other co-investors will not make allowances for slow governance processes – and the need for thorough oversight. As a result, there has had to be a trust-building exercise for many sovereign wealth funds. The stakeholders agree to certain parameters to delegate private-market investment decisions to staff. Consequently, sovereign wealth funds more involved in deal-making are developing agile processes to meet speed and oversight requirements.⁵

For African sovereign wealth funds, the governance challenges around private-market investments are even more profound. For them, robust, independent governance is key to attracting private capital. Most of the funds on the continent are independent, professional institutions with boards comprising largely non-government directors. For these sovereign wealth funds, international private investors must see them as peers with aligned interests if they co-invest. They, therefore, need to have nimble decision-making processes that reflect those of their co-investors.

However, this agility must balance with independence and transparency, which are essential to building public trust, particularly in countries where the perception of government institutions is largely unfavourable.⁶

The promulgation of the Santiago Principles in 2008 catalysed sovereign wealth funds' adoption of higher standards of governance and transparency.⁷ However, as sovereign wealth funds have had greater exposure to private markets – whether that be at home or abroad – their governance standards have continued to evolve due to the complexities of these assets and the need to continue to deliver financial returns. IFSWF data from the first half of 2022 suggests that sovereign wealth funds continue increasing allocations to private markets to insulate their portfolios from volatility in the current market conditions. This trend is reinforced by more sovereign wealth funds embracing the need to combat climate change by investing in infrastructure to support the energy transition. Consequently, the trend for improved sovereign wealth fund governance should remain on an upwards trajectory.

² [IFSWF New Challenges, Private Markets.pdf](#)

³ [IFSWF New Challenges, Private Markets.pdf](#)

⁴ [Partnering for Success: Sovereign Wealth Fund Investments in Private Markets](#)

⁵ [Internal vs External Management: A False Dichotomy](#)

⁶ [Investing for Prosperity and Growth: In Africa, Sovereign Wealth Funds Focus on G, S and E](#)

⁷ Edwin M Truman, "Sovereign Wealth Funds, Building on a Decade of Progress" in [The Origin of Santiago Principles. Experiences from the past: guidance for the future](#) | International Forum of Sovereign Wealth Funds

1.



Investment sovereigns

The primary objective of investment sovereigns is to generate long-term investment returns. Often located in countries rich in natural resources, these sovereigns are tasked with investing excess revenues from the sale of these resources for the benefit of future generations. Investment horizons are generally longer and return targets higher than other sovereigns.



Scale challenges lead investment sovereigns to focus on beta and embrace a Total Portfolio Approach to dynamically manage allocations and better manage risk



Nearly half of investment sovereign regional allocations are in North America. Better regional diversification is a priority for some, with a focus on markets with favourable demographics including Africa and emerging Asia

The past 10 years have seen many investment sovereigns grow their assets at an impressive rate. The largest investment sovereigns now rank among the world’s largest and most influential investors. As universal owners of capital, two important issues have increasingly gained in prominence – 1) how to get better at minimising the impact of major market corrections (i.e. manage beta) and 2) how to achieve more robust geographic diversification.

Strategies for better beta management

The solutions adopted by investment sovereigns to help them manage beta at scale include introducing greater flexibility within asset allocation ranges, sometimes via a Total Portfolio Approach (TPA) to investment governance and portfolio construction.

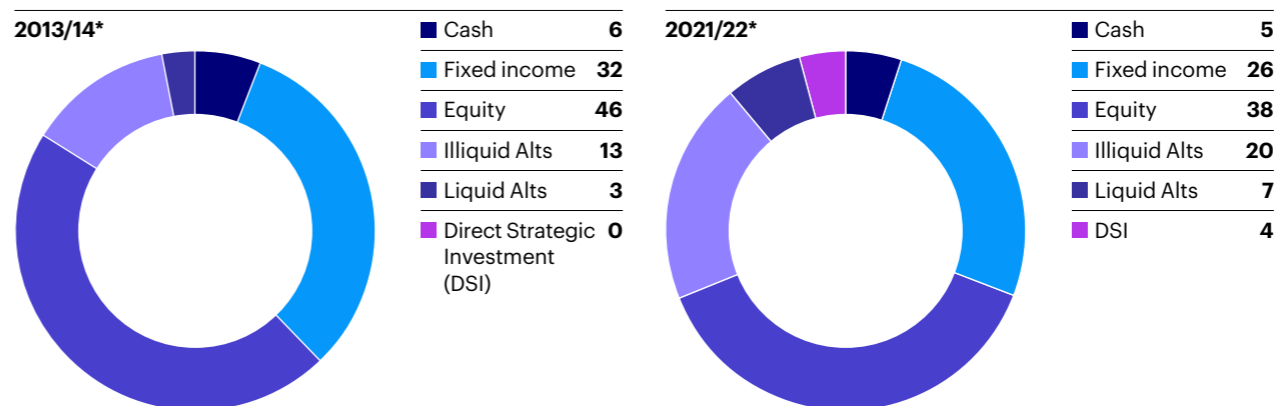
Sovereigns adopting TPA point to a number of benefits including greater speed and flexibility within their investment governance and decision-making. An APAC-based sovereign also noted the ability to better identify, construct and manage sources of beta at scale: “As you get bigger it becomes harder to be dynamic and leverage external alpha. We felt we could ultimately achieve better results by diversifying long-term risk through careful construction of sources of market beta; alpha plays a smaller part of that model.”

Sovereigns adopting this model believe it creates healthy competition for capital across traditionally siloed asset class teams. “We have a well-defined active risk budget, and that active risk is allocated across different parts of the portfolio that we monitor through time. The total active risk budget comes from the board and then the investment committee has the delegation to allocate that risk,” said another APAC-based sovereign using TPA.

Even among funds not using a TPA approach we identified a growing willingness to use allocation-based solutions to better manage exposure to market risk and avoid potential icebergs. “When things look dangerous, such as at the end of 2021 and the beginning of 2022, there is scope to take a more defensive position via your asset allocations,” suggested a sovereign investor based in North America. This includes the use of alternatives such as hedge funds and commodities as this interviewee went on to explain: “When outcomes are very uncertain having an allocation to hedge funds can make sense. We also look at opportunistic investments, such as investing in commodities in response to concerns about inflation.”

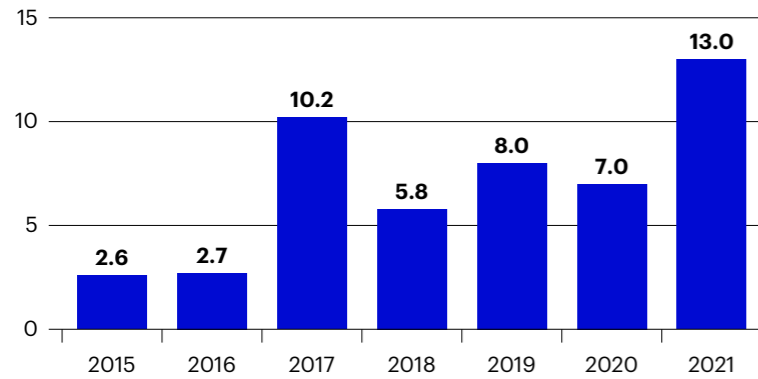
A desire to better target and manage sources of market beta has helped push investment sovereigns towards illiquid alternatives, with investment sovereigns now prominent and influential in bidding for private market assets. Many investment sovereigns have also looked to capture more of the value chain by developing internal management capability. As a result, allocations to listed markets have fallen from 78% to 64% while allocations to illiquid alternatives (incorporating real estate, private equity and infrastructure) have risen from 13% to 20% (figure 2.1).

