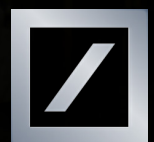


Opportunities or threats? The current and future role of sovereign wealth funds in financial markets

March 2015

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Your entry to in-depth
knowledge in finance





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1. SWFs Overview

SWFs are state-owned investment vehicles that manage portfolios of financial instruments partly denominated in foreign currency. They derive their wealth from commodity revenues or from balance of payments or fiscal surpluses (IMF, 2008).

Based on this definition, it is possible to pinpoint 69 SWFs in the world as of the end of 2013, with estimated total assets under management (AuM) of \$6.3 trillion USD.

The last decade witnessed SWFs' impressive growth, in terms of both the size of their AuM and the number of new funds established worldwide. The total AuM increased from \$500 billion in 1995 to \$6.3 trillion in 2013, with more

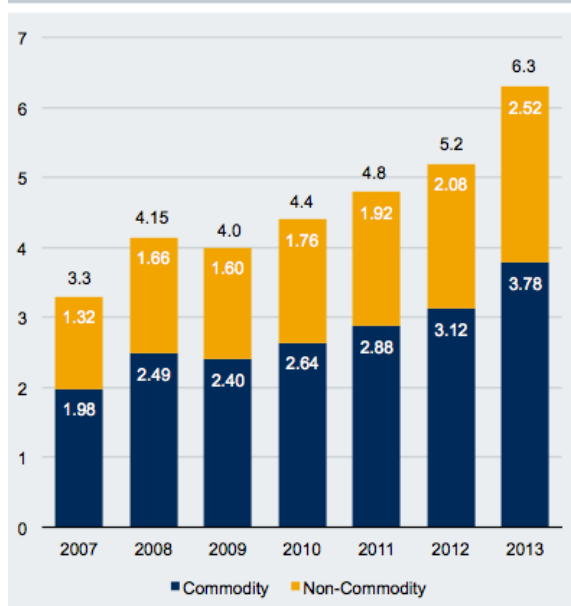
than half (64%) of all existing SWFs having been established between 2000 and 2013. Funding for this rapid growth has been made possible by increasing oil revenues and the accumulation of foreign currency reserves.

1.1. Major SWFs worldwide

Table 1 lists the top 25 SWFs ranked by their respective AuM along with the country of origin, the year of inception and the source of their wealth, where NC stands for 'non-commodity' (mostly trade balance or fiscal surpluses).

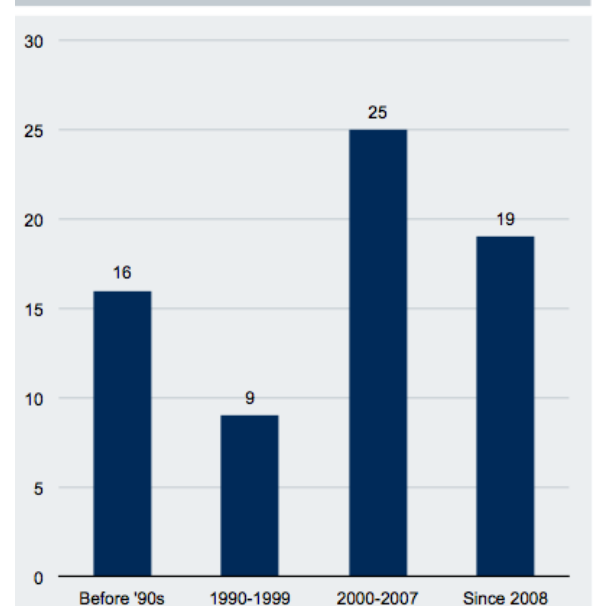
The largest and most prominent SWF in the world is the Norwegian Government Pension Fund endowed with \$839 billion of assets under management at the end of 2013. It

Figure 1: SWFs' AuM Growth (2007–2013)
(\$ trillion)



Source: Elaborations on Quadrio Curzio, Miceli (2010), Ciarlone, Miceli (2013) and Sovereign Wealth Fund Institute

Figure 2: Newly established SWFs' per time period
(number of SWFs)



Source: Elaborations on Quadrio Curzio, Miceli (2010), Ciarlone, Miceli (2013) and Sovereign Wealth Fund Institute

is also the most transparent SWF. It owns 2.5% of Europe's stock markets and 1% of global market capitalization, as well as 9% of BlackRock, the world's biggest asset manager. With forecasts predicting it will exceed \$1.1tn by 2020 and \$1.5tn by 2025 as revenues from oil and gas continue to flow unabated, it represents a role model for other funds. For this reason, in this paper we will often consider it a benchmark.

1.2. Source of SWFs' wealth: Oil and current account surpluses

Among the 69 existing SWFs, the majority of assets originate from commodity related exports and royalties (in particular, oil). Non-commodity funds (mainly related to current account surpluses deriving from trade of manufactured products or other fiscal surpluses) account for 39% of the total AuM, while all commodity related funds account for 61%, of which the lion's share (89%) is represented by oil related exports and royalties, while gas and other commodities together account for the remaining 11%.

