SWFs as grown up investors: Asset allocation, purpose and maturity

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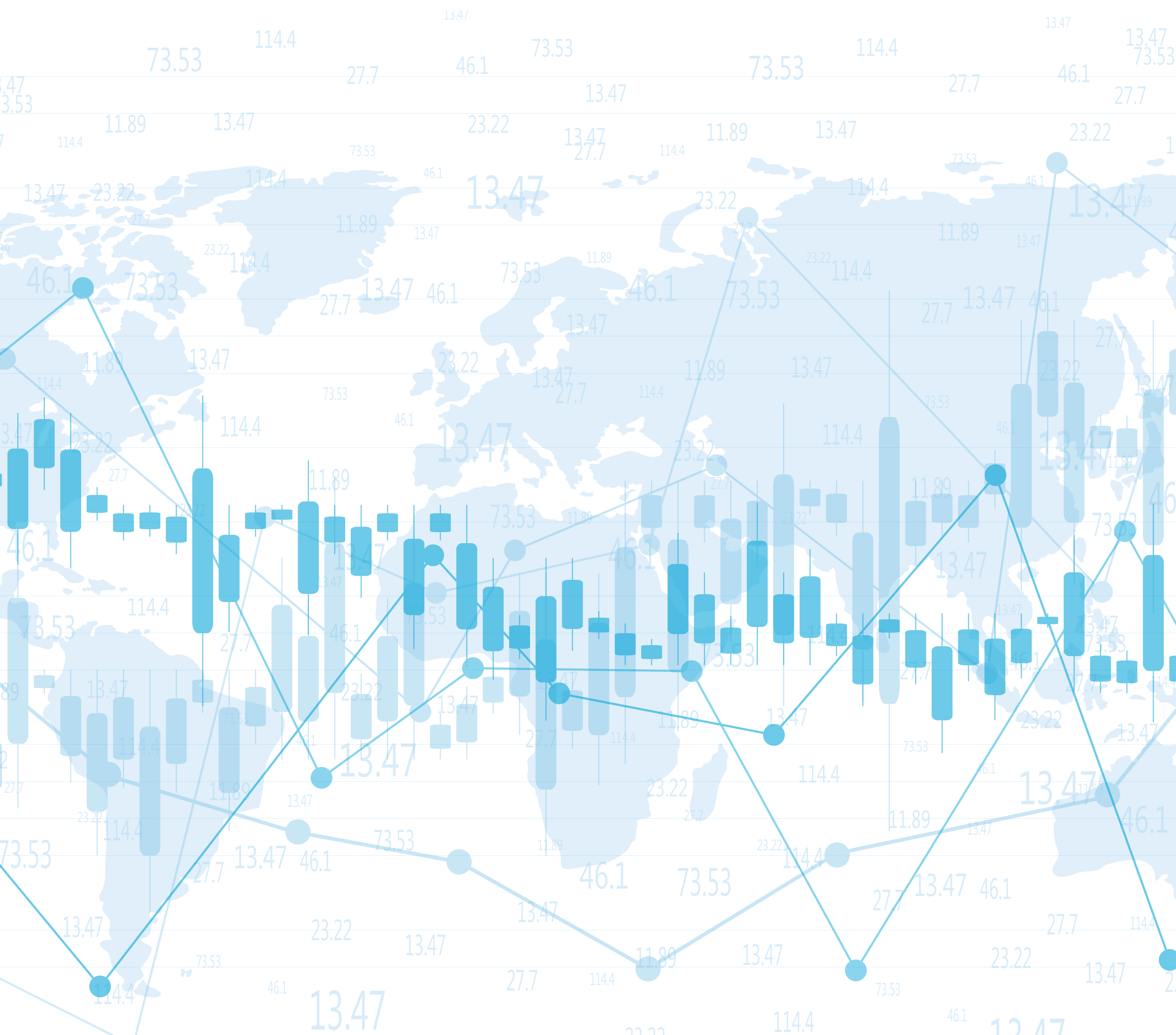


2. SWFs as grown up investors

We have been hearing the term Sovereign Wealth Fund ("SWF") for the past 13 years, but some of these investors have been around for much longer. And just like it happens with individuals, funds adjust their investment criteria with time. Some of these vehicles get comfortable with risk as they grow older and larger and are ready to invest in new asset classes. Some others become concerned about the world, focusing on aspects linked to the environment, social, and governance. Some others decide to form adult partnerships to invest together in the same assets[1].