Figure 2.1
Investment sovereigns’ asset allocation, average %



*Two-year average. Source: Invesco Global Sovereign Asset Management Study.

Figure 2.2
Investment sovereigns' average returns, %



Source: Invesco Global Sovereign Asset Management Study.

Rebalancing towards emerging markets

Over the years, sovereigns have often approached the question of geographic allocations with a degree of caution. A common response has been (befitting a total portfolio approach) that while mindful of diversification, they deploy capital to assets within their investable universe they believe will best deliver their investment objective wherever they are. A changing geopolitical landscape, however, has more recently led sovereigns to reflect more deeply, with greater regional diversification often now a priority.

The regional allocations of investment sovereigns are noteworthy given that they generally have a global mandate and are often tasked with helping diversify their country's underlying balance sheet away from the domestic market. Interestingly, nearly half of investment sovereign regional allocations are in North America (despite North America only accounting for 16% of the investment sovereign sample). In contrast, 17% of allocations are to Europe, 20% to APAC, 12% to the Middle East and under 5% to emerging economies in Africa and Latin America (figure 2.3).

While North America (and the US in particular) has been a major destination for investment over the past decade, our most recent interviews revealed an increased desire for more balanced global exposure. Some investors believe they had become overly reliant on returns from the US market – a situation that left them particularly exposed to the 2022 correction in equity markets.

As long-term investors investment sovereigns are also very conscious of the impact of demographics. Emerging markets with large and growing populations are seen as offering long-term opportunities, particularly in the areas of real estate (both commercial and residential) and infrastructure. "Going forward one-third of our allocation will be directed towards emerging markets, with a focus on Brazil and India" revealed one Middle East sovereign. "The obvious growth engine globally now is Africa. That's looking at demographics and the fact Africa also has a lot of natural resources, many of which are compatible with a transition toward a net zero economy and green technology" added one APAC-based investment sovereign.

Taking advantage of global opportunities

Political risk and currency risk are generally seen as two of the major barriers to increased emerging market allocations. However, investment sovereigns were keen to point out that their focus on long-term returns puts them in a particularly strong position to bear these risks, and benefit from the additional premiums on offer.

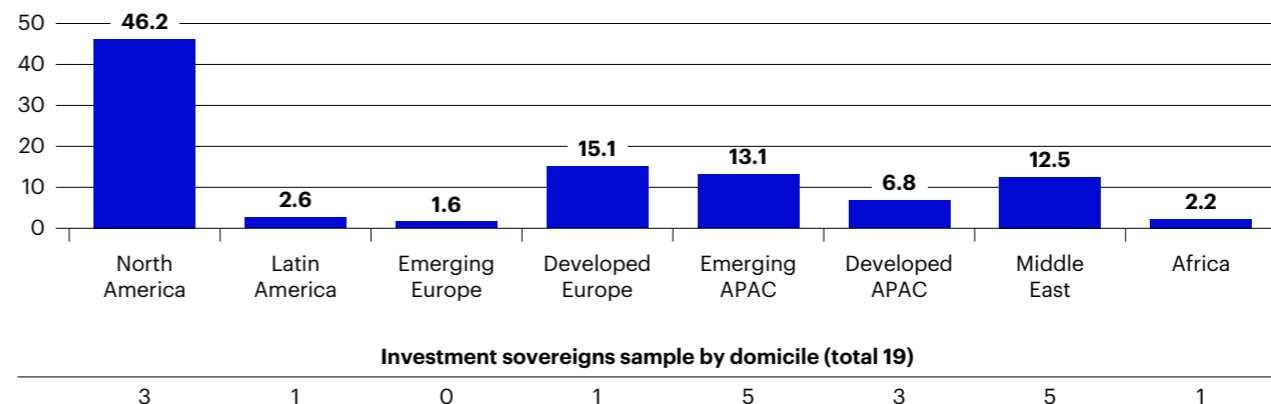
As such, investment sovereigns see the next decade as an opportunity to embrace the full wealth of opportunities available within a global mandate. For many, this is likely to see a rebalancing away from developed markets towards markets with greater long-term growth potential.



Going forward one-third of our allocation will be directed towards emerging markets, with a focus on Brazil and India.

Middle East sovereign

Figure 2.3
Investment sovereigns' average regional allocations, %



Source: Invesco Global Sovereign Asset Management Study 2022.

2.



Liability sovereigns

Liability sovereigns invest to fund specific liabilities, such as pension commitments. They may – and often do – manage a combination of such liabilities, often with a discrete investment mandate. Their main objective is to generate sufficient returns to meet or exceed the liabilities they are funding and therefore often seek to match the duration of their portfolio with the duration of their liabilities.



A higher interest rate environment offers potential to reverse a decade of lower fixed income allocations in favour of private markets



Looking ahead, liability sovereigns will continue to play a prominent role in driving the energy transition. This will continue to influence investment strategy, as funds prioritise investment in low carbon projects to meet carbon reduction targets and net zero commitments

Fixed income plays a central role in portfolio construction for liability sovereigns. Low risk, regular cash flow generation, and the potential for cash flow and duration matching are valuable portfolio construction tools for providing these investors a degree of certainty in funding future liabilities.

Persistently low yields over the past ten years saw fixed income give way to increasing private market assets (figure 3.1). Private market assets such as infrastructure, real estate, private equity, and private debt are seen by many to offer some of the characteristics liability sovereigns find attractive in fixed income: long duration assets generating steady, predictable cash-flows, with inflation pass-through in the case of regulated infrastructure assets. Large public pension funds count among the most competitive bidders for these assets.

“Over the past decade we have steadily increased infrastructure allocations in sectors with legal monopolies. We are attracted to their long duration and the diversification benefits they provide our portfolio” revealed a sovereign investor based in North America.

“We have pushed for more real assets because yields have been limited in fixed income; private equity and private markets are generally long-dated, good diversifiers,” said one European sovereign investor. However, against a backdrop of higher rates, a rotation back to fixed income looks likely.