1.3. SWFs' geographic origin: Asia and the Middle East

Of the total assets of SWFs, 39% belong to those in Asia. The largest are from China and Singapore and they typically derive their wealth from balance of payments surpluses

related to trade of manufactured products (China) and from other surpluses, including fiscal ones (Singapore). Middle Eastern SWFs own the same share of SWFs' AuM (39%), mostly from oil-related revenues. European SWFs are estimated to manage 17% of total assets and are mainly commodity-based.

1.4. Comparisons with other investors

SWFs' cumulative size (\$6.3 trillion) is significant not only when compared to hedge funds (\$2.7 trillion) or private equity funds (\$2.6 trillion), but also relative to central bank reserves (\$11 trillion), pension funds (\$30 trillion), insurance companies (\$25 trillion), and mutual funds (\$24 trillion).

Considering SWFs individually, the largest ones such as the Norwegian Government Pension Fund (\$839 billion), the Abu Dhabi Investment Authority (\$773 billion), the Saudi Arabian SAMA Foreign Holdings (\$676 billion), the China Investment Corporation (\$575 billion), and the SAFE Investment Company (\$568 billion), are similar, in terms of size, to the largest insurance companies – like Japan Post Insurance (\$1,258 billion of AuM), the French AXA (\$946 billion), the German Allianz (\$831 billion), and the American

Table 1: 25 largest SWFs' by AuM (2013; USD billion)

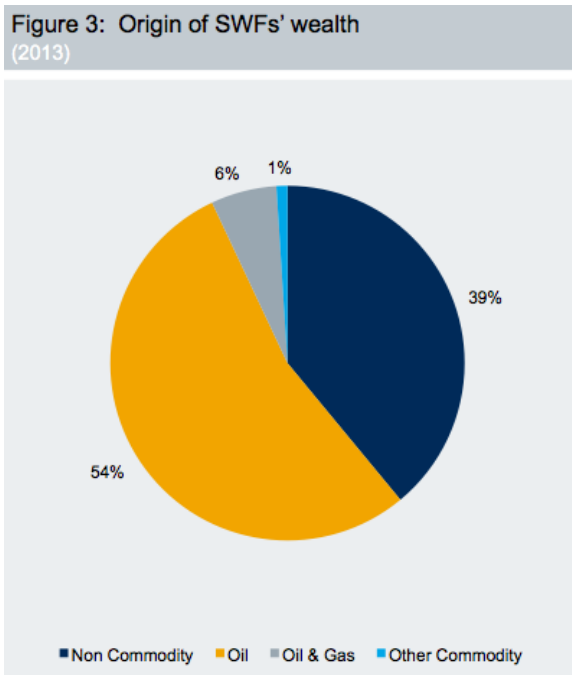
Country	SWF	Total Assets (USD billion)	Year	Source
Norway	Norwegian Government Pension Fund – Global (NGPF-G)	839	1990	OIL
UAE - Abu Dhabi	Abu Dhabi Investment Authority (ADIA)	773	1976	OIL
Saudi Arabia	SAMA Foreign Holdings	676	-	OIL
China	China Investment Corporation (CIC)	575	2007	NC
China	SAFE Investment Company	568	1997	NC
Kuwait	Kuwait Investment Authority (KIA)	410	1953	OIL
China-HK	HK Monetary Authority – Investment Portfolio (HKMA)	327	1998	NC
Singapore	Government Investment Corporation (GIC)	320	1981	NC
Singapore	Temasek Holdings	171	1974	NC
Qatar	Qatar Investment Authority (QIA)	170	2005	OIL & GAS
China	National Social Security Fund (NSSF)	161	2000	NC
Australia	Australian Government Future Fund (AGFF)	89	2006	NC
Russia	National Wealth Fund (NWF)	89	2008	OIL
Russia	Reserve Fund (RF)	87	2008	OIL
Kazakhstan	Samruk-Kazyna Jsc	84	2008	NC
Algeria	Revenue Regulation Fund	77	2000	OIL & GAS
UAE – Dubai	Investment Corporation of Dubai (ICD)	70	2006	OIL
Kazakhstan	Kazakhstan National Fund	69	2000	OIL
UAE - Abu Dhabi	International Petroleum Investment Company (IPIIC)	63	1984	OIL
Libya	Libyan Investment Authority (LIA)	60	2006	OIL
Iran	National Development Fund of Iran (NDFI)	59	2011	OIL & GAS
South Korea	Korea Investment Corporation (KIC)	57	2005	NC
UAE-Abu Dhabi	Mubadala Development Company	56	2002	OIL
USA	Alaska Permanent Fund (APF)	50	1976	OIL
Malaysia	Khazanah Nasional	41	1993	NC

Source: Elaborations on SWFs Annual Reports and Sovereign Wealth Fund Institute (2014)