One of the funds we have been hearing most about lately, is the Public Investment Fund (PIF), from Saudi Arabia. PIF is actually 47 years old and was established at the beginning of the 70's as a development fund to channel oil wealth into domestic, strategic projects. However, everything changed in 2015, with the Kingdom's succession into Salman al Saud (as king) and his son Mohammad (as crown prince). Together they developed Saudi Vision 2030, and envisaged PIF to change and become the "world's biggest SWF"[2].

Since then, the Saudi vehicle has deployed over $74.4 billion to real estate, infrastructure and private equities overseas, including commitments of $45 billion to Softbank's technology fund and $20 billion to Blackstone's infrastructure fund, and $6.5 billion investments to Silicon Valley firms Uber, Tesla and Lucid. This represents a third of its current asset base. For a fund that has had no previous experience beyond fixed income and public equities, and whose investment team is less than 2 years old, this may have been a rushed move.

The other extreme can be illustrated by the world's largest SWF, Norway's Government Pension Fund Global, managed by Norges Bank Investment Management (NBIM). The Norwegian leviathan is a mature investor that has been around for over 20 years but has barely invested in illiquid assets. For the past couple of years, it has been trying to increase its allocation to real estate from the current 3% to a target 7%, but it is a daunting task given its investment framework and its narrow criteria for city selection[3]. There have also been a number of propositions for the fund to allow it to invest in infrastructure assets and in unlisted equities, but Norway's Parliament has blocked them all. So even though the fund has grown mature and beyond the $1 trillion under management, it will primarily stay as a liquid, risk averse investor. On the pension fund space, almost the same comment can be made about Japan's $1.2 trillion Government Pension Investment Fund (GPIF), which has been advised to assign capital to alternatives but is still on a 50/50 (fixed income/equities) allocation.

Note on Methodology

We have analyzed the asset allocation of some of the world's largest SWFs – a total of 42 funds with $7.3 trillion of assets under management. The sample includes stabilization funds (e.g. HKMA, SAMA, LIA), savings funds (e.g. NBIM, CIC, ADIA) and development funds (e.g. Temasek, ICD, Mubadala). Given the difference in objectives, we deemed it necessary to analyze the three subsets separately.

The SWFs have been chosen based on size, importance and data availability. We include all 32 members of the IFSWF, except for 4 development funds (CDP Equity, Ithmar, RDIF, Samruk) and 4 funds that are smaller or newer (Mexico FEIP, Nauru, Rwanda and NIC). Data comes from IE's SWF Lab (Age, AUM), from the Sovereign Wealth Center (Asset Allocation) and other public sources.

The asset allocation is not weighted by size or age of the fund – we considered it more interesting to analyze the pure average, to reflect what different funds are doing irrespective of how big they are. Unless mentioned otherwise, the weights refer to the latest available, actual asset mix of the fund.

We have also analyzed a sample of 13 Pension Funds, which even if not subject to the main analysis, reported some interesting results: Pension Funds are on average, older, larger and more aggressive that the average SWF. This is especially true for the seven Canadian and the two Dutch Pension Funds.

The "standard" path for a SWF

In general terms, there is significant correlation between the fund's maturity and its asset allocation. The first investment step is fixed income, comprised of cash, bills and bonds. Assuming a balanced portfolio of T-bills, high-grade bonds and high-yield bonds, one can predict a 2.5% return for this asset class. The natural complement is public stocks, also considered

[1] See Chapter The friends of sovereign wealth funds. SWFs co-investment strategies in this report

[2] See "Saudi Arabia's Deputy Crown Prince Outlines Plans", Bloomberg, April 2016. Accessed at https://www.bloomberg.com/news/articles/2016-04-04/saudi-arabia-s-deputy-crown-prince-outlines-plans-transcript

[3] See "Strategic Cities", NBIM Real Estate Management. Accessed at https://www.nbim.no/en/investments/real-estate-management/

fairly safe given liquidity and diversification. For a weighted basket of small caps, large caps, developed and emerging market stocks, the fund could expect a 7% return, which is around the annual return of the S&P 500 for the past 70 years, adjusted for inflation[4].