Hiking downhill – rising interest rates and market risk eases way for fixed income

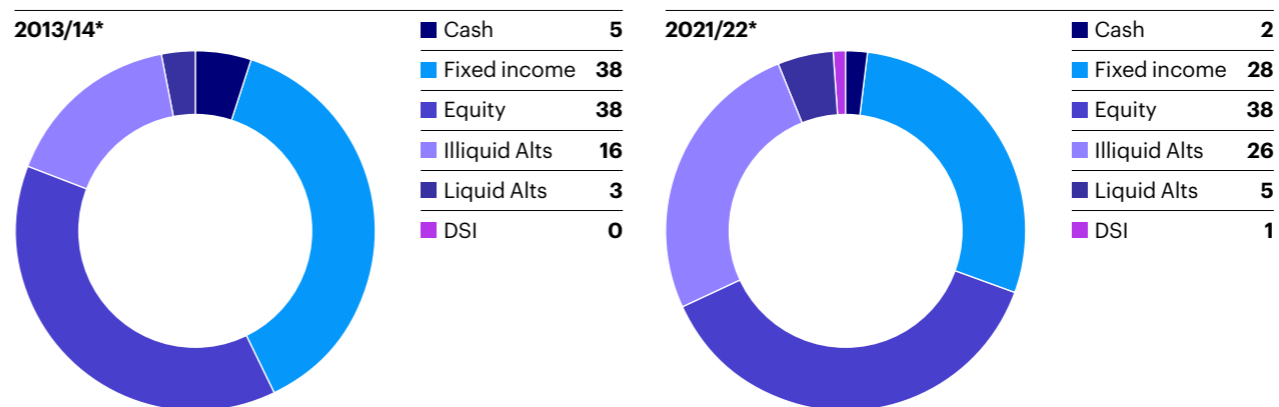
For liability sovereigns higher prevailing rates can improve their funding status by reducing the present value of future liabilities. For some, this presents a timely opportunity to rotate capital back to fixed income and away from private markets as they contemplate valuation concerns and other potential risks. This was the view of one APAC liability sovereign,

“Most asset owners run a real return objective. Private market capital formation hasn’t really kept pace with that required return. We see an ever-greater demand for private markets and supply that hasn’t matched it, which creates supply and demand imbalances and pricing challenges. There are great opportunities out there, but not everyone can be a top quartile investor in terms of access.”

Rising rates could also temper demand for real assets in favour of riskier parts of the fixed income space as one European liability sovereign explains. “There is tremendous opportunity in distressed debt as well as high-yield fixed income products thanks to the rate hikes. These assets are relatively liquid and much easier to access than infrastructure or real estate so we are starting to think about how we prioritise allocations going forward.”

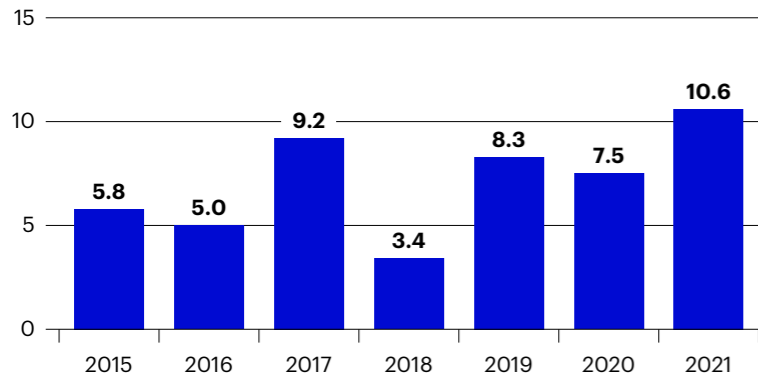
Meanwhile listed equities have also begun to look less attractive than fixed income on a relative, risk-adjusted basis, as one North American interviewee explains. “The yield on fixed income is now much higher than public equity markets. For example, the yields on the S&P 500 are around 2% and you can achieve 4% in risk-free treasuries. This could see average equity allocations go down”.

Figure 3.1
Liability sovereigns’ asset allocation, average %



*Two-year average. Source: Invesco Global Sovereign Asset Management Study.

Figure 3.2
Liability sovereigns' average returns, %



Source: Invesco Global Sovereign Asset Management Study.



ESG factors and climate change are a key component that are driving changes in our asset allocation.

North American interviewee

Driving the energy transition

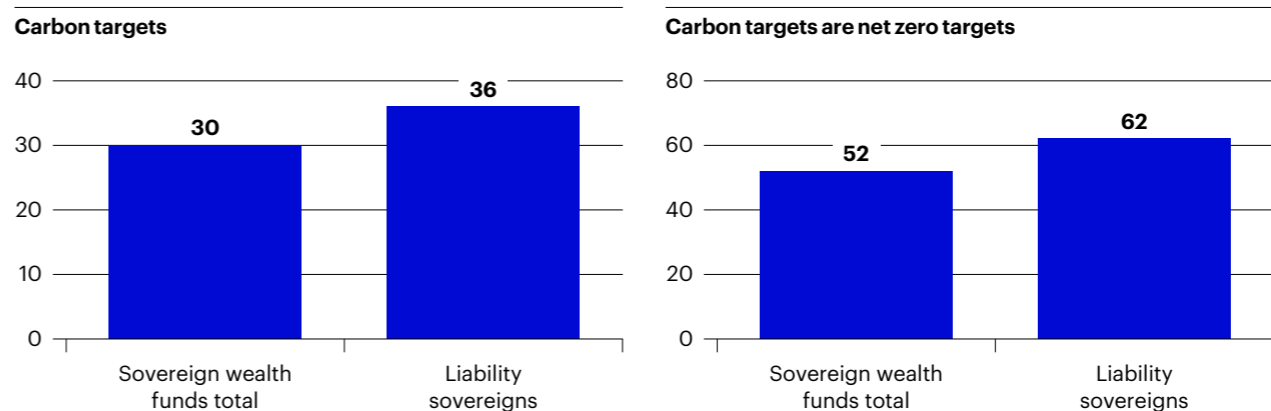
As they are often providers of public (Pillar 1) pensions, liability sovereigns attract a high degree of public scrutiny. Recently, this has included pressure to outline commitments to carbon reduction and their role in the energy transition.

Some 36% of liability sovereigns have adopted carbon targets (compared to 30% of sovereigns as a whole, figure 3.3). For many liability sovereigns this is now having a direct influence on investment strategy, with funds looking for opportunities to invest in low carbon projects. “ESG factors and climate change are a key component that are driving changes in our asset allocation. We are investing more in renewable infrastructure to promote sustainable practices. We are also refocusing our private equity programme to support companies who are following an environmentally friendly approach” revealed one North American interviewee. With several large liability sovereigns making commitments to net zero targets, this segment can be expected to lead from the front in driving the institutional response to the climate crisis over the next ten years.

Of the 36% of liability sovereigns that have enacted a carbon target, some 62% say that this is a net zero target. “We have 2050 net-zero targets and a goal of 30% reduction in carbon intensity by 2030” said one European fund. “We have ambitious carbon targets and actively engage with companies, so that they can develop proper strategies in order to reduce their carbon emissions. We have developed a number of metrics that allow us to monitor progress and hold companies to account if they are failing to take the right steps” added a sovereign investor based in North America.

The next decade will see investors grapple with the challenges of meeting these targets. However, under the scrutiny of both beneficiaries and the wider public, the ability to match these ambitious goals will likely be an increasingly important metric for how many liability sovereigns are judged.

Figure 3.3
Have carbon targets, % citations



Source: Invesco Global Sovereign Asset Management Study 2022.

3.