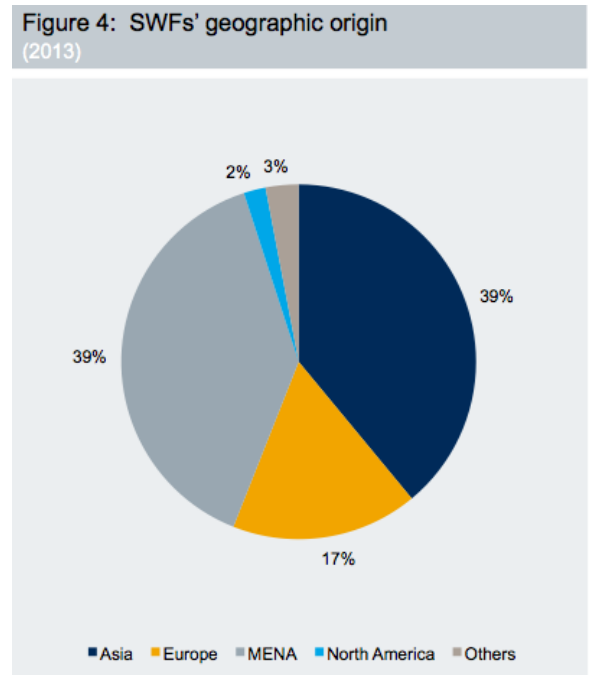
Metlife (\$800 billion) – and to the largest pension funds – like the Japanese Government Pension Investment Fund (\$1,222 billion of AuM), Dutch ABP (\$417 billion), Korean National Pension Fund (\$406 billion), and Californian CalPERS (\$284 billion).

A relevant characteristic of SWFs is their high degree of

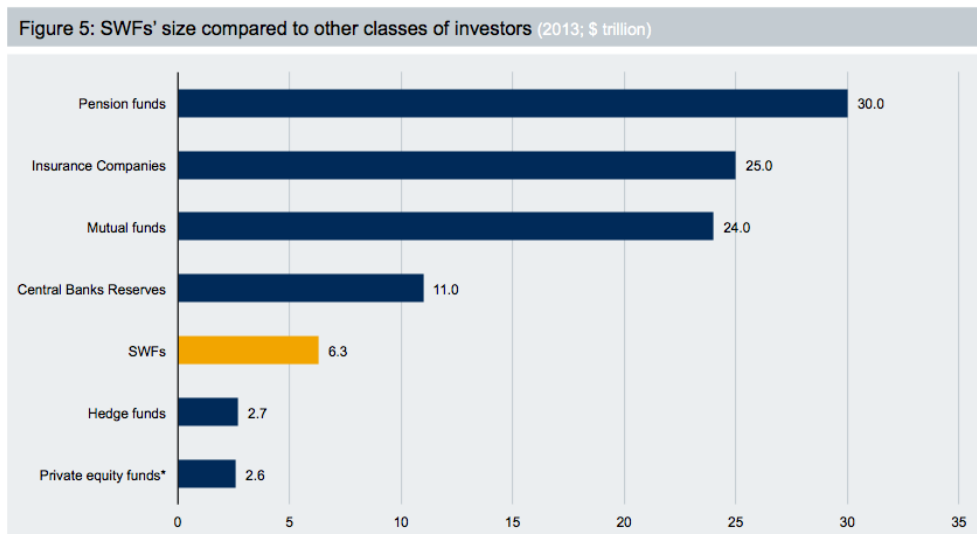
concentration: The 10 largest SWFs hold 77% of the total cumulated assets at 2013, and the top 20 own 90%¹. This is quite unusual if compared with other institutional investors. For instance, the top 20 pension funds in the world manage assets of \$5.5 trillion, accounting for 18% of the AuM referred to the whole industry. The top 300 pension funds do not even cover half of the total industry (47%).



Source: Elaborations on SWFs Annual Reports and Sovereign Wealth Fund Institute



Source: Elaborations on SWFs Annual Reports and Sovereign Wealth Fund Institute



* Data for private equity funds refer to 2011

Source: Elaborations on SWFs Annual Reports, Sovereign Wealth Fund Institute, The CityUK, Towers Watson, Financial Times

¹ The 25 SWFs reported in Table 1 represent 94% of total SWF assets.

2. SWFs' Portfolios And Investment Strategies

In this section we will analyze SWFs' broad asset allocation, investment strategies, and performance. We will base our analysis upon SWFs' annual reports. As few SWFs publish periodic reports, we will consider only a limited number of SWFs. Among the 25 largest SWFs, only 10 of them may be deemed sufficiently transparent². These 10 funds³ have \$2.5 trillion of assets representing 40% of the total owned by all SWFs.

2.1. Broad asset allocation: A preference for equities

SWFs cannot be considered a homogeneous group of investors, even if they share some important characteristics. There are, indeed, notable differences in SWFs' investment strategies that reflect their specific features, including their funding sources and the reason for their creation. They may differ significantly in terms of their ability to tolerate losses, the level of risk they are willing to take, the amount and stability in the flow of their funding sources, and their maturity and sophistication. Also, the year they were established may represent a source of difference, since recently established SWFs or those undergoing legal and institutional changes may not have been able to implement their investment strategy fully.