Most emerging funds stick to fixed income and public equities, at roughly a 40/60 split, for the first few years of operations. It is important to distinguish not only the age and the size, but also the source and the purpose of the fund. A pension fund is accountable and liable to the population, so its risk profile is normally more moderate. Even among SWFs, despite the theoretical lack of liabilities, the purpose may call for higher risk aversion, especially in stabilization vehicles. Of the 42 SWFs analyzed, 12 of them allocate 5% or less to alternative asset classes. Six of these are stabilization funds.

The first illiquid asset SWFs normally consider is real estate. Not only is the expected yield aligned with that of public equities, but this is also a long-term asset class that investors have studied and bet on for many years. The early versions of Kuwait's KIA and Abu Dhabi's ADIA started investing in the property market in London as early as in 1974. KIO (Kuwait Investment Office) bought out St Martins Property Group (which would become its real estate subsidiary) for £107 million, while ADIB (Abu Dhabi Investment Board) acquired 44% of St. Helen's skyscraper for £36 million. The Emiratis eventually sold the tower to developer Simon Halabi in 2003 for £260 million, reflecting a yield of 6.3%. SWFs keen to keep liquidity and at the same time increase their exposure to real estate, invested in real estate investment trusts (REITs), as Qatar's QIA famously did in 2016 with a 10% acquisition of New York's Empire State Realty Trust.

But real estate is becoming an increasingly complex asset class, with certain overlaps with Infrastructure. The latter covers a wide span in the risk-return spectrum for different sectors, including social infrastructure (health and education), power generation, regulated utilities, toll roads, airports, ports, freight rail and telecom towers. Depending on the cer-

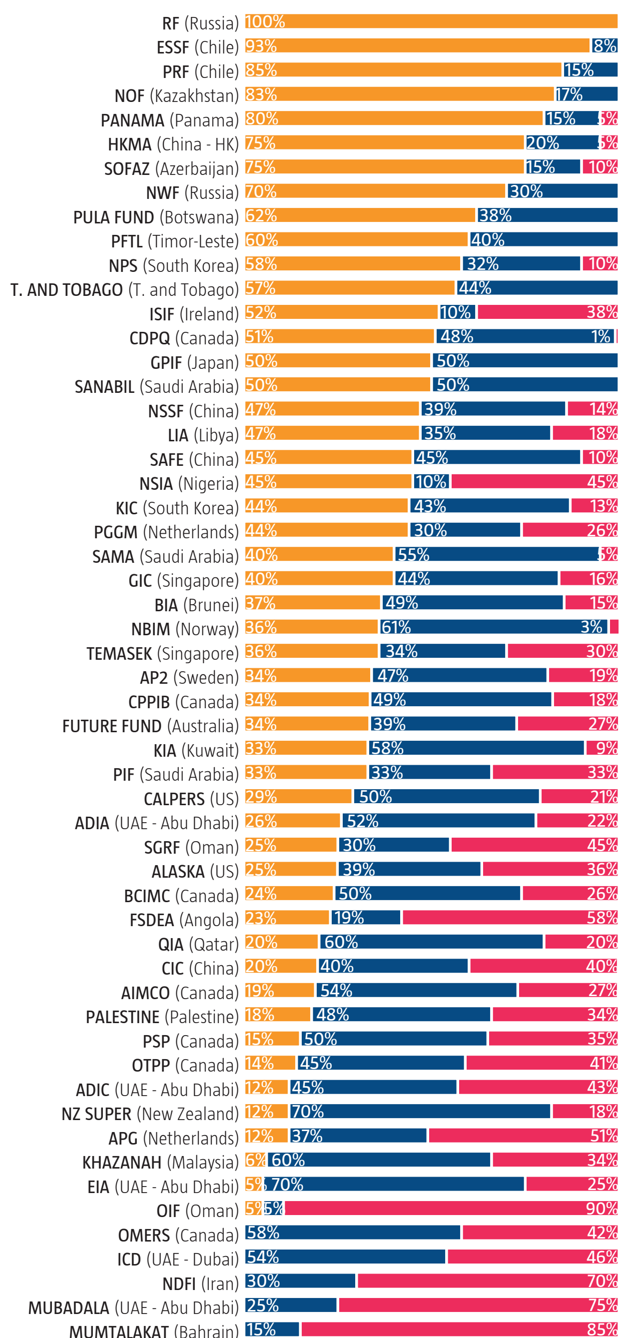
[4] Jordà, Knoll, Kuvshinov, Schilarick, Taylor, The Rate of Return on Everything, 1870-2015 (National Bureau of Economic Research, 2017). Accessed at http://conference.nber.org/confer/2017/SI2017/EFGs17/Jorda_Knoll_Kuvshinov_Schularick_Taylor.pdf