Development sovereigns

The distinguishing characteristic of development sovereigns is the priority placed on development objectives, such as diversifying and developing the local economy, over investment returns. These investors take stakes in local companies within strategic sectors and work closely with them to foster long-term growth and self-sufficiency. Success is often measured in economic metrics such as GDP growth and job creation. When large and mature enough, proceeds from these investments may be reinvested in foreign assets.



New development sovereigns are being established, particularly within Africa. Existing development sovereigns have shifted from being custodians of state assets to sophisticated global capital allocators across a range of asset classes



Development goals have evolved to focus on long-term strategic investments in current and emerging industries such as technology and renewable energy

Over the last decade the number of development sovereigns has increased steadily, with governments across a number of emerging markets (most notably in Africa) recognising the important role that these organisations can play in driving the long-term development of a country. At the same time the role and goals of existing funds has shifted to focus on new asset classes and new targets, including supporting the energy transition and development of a technologically advanced local economy.

Shift from custodians to active investors

Development funds are often initially established to own and develop existing state assets that exist as natural monopolies in key sectors of the economy such as energy, transportation, and telecommunications. While this remains an important part of their remit, over the past ten years the mandate of many funds has changed to focus on investing capital in new and existing businesses to help develop parts of the economy seen as underserved by private financing. These investments are now often implemented via equity stakes that provide some control and influence over strategy and outcomes.

This trend is likely to accelerate over the next ten years and has led to a significant shift in portfolios, the average allocation to direct strategic investments falling from 79% in 2013/14 to 46% in 2021/2022 and allocations to equities, fixed income and alternatives all rising sharply (figure 4.1).

“10 years ago we were really focused on developing the local economy and the employment of the local workforce. Now we are very focused on technology and low carbon solutions – areas that can be difficult to replicate at the same scale in the private sector” said one Middle East-based interviewee.

With many development sovereigns acting more like conventional investors this shift has necessitated funds to develop a commercial approach to allocating capital and has seen the goal of many funds evolve to include a focus on investment returns. This was articulated by one

Middle East-based interviewee: “10 years ago the objective was to achieve a 5% total return with a limited amount of risk. Now we have become much more aggressive in terms of expected return and the amount of risk we can take. This has led to a more entrepreneurial spirit with higher targets and higher levels of expected return.”

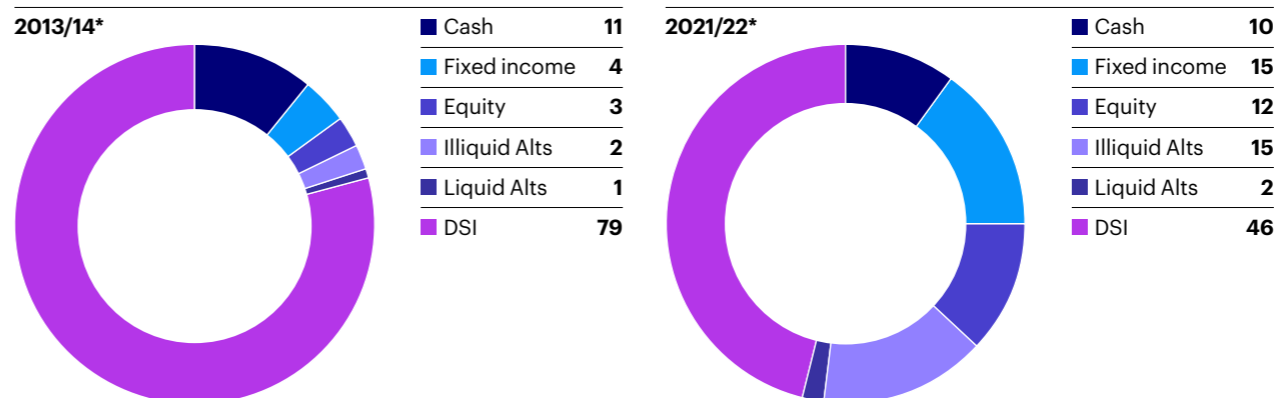
Delivering commercial returns alongside development goals

As the mandate of development sovereigns has evolved many are now tasked with delivering strong returns while also providing evidence that they are meeting their development goals. “Our mandate is for commercial returns, but also to generate economic impact in the local economy. Each of our investments needs to have some benefit in terms of job numbers, wages or contribution to the local economy. We track how our investments are doing from an economic perspective through a survey and we collate all of that data, to produce an economic impact report” revealed a European investment development sovereign.

These twin objectives are not always perfectly aligned and this is likely to lead to additional challenges over the next decade, as one Middle East investor revealed. “We look to explain to our shareholders the impact of our investment activity on the local economy. However, there is always a balance between delivering on those objectives and delivering strong returns and that is not necessarily reflected in our mandate.”

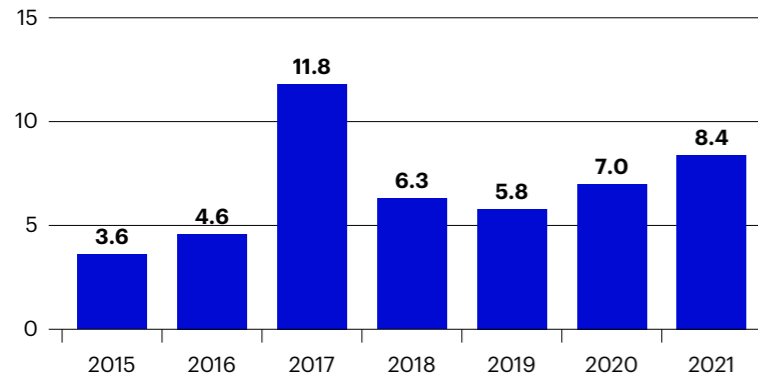
Figure 4.1

Development sovereigns’ asset allocation, average %



*Two-year average. Source: Invesco Global Sovereign Asset Management Study.

Figure 4.2
Development sovereigns' average returns, %



Source: Invesco Global Sovereign Asset Management Study.

Evolution of development goals to include the energy transition

The goals of development sovereigns have also evolved, with many sovereigns now tasked with driving the energy transition and supporting the development of a knowledge-based economy. Innovations in these areas are seen as one solution to the demographic challenge of falling birth rates and, in some markets, reducing the reliance on immigration as a driver for economic growth. “Financial wealth is eventually turned into human capital and improved skills among later generations. That is the ultimate goal of a development fund” explained one Middle East-based sovereign investor.