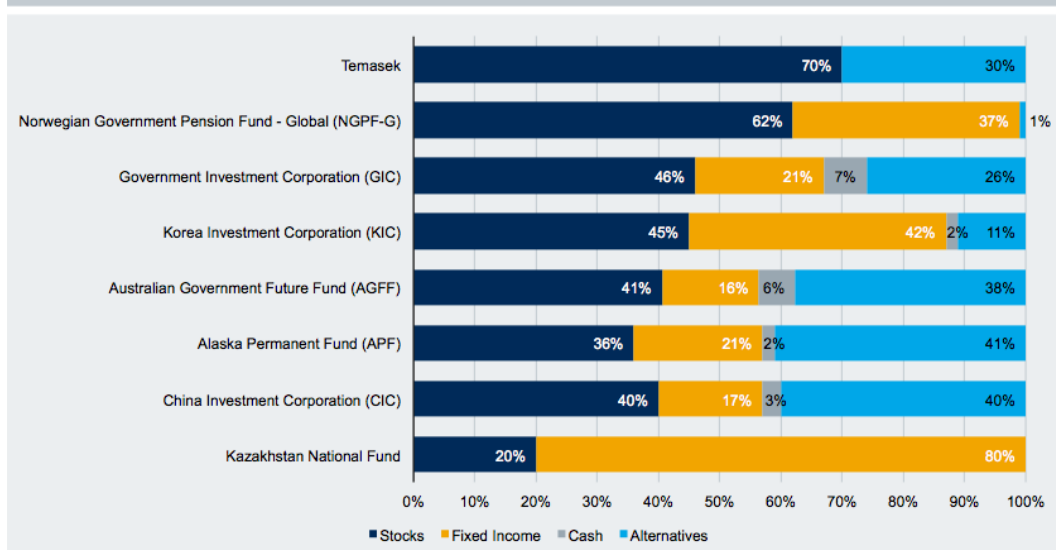
In spite of those differences, there are some common features that allow us to outline some similarities in SWFs' investment

strategies. Most SWFs invest for future generations and have no short-term liabilities, nor are they subject to rules that could require costly adjustments at inopportune times. This applies to most SWFs, except for stabilization funds. The latter, however, represent a tiny share of the group⁴. The majority of SWFs can therefore withstand periods of great volatility in capital markets and are able to exploit opportunities that arise when other investors are forced to make short-term decisions. They pursue long-term investment opportunities and look for exposure to risk factors that are expected to generate high returns over time.

Since a long investment horizon is traditionally associated with the ability to take more risk, a larger share in equities for investors with long-term horizons could be deemed appropriate. Moreover, it would be reasonable to invest in illiquid assets (real estate, infrastructure, private equity) to reap the benefits of liquidity premiums.

As highlighted in Figure 6, SWFs invest the largest share of their portfolios in stock. Figure 6 also reports the portfolio allocation of the Kazakhstan National Fund (a stabilization fund) in order to highlight the differences with this particular category of SWFs. Stabilization funds follow more prudent investment

Figure 6: SWFs' portfolio allocation (2013)



Source: Elaborations on SWFs' Reports

² For an indicator of SWFs' level of transparency see Linaburg-Maduell Transparency Index published by Sovereign Wealth Fund Institute.

³ The 10 funds are: Norwegian Government Pension Fund (NGPF), China Investment Corporation (CIC), Hong Kong Monetary Authority (HKMA), Government Investment Corporation (GIC), Temasek Holdings, Australian Government Future Fund (AGFF), International Petroleum Investment Company (IPIC), Korea Investment Corporation (KIC), Mubadala, and Alaska Permanent Fund (APF).

⁴ SWFs that declare themselves to be exclusively stabilization funds represent only 4% of the total assets. The main difference from other SWFs is they are only allowed to invest in highly rated sovereign bonds.

strategies targeted at shorter time horizons. By contrast, cases such as the Alaska Permanent Fund and the China Investment Corporation whose largest share of portfolios is devoted to alternative investments, further emphasise the search for exposure to risk factors able to generate high returns in the long run and to reap liquidity premiums.

Also ADIA, which is not represented in Figure 6 as it does not provide data on its actual portfolio, declares a benchmark of a maximum of 67% of its portfolio devoted to equity (42% in developed markets) and only 20% to bonds.

The share devoted to alternative investments is on the rise for most SWFs. Alternative investments include private equity, hedge funds, real estate, infrastructure, absolute return, and other types of alternatives such as commodities and derivatives. Figure 7 summarises the main types of alternative investments for those SWFs for which data are available.