Infographic 2

Sovereign wealth: Strategic asset allocation

Sovereign wealth funds and pension funds

FIXED INCOME AND CASH · EQUITIES · ALTERNATIVES



Source: IE Sovereign Wealth Research. Based on data from: Sovereign Wealth Research, Preqin, Sovereign Wealth Center, IFSWF, SWFI, and SWFs' websites .

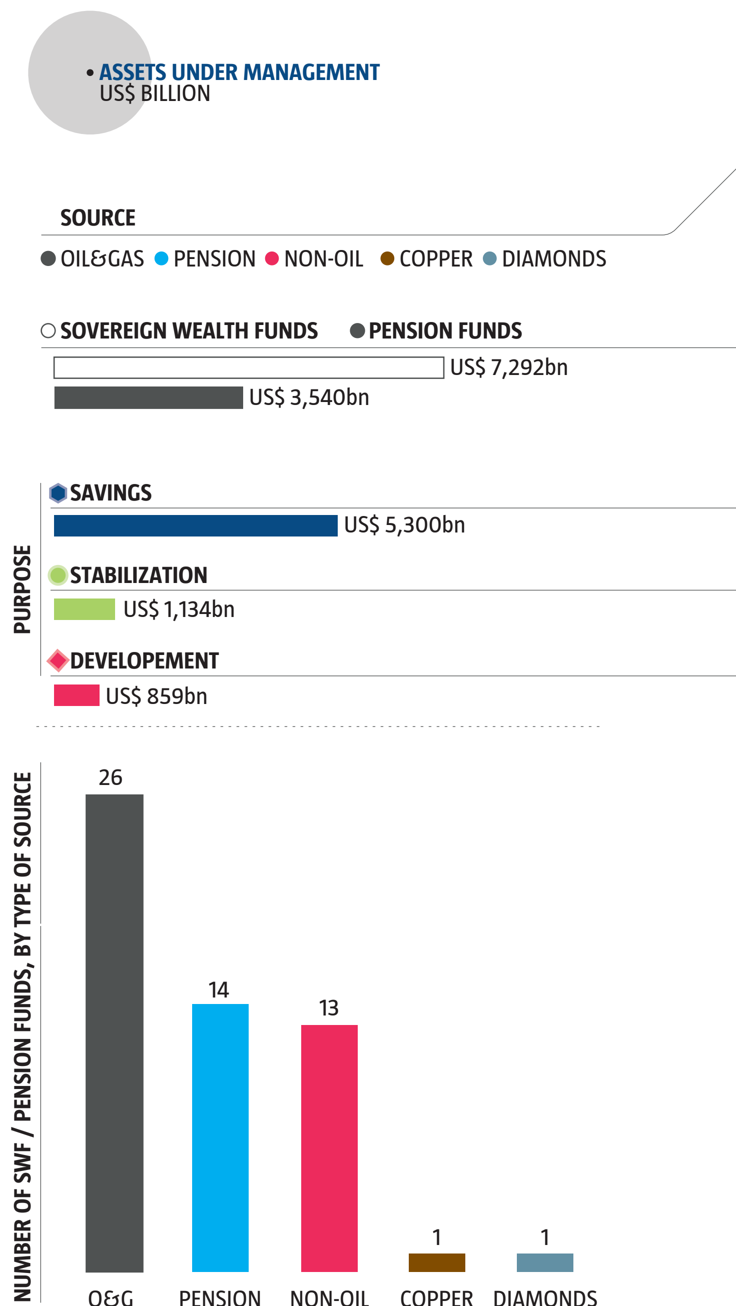
tainty of the cash flows, the expected returns for these assets used to range from 5% to 20%, with a median of 14%. However, due to the overcrowding of limited partners and general partners alike, keen to deploy their dry capital into a relatively secure asset class, this has now declined to a more realistic 10%[5]. Except for NBIM and Azerbaijan's SOFAZ, all the SWFs that invest in real estate, invest in infrastructure assets as well.