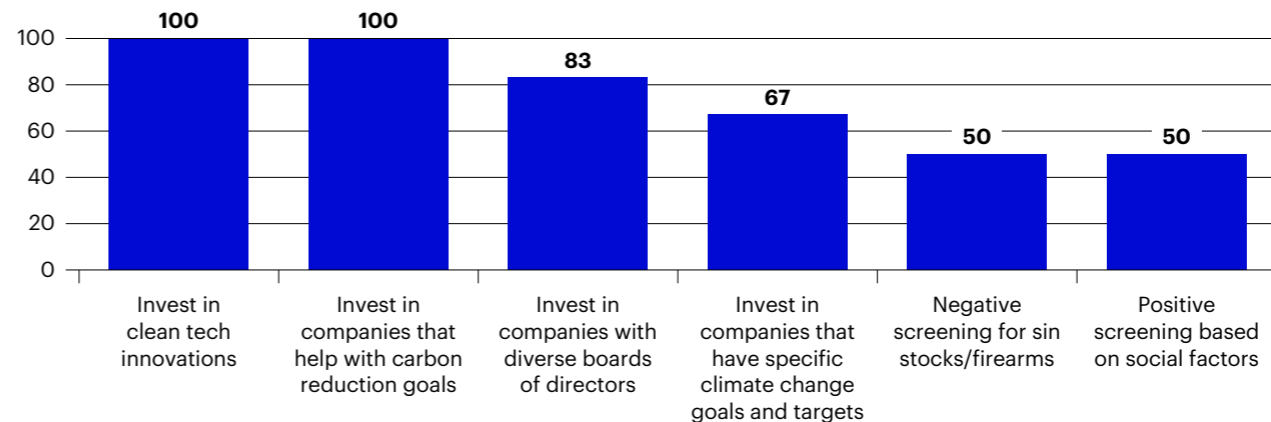
With many development sovereigns based in economies reliant on the extraction of natural resources to help fund government spending there is often an additional incentive to invest in projects that can drive the transition to a low-carbon economy. Development sovereigns are well placed to make these investments thanks to their ability to take on higher levels of risk, as one Middle East-based sovereign explained “You can create a solar panel project and in three years’ time there is a new technology which makes this investment obsolete. But this is where innovation is and where we want to be investing, regardless of the return.”

Notably, the ESG policies of all development sovereigns include a focus on investing in clean tech innovation as well as companies that are helping drive carbon reductions (figure 4.3). “This is an example of how the mandate is changing, with sustainable energy a frontier challenge where the technological gap can be closed quickly via the right investment” explained one European-based development sovereign.

Mandate offers up unique possibilities

With few of the traditional constraints characteristic of their sovereign peers and other large institutional investors many development sovereigns are uniquely positioned to focus on identifying and investing in very long-term trends. As such they are increasingly building a reputation as early-stage investors in secular trends such as sustainable energy, digitalisation and biotechnology. With these investments now starting to deliver impressive returns (often via IPOs and disposals) development sovereigns look set to continue evolving from managing state assets to becoming private equity-like investors with a wider investment universe.

Figure 4.3
Issues addressed in ESG policy, development sovereigns, % citations



Source: Invesco Global Sovereign Asset Management Study 2021.

4.



Liquidity sovereigns

Liquidity sovereigns are funds set up to act as a buffer in the event of economic shocks. They are generally located in emerging markets prone to currency volatility and those dependent on commodity prices. Due to the unpredictable nature of outflows, liquidity sovereigns generally have extremely short time horizons and prioritise portfolio liquidity above investment returns.



The pandemic led to a reassessment of which asset classes are likely to remain sufficiently liquid in a crisis, with liquidity sovereigns reshaping portfolios to focus on resilience



Models of risk are advancing to consider the position of sovereign funds within the wider context of the state balance sheet. 67% of liquidity sovereigns incorporate a consideration of state assets and liabilities in their risk model, compared to 54% of sovereign funds overall

The next decade is likely to see continued developments in the role of liquidity sovereigns. In markets where governments are running fiscal surpluses we are likely to see these funds grow in scale and take on additional responsibilities beyond market stabilisation. Indeed, this is occurring already with some funds having grown in size and evolving to look more like conventional investment sovereigns (and building more diverse portfolios to match).

Developing flexibility to meet next crisis

For liquidity sovereigns the pandemic stands out as an event of particular importance when reviewing the past decade. Among all the sovereign segments liquidity sovereigns were the ones called upon the most during the Covid crisis, with 78% of liquidity sovereigns seeing drawdowns compared to 36% of sovereigns overall (figure 5.1). “The pandemic really highlighted the need for a sovereign wealth fund. We were tapped by the government to fund programmes for combating the crisis, including vaccines, PPE equipment and creating a housing fund to generate economic activity” revealed one Latin American-based liquidity sovereign.

Despite successfully meeting these challenges this period highlighted the scale of potential liquidity needs during a crisis and created questions about which assets are likely to remain liquid during periods of extreme volatility. In response, many liquidity sovereigns moved a significant portion of their assets to cash to facilitate withdrawals and this continues to influence the size of these allocations (figure 5.2).

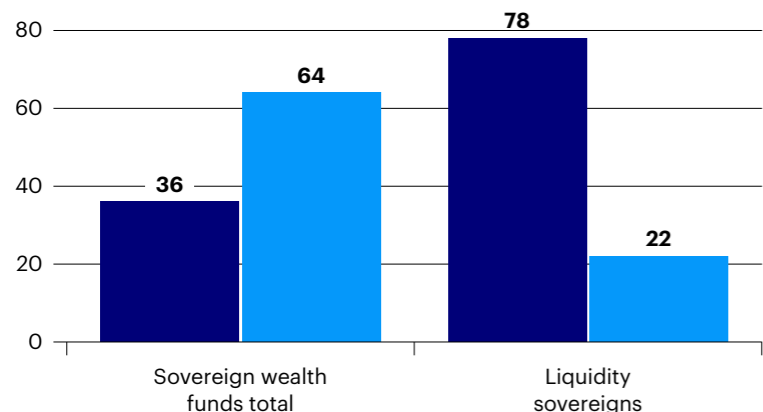
Since the crisis many funds have looked to build more resilient portfolios, as well as more flexible organisations that can adapt quickly to unexpected crises. This includes improved reporting on liquidity metrics and a better understanding of how best to liquidate assets during times of stress.

“Our liability stream is for natural disasters and heavy economic downturns. We know what the shape is, but we don’t know when they will occur so 90% of our assets are in deep liquid markets” said a Latin American liability sovereign.

Generating returns from the most liquid parts of the fixed income market has previously been a challenge but liquidity sovereigns have been aided by the rising rate environment, as one Latin American sovereign explained: “Prior to the pandemic we had been moving up the risk spectrum to avoid negative yields but that is no longer necessary. In our fixed income portfolio we have low levels of duration so for us a rising rates environment makes managing the portfolio easier when we reinvest.”