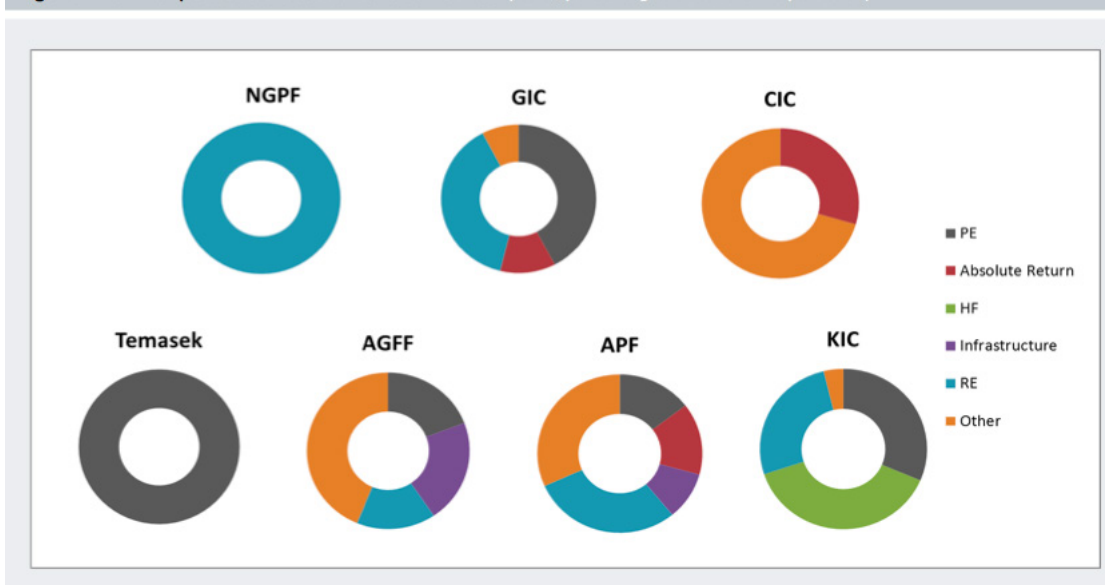
The Norwegian Government Pension Fund started to invest in alternatives in 2011, focusing only on the real estate sector. In 2013 NGPFs' real estate investments accounted for 1% of the fund portfolio. The real estate share will increase to as much as 5%, with investments mainly in advanced markets. The fund plans to deploy about \$10 billion to real estate over the next three years. Government Investment Corporation of Singapore

is mainly focused on private equity and real estate. Unlike GIC, Temasek only invests its alternative portfolio in unlisted assets, sometimes ahead of initial public offerings. China Investment Corporation pursues absolute return investments, while in the category "others" includes several kinds of long-term investments, such as real estate and infrastructure. Korea Investment Corporation focuses on private equity funds, hedge funds, and real estate. For all SWFs in this sample, real estate represents an important share of the alternative portfolio and is bound to rise. This is true also for other SWFs not represented in Figure 7, such as ADIA and Kuwait Investment Authority (as they do not publish data) and for other smaller SWFs not included in the list of the 25 largest⁵.

According to the Sovereign Wealth Center (2014), deals in real estate peaked in 2013, totalling \$22 billion, while they amounted to less than \$3 billion in 2010. This comes as no surprise considering that all institutional investors in the current low yield environment seek more risk to maximise portfolio returns by increasing their allocations to alternative investments.

SWFs that became renown for acquiring prime commercial properties in major cities like London, New York, and Paris, seem now less fascinated by this type of trophy asset. The over-heating in the market has indeed rendered these

Figure 7: SWFs' portfolio allocation to alternatives (2013; percentages of alternative portfolios)



Source: Elaborations on SWFs' Reports

⁵ For example Azerbaijan's Sofaz has moved into real estate since 2012, buying properties in London, Paris, Moscow, and Seoul.

investments less attractive. SWFs have started to look elsewhere, for example to second-tier assets, such as industrial, retail, and logistic properties outside major capitals. Being able to pursue long-term returns, they are also increasingly keen to allocate resources to property development projects in order to reap healthier returns. Another corollary of their long-term horizons is the increasing interest in infrastructure. Unfortunately, SWFs still struggle to find appropriate deals in this sector. A type of real estate investment that has never lost its allure with sovereign funds is hospitality property, particularly luxury hotels.

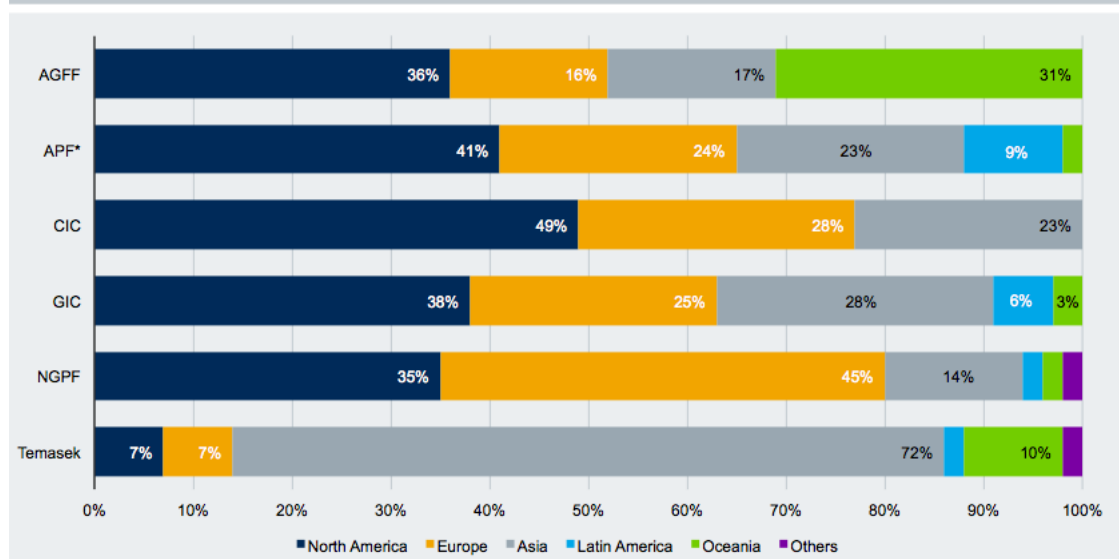
Considering the increased competition among investors in the hunt for decent yields in the property sector, the demand for specialist knowledge and expertise will continue to grow. Only a few SWFs will be willing to build such capabilities in-house, while many of them will likely continue to rely on property managers with strong track records.