Lastly, some SWFs have dived into private equities. This is a whole different animal, as it implies collaboration with fund managers that have a very different investment behavior and cost structure. Private equity is not the asset class it used to be either, and the once promised 25% yield has now gone down to 15%. This encompasses a number of options, from fund investing / co-investing / direct investing, from buyout funds to venture capital, and from traditional tenures of 3-5 years to longer lifespans of 10-15 years. General partners are making a big effort to align better with SWFs, who will surely stick around in the near future[6].

Another factor playing into the asset allocation decision is timing, and rebalancing. With the financial crisis, a number of SWFs that had aggressive positions in US investment banks received a significant backlash by shareholders. The statement made by Korea's Investment Corporation former chairman, assuming its fault and accountability for the $2 billion investment in the now acquired Merrill Lynch, made the frontlines[7]: "I believe that it was a poor investment and apologize to the people of Korea." The fund now maintains a relatively moderate profile with a 44/43/13 (fixed income/public equities/alternative) asset split.

Infographic 3

The Global Sovereign Wealth Industry: Purpose and Sources.



Source: IE Sovereign Wealth Research.

[5] See "Global Infrastructure Investment", Global Infrastructure Investment Association (GIIA), 2017. Accessed at https://www.pwc.com/gx/en/industries/assets/pwc-gi-ia-global-infrastructure-investment-2017-web.pdf

[6] See "Private Equity: An increasingly aligned asset class", López, PWC, 2015. Accessed at https://drive.google.com/file/d/1RK64l44j_p7oYNrIMaM-VLzrAPCOLJ4-/view

[7] See "SWF Apologizes to Citizens for Merrill Lynch Investment.", Chief Investment Officer Magazine, November 2014. Accessed at https://www.ai-cio.com/news/swf-apologizes-to-citizens-for-merrill-lynch-investment/