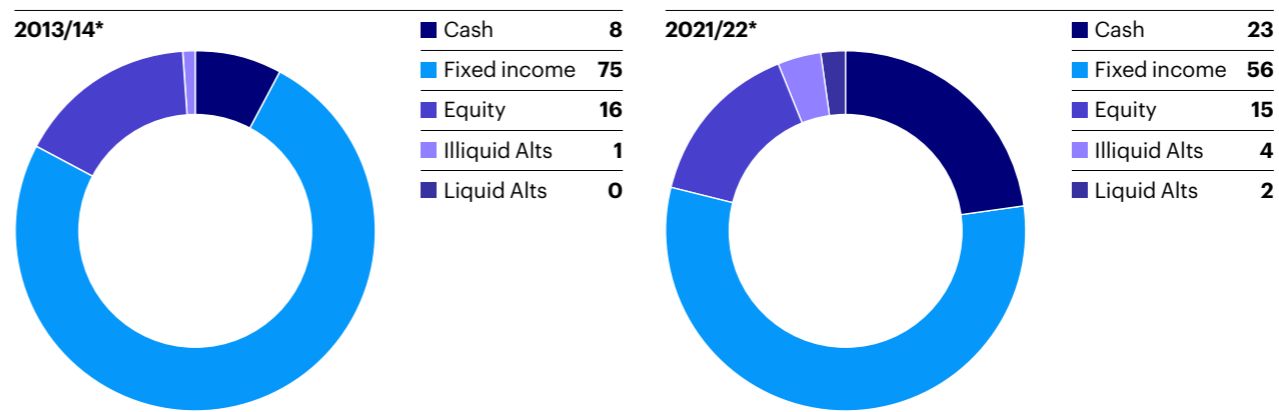
Because of their more frequent outflows, liquidity sovereigns have to be particularly sensitive to their position as part of the government’s overall balance sheet. Some 67% of liquidity sovereigns incorporate a consideration of state assets and liabilities in their risk model, compared to 54% for sovereign funds overall (figure 5.4 , page 31). This includes managing swings in commodity prices, as one African liquidity sovereign explained. “If I am in an oil-rich country it makes no sense to buy assets in oil companies because I have oil in the ground. Our role is to help turn natural resources into financial resources so that the country has a sound balance sheet.”

Figure 5.1
Drawdowns due to Covid-19, % citations



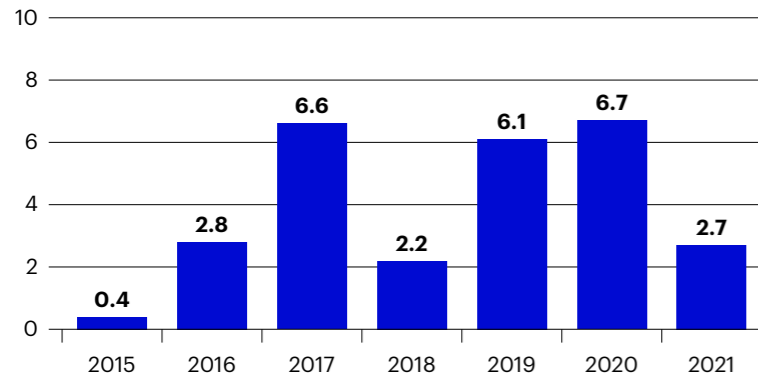
Source: Invesco Global Sovereign Asset Management Study 2021.

Figure 5.2
Liquidity sovereigns’ asset allocation, average %



*Two-year average. Source: Invesco Global Sovereign Asset Management Study.

Figure 5.3
Liquidity sovereigns' average returns, %



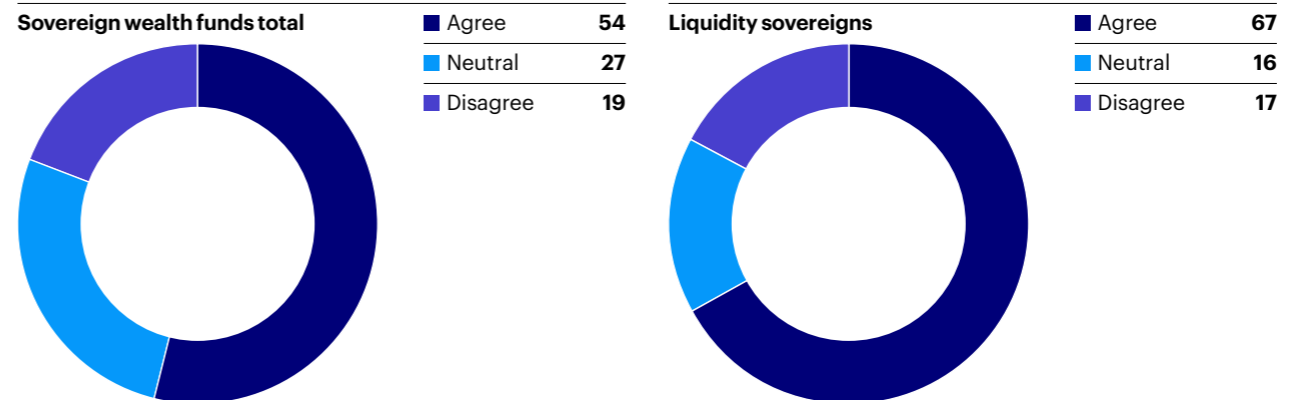
Source: Invesco Global Sovereign Asset Management Study.

A changing role for some but liquidity objectives remain

Increased scale means that some sovereigns in this segment are now of sufficient size to look beyond liquidity as the only objective. Over the next decade this trend is likely to continue with many having ambitions to take on the inter-generational role of investment sovereigns or the economic role of development sovereigns. This was articulated by one Latin American-based fund. "You build your central bank reserves first until you have enough to fend off a crisis, then you overflow the reserves into a stabilisation fund that stabilises the fiscal situation. Now that you have dealt with current account risks you can focus on longer-term horizons with an intergenerational fund".

For funds facing this kind of evolving mandate a focus on liquidity and flexibility will undoubtedly remain a central part of their remit. However, it is one that they will be increasingly asked to balance against new longer-term return and/or development objectives in a way that may require both a modified approach to portfolio construction and the harnessing of additional sources of expertise.

Figure 5.4
Risk models include a consideration of state assets and liabilities, % citations



Source: Invesco Global Sovereign Asset Management Study 2021.

5.



Central banks

While central banks have many roles, in this study we focus on the management of foreign exchange reserves. Central banks hold these reserves to manage foreign exchange rate policies and to facilitate foreign exchange operations such as payments for imports and foreign debt. Foreign reserves are important for sending credibility signals to the market, to facilitate currency intervention and to provide liquidity buffers in times of crisis. They have traditionally been invested with a priority on capital preservation and liquidity.



Diversification into non-traditional assets has been a focus for central banks over the past decade as central banks have evolved their model for managing risk. However, rising rates may temper this trend going forward with banks instead focused on maximising returns from their government bond portfolio



The position of USD within central bank reserves has dipped only slightly over the last decade, with Euro allocations falling further. While RMB allocations have grown, there are obstacles to overcome before the currency can pose any challenge to the status of USD as the world's reserve currency

The last ten years has seen a significant shift in the management of foreign currency reserves, with banks increasingly viewing risk on a portfolio basis rather than at the single asset level. This is partly a result of central banks adopting more sophisticated models for assessing their investment horizons, recognising that they have both short-term and long-term objectives.

This was explained by one Middle East interviewee: “We build a multi-stage model: very liquid for tomorrow and super long-term to recognise that reserves should be permanent. As a result our investment horizon sits somewhere between those two and is determined by running a reserves adequacy model and understanding how big the liquidity requirements need to be”.