Private equity represents a larger share of the alternative portfolio than for other institutional investors and is one of the fastest growing asset classes. Over the past six years, SWFs have doubled their allocation to private market investments. SWFs are also increasingly likely to become partners of private equity houses. They have recently bought stakes in the most prestigious U.S. and European firms in the sector. Private equity firms have therefore started to see SWFs not simply as another source of fundraising, but as stable and long-term partners in

the firms' limited partner base. Indeed, SWFs accounted for 10% of the European private equity investor base last year, from 5% in the previous four years. In this period, they invested not just in well-established buyout shops, but also in country or sector specialists with deep knowledge of particular market niches. On the other hand, players such as endowments and public pension funds are over-allocated to this asset category and can no longer commit large sums. SWFs' increased participation in the industry translates into an increasing power to question and negotiate the high fees charged by the firms in the sector. Moreover, SWFs have started to demand privileged access to co-investments in order not only to reduce the fee burdens, but also to climb the learning curve in the industry. The private equity sector is particularly attractive for SWFs as it may serve the fulfillment of purposes other than purely financial ones, for example in sectors such as commodities, energy, and high-tech. Considering this type of broader interest, it is reasonable to assume that private equity is destined to gain further relevance in SWFs' portfolios.

Investments in hedge funds, on the contrary, risk losing significance among institutional investors, especially after the recent move in 2014 by CalPERS (the largest US pension fund) to exit the sector. SWFs and pension funds alike are increasingly demanding individual service rather than joining co-mingled hedge funds, but at the same time, they are ever more wary because of the complexity, costs, and difficulty of appropriately scaling the investment.

Figure 8: SWFs' portfolio allocation to geographic regions (2013)



*APF allocation refers exclusively to the stock portfolio

Source: Elaborations on SWFs' Reports

2.2. Region and currency portfolio allocation: SWFs favour advanced economies

In terms of regional allocation, Figure 8 shows that SWFs are affected by a home bias. The share of their home region is overrepresented in their portfolios compared to the average for the other funds. For example, Temasek is mainly focused on Asia (Singapore, in particular, represents 31% of the total portfolio), the Norwegian pension fund is overly concentrated on Europe, the Australian Fund on Oceania, and the Alaskan one on the US⁶.

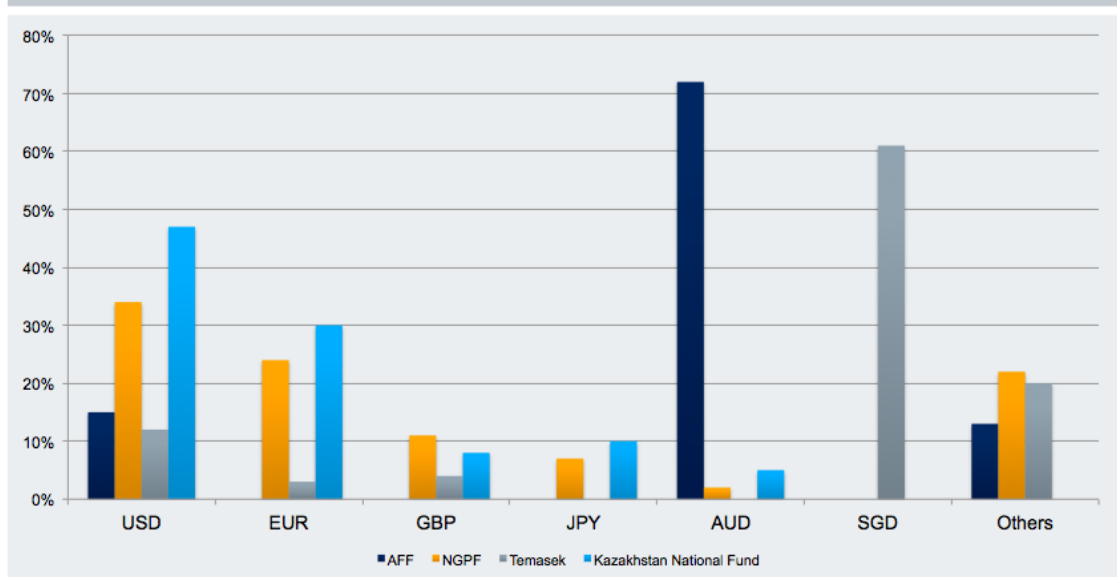
However, the most striking evidence emerging from this analysis is SWFs' preference for investing in advanced economies. The quotas devoted cumulatively to the markets of North America and Europe represent the largest slice of portfolios for most SWFs, except for Temasek. This is in line with other empirical evidence showing that SWFs prefer to invest in advanced countries because of their larger and more liquid financial markets. Even in the case of Temasek, almost half of the portfolio devoted to Asia is invested in Singapore and the overall exposure of the fund is 60% to mature economies and 40% to emerging regions. The preference for advanced economies also holds true for SWFs not represented in Figure 8, as they

do not publish actual data on their portfolios. For example, ADIA, in its benchmark, considers a maximum of 100% of its portfolio devoted to advanced economies, while only 25% to emerging markets.