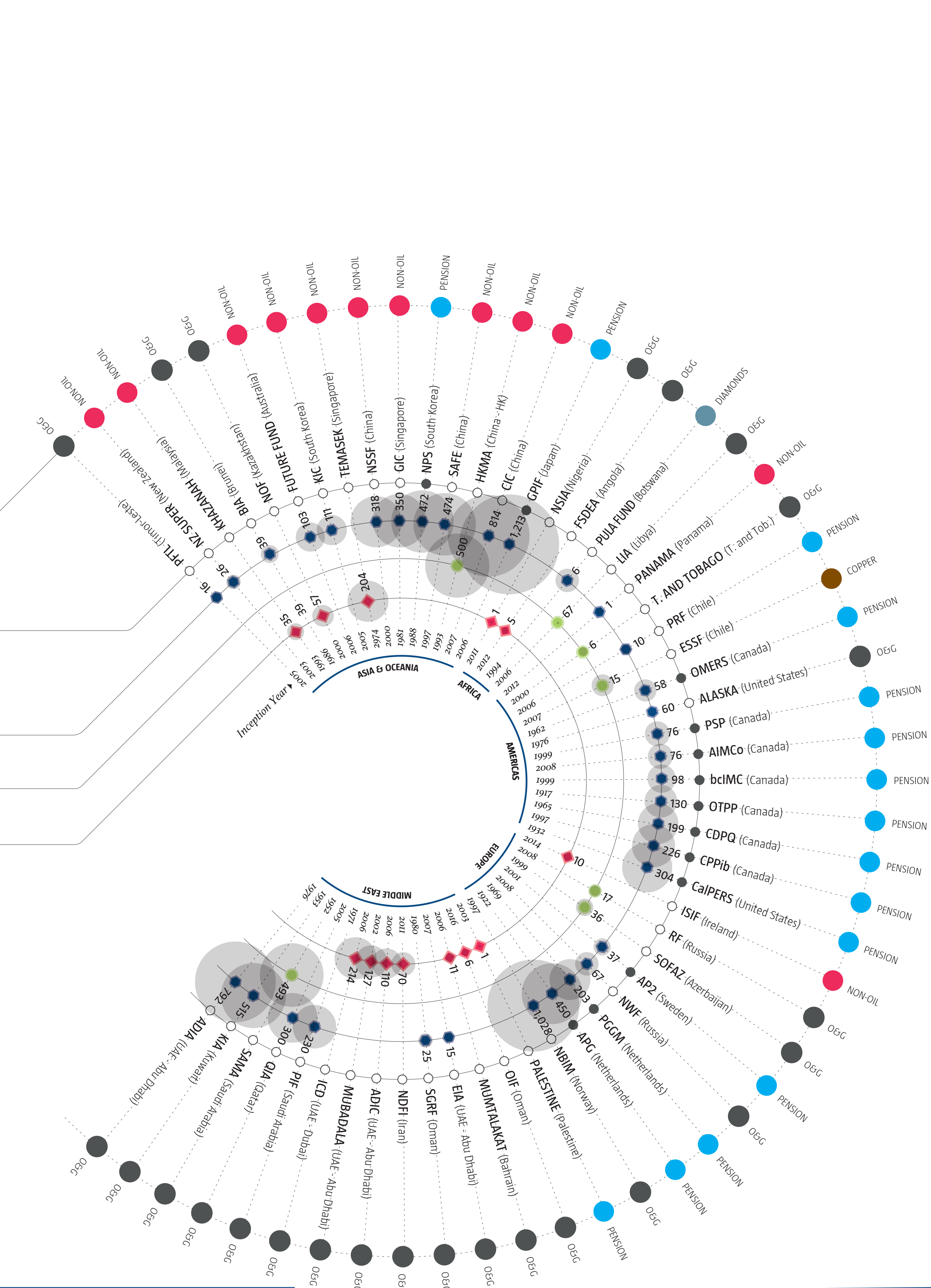

Inception Year
ASIA & OCEANIA
AFRICA
AMERICAS
EUROPE
MIDDLE EAST
PFTL (Timor-Leste)
NZ SUPER (New Zealand)
KHAZANAH (Malaysia)
BIA (Brunei)
NOF (Kazakhstan)
FUTURE FUND (Australia)
KIC (South Korea)
TEMASEK (Singapore)
NSSF (China)
GIC (Singapore)
NPS (South Korea)
SAFE (China)
HKMA (China - HK)
CIC (China)
GPIF (Japan)
NSIA (Nigeria)
FSDEA (Angola)
PULA FUND (Botswana)
LIA (Libya)
PANAMA (Panama)
T. AND TOBAGO (T. and Tob.)
PRF (Chile)
ESSF (Chile)
OMERS (Canada)
ALASKA (United States)
PSP (Canada)
AIMCo (Canada)
bcIMC (Canada)
OTPP (Canada)
CDPQ (Canada)
CPPib (Canada)
CalPERS (United States)
ISIF (Ireland)
RF (Russia)
SOFAZ (Azerbaijan)
AP2 (Sweden)
NWF (Russia)
PGGM (Netherlands)
APG (Netherlands)
NBIM (Norway)
PALESTINE (Palestine)
OIF (Oman)
MUMTALAKAT (Bahrain)
EIA (UAE - Abu Dhabi)
SGRF (Oman)
NDFI (Iran)
ADIC (UAE - Abu Dhabi)
MUBADALA (UAE - Abu Dhabi)
ICD (UAE - Dubai)
PIF (Saudi Arabia)
QIA (Qatar)
SAMA (Saudi Arabia)
KIA (Kuwait)
ADIA (UAE - Abu Dhabi)
O&G
NON-OIL
PENSION
DIAMONDS
COPPER

Table 1

Example of a balanced SWF portfolio and expected returns

Asset Class	Return	Allocation
Bonds	2.5%	30%
Equities	7.0%	50%
Real Estate	8.0%	10%
Infrastructure	10.0%	5%
Private Equity	15.0%	5%
Portfolio	**6.30%**	**100%**

Source: Author's elaboration.