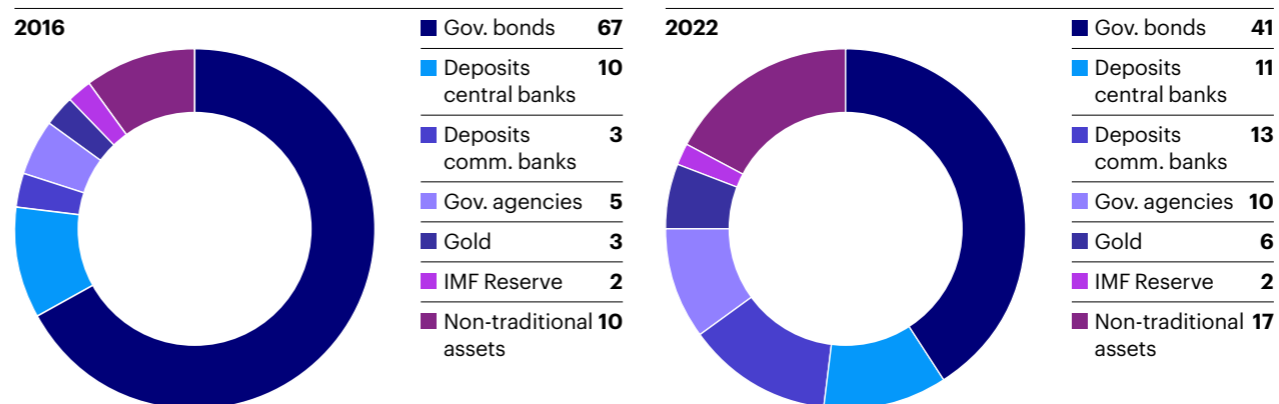
These developments have led to the widespread adoption of barbell strategies and more diverse portfolios. This includes a significant increase in allocations to non-traditional ‘risk assets’ including equities, emerging market (EM) debt and real estate. These accounted for 10% of the average portfolio in 2016, increasing to 17% in the latest study (figure 6.1). This diversification has pushed banks to develop expertise across asset classes and also increased engagement with the asset management sector, as one Middle East interviewee explained: “The big trend is towards diversification so that you maximise your return given your risk factor. We assess individual asset classes to see if we can pick a fund manager who we can engage with and learn from.”

Higher rates make reserve management easier

Another important driver of this move towards diversification has been low and negative yields on government bonds, which traditionally make up the lion’s share of a reserve portfolio. While return targets for reserve managers are low there is usually an expectation that losses will be avoided, with returns from the portfolio used to help fund the running of the bank.

For central banks higher interest rates makes managing reserves easier and diversification to boost returns is likely to be less of a priority going forwards. “Nominal yields are going up and that means you have a loss on the bond portfolio. However, that loss will be offset by higher reinvestment rates over the horizon” revealed one European central bank. “It is much easier to manage reserve when yields are high than when they are low. You can accommodate higher potential drawdowns and still expect a return. When yields are at zero any drawdown will impact the size of the reserves, and this must be included in the model” added a Middle East-based central bank.

Figure 6.1
Central bank asset allocation, average %



Source: Invesco Global Sovereign Asset Management Study.



The dollar is most frequently used in foreign exchange funds and trade transactions. All the underlying reasons why you hold currencies still support the dollar.

Middle East-based central bank

Reserves growing with USD preeminent

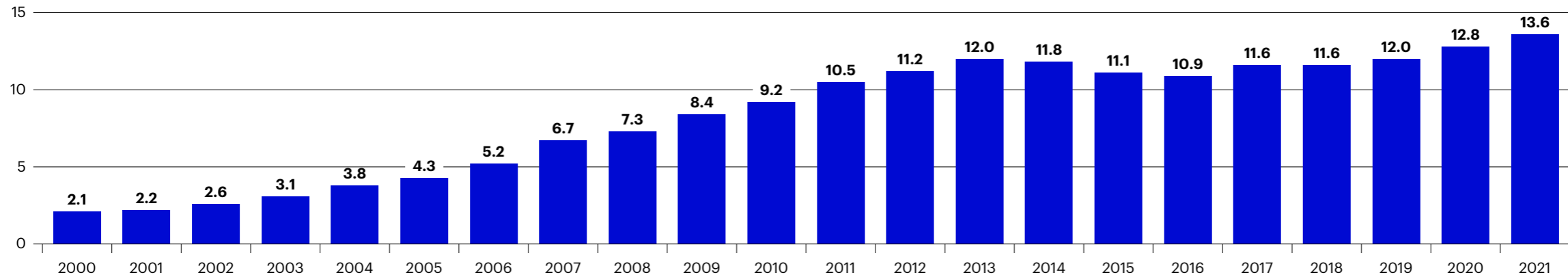
The globalisation of financial markets over the past twenty years has encouraged central banks to hold higher reserves to reflect increased levels of trade and capital movements. Reserves grew rapidly between 2000 and 2013 with the cumulative size of reserves increasing by more than 500% (figure 6.2). This was followed by a lull, with total reserves declining between 2013 and 2016. However, the pandemic brought central bank reserves back into the spotlight and highlighted the importance of having adequate reserves to mitigate potential crises. As such total reserves grew by 13% between 2019 and 2021 to stand at US\$13.6 trillion.

US dollar holdings account for just under 60% of this total, with this share declining only marginally over the last 10 years (figure 6.3, page 35). “The dollar is most frequently used in foreign exchange funds and trade transactions. All the underlying reasons why you hold currencies still support the dollar” suggested one Middle East-based central bank. Central banks are certainly uneasy around the recent

weaponization of central bank reserves in response to the invasion of Ukraine as one Middle East-based bank articulated: “As a central bank we don’t like anything that restricts the free flow of capital. From a reserves manager point of view, it will never be good that something will restrict the sale of assets for whatever reason”. However, to date it has had very little impact on allocations. Indeed it is the Euro which has lost most ground over the past decade, falling from nearly 25% of reserves in 2012 to just over 20% in 2022.

When asked if RMB could ever challenge USD for global dominance, central banks generally point to the long list of challenges that need to be overcome, including improved access and liquidity. However, these are not insurmountable and will surely be gradually addressed as one Middle East central bank articulated “There was a time when Sterling was the reserve currency. When countries rise in prominence they also rise in trade and their currencies become more used. China will have more of a role in the future but at what pace and how much we just can’t say.”