The share of emerging markets, however, is on the rise. In a low yield environment such as the current one, SWFs and other investors are in search of higher-yielding assets. Sovereign funds have progressively expanded their exposure not only to emerging markets (especially to the BRICs), but also to frontier markets. Among emerging countries, the long-term return potential of the Indian economy has gained particular interest recently. Temasek, for example, has significantly expanded its pipeline of deals in India in healthcare, consumer industries, and technology. In 2013 the Singaporean fund took advantage of weakness in the Indian stock market to buy a small stake in ICICI Bank, Indian's biggest private sector bank for \$300m. Temasek is not alone in being attracted to the Indian market. Other SWFs have increased their investments in the private and property markets in the country.

The increased interest towards frontier economies has particularly benefitted Africa. Investors, including SWFs, have put

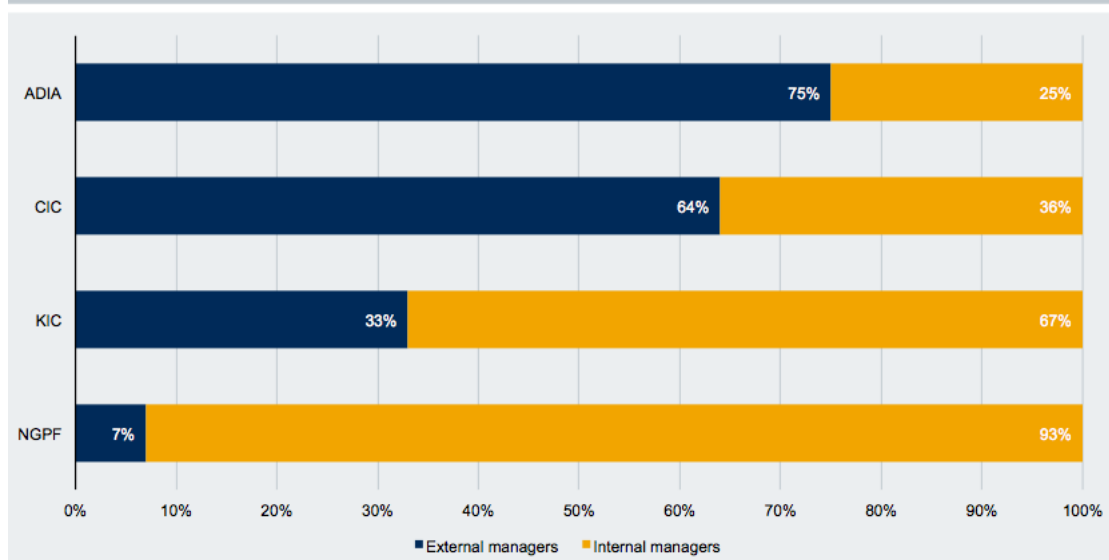
Figure 9: SWFs' portfolio allocation to currencies (2013)



Source: Elaborations on SWFs' Reports

⁶This is still truer for the APF considering its bond portfolio, of which 80% is invested in U.S. bonds.

Figure 10: External vs internal asset managers



Source: Elaborations on SWFs' Reports

aside concerns about whether African countries would be able to repay their debts and pursue the right fiscal and economic policies, and have started to invest money into these markets.

In terms of currency composition, and in line with the preference for advanced economies, the preferred currencies belong to advanced countries. Not surprisingly, SWFs prefer to invest in USD, EUR, GBP, and JPY (figure 9). Temasek, which invests mainly in Asia and in Singapore in particular, has an overwhelming proportion of its portfolio invested in Singaporean dollars. The NGPF is the most diversified in terms of currencies.

The share allocated to emerging countries' currencies is on the rise, following the corresponding trend at the geographic level. For SWFs, the move to diversify away from the USD, EUR, and GBP is part of a wider strategy to increase their exposure to riskier assets. An important role, in this respect, is being played by the increasing internationalization of the Chinese currency. This phenomenon is particularly significant for SWFs as they are among the most important investors in China's public markets. Among SWFs, NGPF, KIA, and Temasek are the major investors in RMB-denominated assets. QIA and ADIA also play an important role. The increasing interest in emerging market currencies and RMB in particular, is also shared by

smaller SWFs not included in our sample. For example, Azerbaijan's SWF (Sofaz) decided to increase its exposure to currencies other than the USD, EUR, and GBP from 5% to 10% at the end of 2013.