Some of the most aggressive and mature funds have also been able to set up hedge fund teams and programs. However, the decision of CalPERS (California's Public Employees' Retirement System), one of the world's largest pension funds, to divest the $4 billion it had in hedge funds altogether in 2014, sent some signals to the industry and since then SWFs have been very conscious of costs and complexities. In short, returns must be very high to compensate costs and funds have tended to concentrate their positions in asset managers, using them only for their expertise niches.

An over simplistic matrix of the asset allocation for a mature fund, therefore, would have a significant allocation to fixed income and public equities. This mix would give a 6.3% return to the portfolio, beating the usual target of the average SWF (e.g. inflation + 2%, risk-free-return + 1%).

No two funds are the same though, and there is no such thing as a "standard" path or portfolio. The source of wealth, the macroeconomic purpose, the liabilities, the governance, the accountability, the risk tolerance, the target markets and the return objective are only some of the factors affecting the final mix.

Table 2

Asset allocation by type of Sovereign Wealth Funds

	Sample Size	Age (mean)	AuM in $bn (mean)	Average Allocation		
				Fixed Income	Public Equities	Alternatives
Stabilisation Funds	7	23	162	70%	25%	5%
Saving Funds	21	24	252	40%	43%	17%
Development Funds	14	14	61	24%	30%	46%
Sovereign Wealth Funds	**42**	**21**	**174**	**39%**	**36%**	**25%**

Source: IE Sovereign Wealth Research, Sovereign Wealth Center, and funds' websites. AuM= Assets under management.

The real case studies

We have studied a sample of 42 SWFs, who show an average allocation of 39% in fixed income, 36% in public equities and 25% in alternative asset classes, including real estate, infrastructure and private equities. It is necessary to differentiate the type of funds:

As we can see, it is not only a matter of age and size, but also of purpose and risk profile.

● Stabilization funds are, not surprisingly, the most conservative set of funds, with 95% on average invested in liquid assets. The Monetary Authorities of Hong Kong and Saudi Arabia, which are in effect central banks, present both a 5% target allocation to real estate and private equities.

● Savings funds (also known as Future Generations or Capital Maximization) show a greater balance between fixed income and public equities, and a moderate exposure to alternatives. They are the largest and oldest set of funds and present an increasing degree of sophistication. If we take the ten "largest players" (NBIM, CIC, ADIA, KIA, SAFE, GIC, NSSF, QIA, PIF and KIC), only NBIM presents a limited exposure (3%) to illiquid assets, for the aforementioned reasons.

● Lastly, Development Funds are a different story, given their double mandate of obtaining financial returns and developing the local economy. The 46% of the portfolio shown as alternative asset classes is in fact stakes in domestic, unlisted businesses. But they are the youngest, smallest and most difficult subset to analyze, given the different ecosystems in which they operate. For example, the Investment Corporation of Dubai (IC) and Temasek manage completely different portfolios, despite having similar purposes. While ICD is primarily focused at home with assets like Emirates, Emirates National Oil Company and Dubai Aluminum, Temasek has grown into a global diversified investor, with only a third of its portfolio in Singapore.

Adjusting to the new normal

In the past few years, SWFs – especially those that are commodity-driven – have had to react to lower oil prices and macroeconomic uncertainty. These funds were using the steady inflows from oil revenues and surpluses to rebalance their portfolios or to change the dynamic asset allocation over time, naturally increasing their risk and allocating more into alternative asset classes.

However, a new scenario of low oil prices and budget deficits means no inflows, and even worse, potential outflows. This may be the mandate of stabilization funds but is not consistent with the horizon of development or savings funds. Especially the latter have been tapped into by governments as a quick fix and have had to become prepared to give up a portion of their money market instruments.