Figure 6.2
Global aggregate central bank reserves (Total reserves (Trillions))



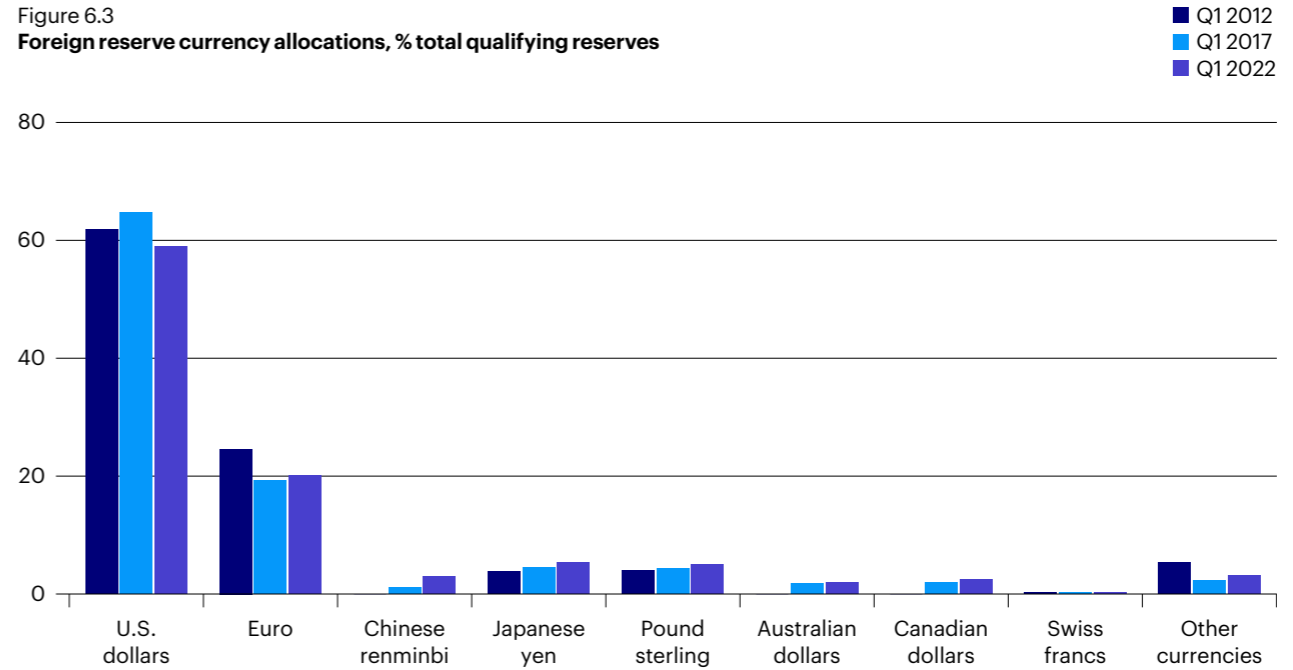
Total reserves excluding gold, US dollars. Source: World Bank.

Increased role for Renminbi in next decade

Over the past 10 years RMB has gone from being negligible portion of global reserves to the fifth most important currency with 2.9% of allocations. “China is relatively uncorrelated with other bond markets and that is actually one of the best reasons to invest if you are able to manage the risks” suggested one European central bank. Despite this increased share, allocations to RMB still massively under-represent China’s position as a global trading partner and the size of the economy. As a result there is little doubt allocations will continue rising over the next decade, but if and when the currency might pose a threat to USD as the world’s reserve currency it is perhaps too early to speculate on.

Figure 6.3

Foreign reserve currency allocations, % total qualifying reserves



Source: IMF COFERS.



China is relatively uncorrelated with other bond markets and that is actually one of the best reasons to invest if you are able to manage the risks.

European central bank

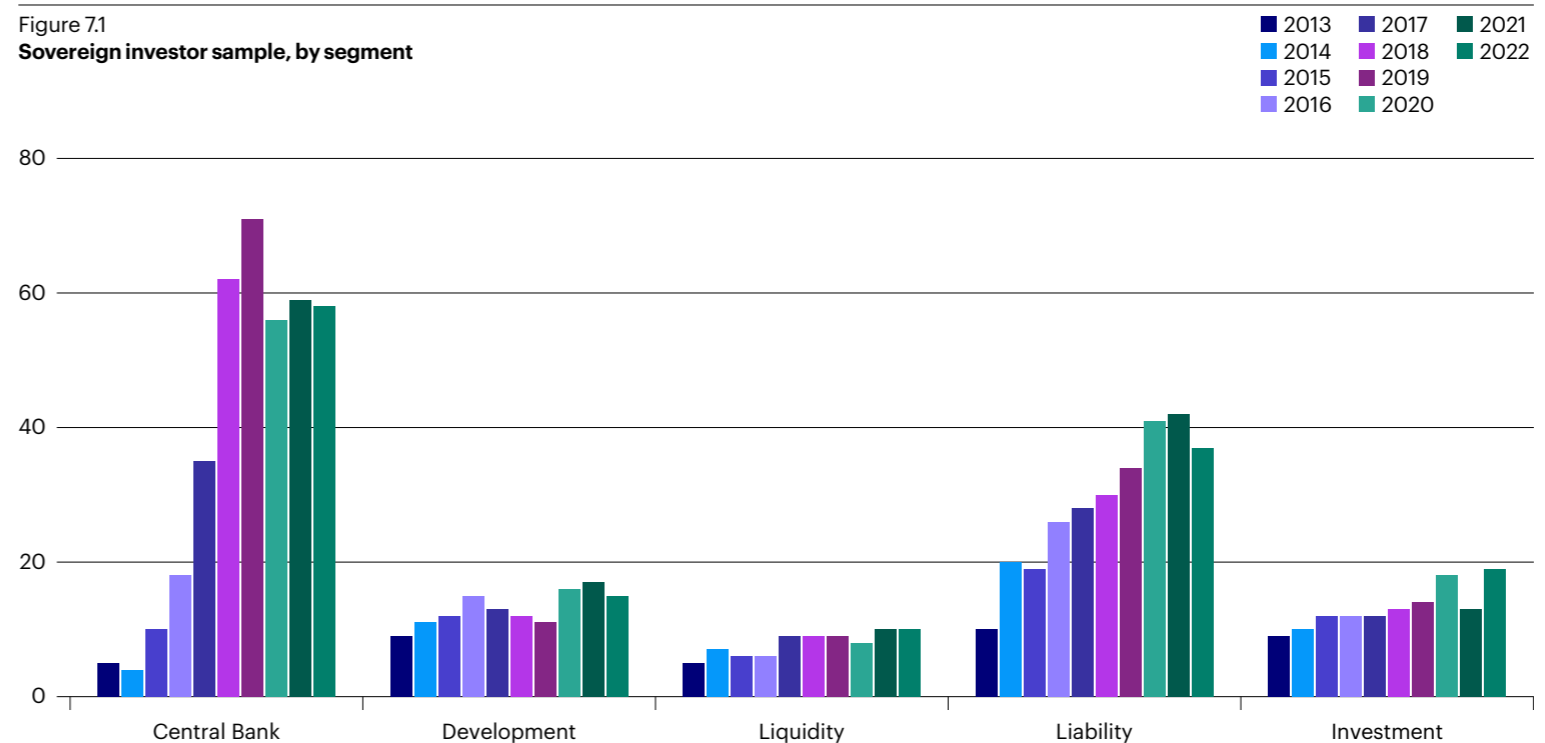
Methodology

The Invesco Global Sovereign Asset Management Study has been running since 2013 and is conducted by NMG Consulting. Invesco chose to engage a specialist independent firm to ensure high quality objective results. Over this period the size and scope of the study has gradually evolved and expanded.

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 interviews using a structured questionnaire to ensure quantitative as well as qualitative data is collected
- Analysis capturing investment preferences as well as actual investment allocations
- Results interpreted by NMG's team with relevant consulting experience in the global asset management sector

Figure 7.1
Sovereign investor sample, by segment



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.

Important information

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