The problem comes when such withdrawals destabilize the strategic asset allocation, generating an overweight into illiquid assets and an increase of the overall liquidity risk. Risk and return targets are disregarded in the benefit of short-term liquidity needs, and the balance of the portfolio is compromi-

sed. This is clearly an investment governance and accountability issue, which has caused tensions between the different government entities, and goes to show how important asset allocation can be.

The solution is not straightforward. Some funds have considered the creation of a separate, liquidity account to cover public deficits. Some others have split the funds into a dual mandate, to serve both as a buffer in the bad years and as an investment pool in the good ones.

Take the Nigeria Sovereign Investment Authority, for instance. Despite its smaller size, with $1.2 billion under management, its mission is threefold: provide stabilization support in times of economic stress (stabilization fund, 20% of capital), invest in a diversified portfolio to provide future generations a savings base (savings fund, 40% of capital), and enhance the development of infrastructure, through investing in domestic projects that meet targeted financial returns (development fund, 40% of capital). All three sub-funds have different target returns, needs for liquidity, and hence, strategic asset allocation.

The reality is that not all SWFs can afford to change their mandate or to create different subsidiaries overnight. The proper solution should come in the form of rebalancing. Rebalancing of asset allocation is not given sufficient focus by SWFs, when in reality it can force a fund to have the discipline to follow its strategic allocation and to limit the risk of overconfidence in forecasting financial markets.[8] The adjustment to a new allocation may include the potentially costly redemption of some illiquid positions.

We have also seen the contrary – funds with very different mandates, being consolidated. Such is the case of Mubadala Development Company, which first merged with the International Petroleum Investment Corporation, into Mubadala Investment Company, and then absorbed Abu Dhabi Investment Council. The latter had inherited a portfolio of domestic financial institutions, but it was primarily a future generations fund. The combined entity, with assets worth $227 billion, will have a very different asset allocation than any of the three entities were previously representing.

We have also seen Saudi Arabia's PIF transitioning from a silent development fund into an active savings fund, and other investors such as Khazanah modifying its investment style, from open market transactions and fund investments, to joint ventures and co-investments. As we can see in the infographics, SWFs are as always, a heterogeneous group of investors with very different characteristics.

[8] See "Asset allocation trends of Sovereign Investors", Meert and Craddock, PWC, 2015. Accessed at https://www.pwc.com/gx/en/sovereign-wealth-investment-funds/publications/assets/pwc-asset-allocation-trends-of-sovereign-investors.pdf

What's next?

It is difficult to assess what the future holds for SWFs, and what type of fund will prevail over the next few years. Governments continue to set up vehicles with different purposes, including "SOE funds" used to manage state-owned national champions (e.g. Turkey, Egypt), "FDI-driven funds" whose purpose is to attract and co-invest with foreign funds (e.g. Russian Direct Investment Fund, CDP Equity in Italy, CDC International in France, or the newly established SOPEF in Spain) and joint ventures such as Vision Fund, raising debt and equity from a variety of investors.

Setting up a fund has become "trendy" and new funds are trying to keep up with the investment industry. In September 2018, best practices organization IFSWF approved Rwanda's Agaciro Development Fund as a new member, and invited new funds including Egypt, the Philippines and Uganda, to become members "very soon" [9]; they would share the platform with more established and significant larger funds such as ADIA, KIA, QIA, GIC and CIC (all savings funds). They all represent very different asset class mixes.

The current levels of macroeconomic uncertainty and volatility make us consider the possibility, that there could well be new periods of financial constraints and withdrawal demands from governments in the near future. In order to avoid any mismanagement of funds or cause any distress, SWFs need to ensure that the strategic asset allocation is aligned with the mandate of the fund and with any potential rebalancing. In the long term, the solution may include setting up a separate, stabilization fund that provides the necessary liquidity.

At the end of the day, SWFs are now grown-ups and should be able to show that they are not only large, but also well-governed, profitable and sustainable investors with a stable and robust investment profile.

[9] See "2015-18 Review. Speech from the outgoing chairman", Adrian Orr, IFSWF, 2018. Accessed at http://www.ifswf.org/general-news/2015-18-review-speech-outgoing-chairman