2.3. External asset managers and investment styles

Most SWFs make use of external asset managers, even if not necessarily for most of their portfolios. There are also SWFs (ADIA and CIC) that use asset managers for most of their investment activity⁷. NGPF uses both internal and external investment managers. However, for this fund, the role of external asset managers is definitely more significant in equity than in fixed income. NGPF focuses on internal and external equity managers possessing specialist expertise in clearly defined investment areas, covering both developed and emerging markets, and sector- and style-based approaches. With the exception of one fixed income manager, the external mandates in the case of NGPF are for long-only equities spread across 44 managers and totaling around 7% of the value of the fund.

CIC traditionally has been an active direct investor. It has recently shifted toward an endowment-style investment model seeking beta returns through passive strategies in bonds and equities and alpha returns through alternative

⁷ While for ADIA and CIC, we know the exact numbers (cfr Figure 10), the Kuwait Investment Authority also uses external asset managers for most of its investment activity. However, the latter fund does not disclose the numbers.

investments. However, the fund is facing difficulties in getting resources at home because of competition from SAFE (State Administration of Foreign Exchange), the Chinese SWF that is an integral part of the People's Bank of China and manages the central bank's \$3.8 trillion in foreign exchange reserves. SAFE has always been in competition with CIC, but it has recently received more freedom to invest heavily in international equity and real estate markets. This keeps potential resources away from CIC.

ADIA reports that 55% of its portfolio is invested passively, and the remaining 45% is active. The Kazakhstan National Fund invests the largest fraction of its portfolio passively (80%).

The most transparent fund, for which complete information is available, is the Norwegian NGPF. It pursues both active and passive strategies. Its strategic benchmark for equities is the FTSE Global All-Cap index and a Barclays Capital index for bonds. However, in September 2014, the fund declared that traditional global indices are no longer an appropriate model on which to base its investments. While global indices have tradability and liquidity as their main criteria, the Norwegian SWF is a different investor with long-term horizons and less concern about liquidity. In terms of equity, this means more diversification towards emerging markets. In terms of bonds, it means moving away from a market weighted towards GDP.

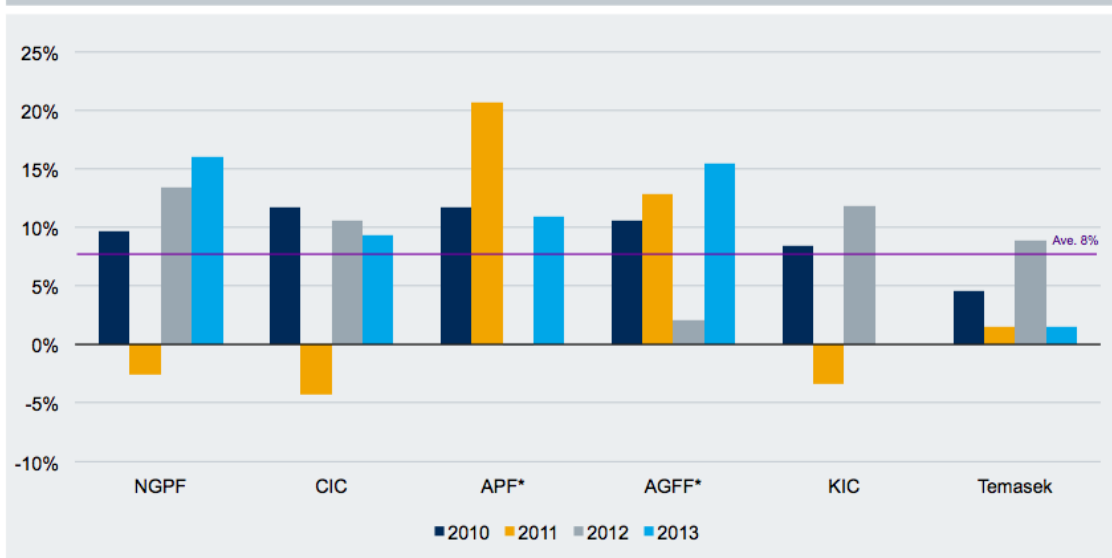
SWFs are alluring for asset managers. New initiatives targeted specifically at them are blossoming and asset management firms are being established in order specifically to manage SWF's assets. In spite of these initiatives, the trend emerging among SWFs is an increasing willingness to invest their cash directly or through partnerships with third parties. This may pose a big challenge to the asset management industry, as we will see next.

2.4. Performances in the short and long run

SWFs achieved on average a return of 8% per annum over the period 2010-2013 according to the official data provided by SWFs themselves in their annual reports. The bad year was 2011, except for those funds whose fiscal year ends in June (APF and AGFF). In order to escape punishingly low yields in fixed income and deliver decent returns in 2013, many SWFs had to increase their equity portfolios in order to reap the benefits of the bull stock market. Much of their performance for 2013 can therefore be attributed to the shift from fixed income to equity and to other forms of alternative investments.

There are SWFs that do not provide annual returns, but only returns on a longer-term horizon. For example the annualised 20-year real rate of return for the year ended 31 March 2013 for GIC was 4.0%. In USD nominal terms, GIC achieved an annualised return of 2.6%, 8.8%, and 6.5% for 5-year, 10-year, and

Figure 11: Annual rates of return (2010-2013)



*SWFs whose fiscal years end in June
Source: Elaborations on SWFs' Reports

20-year time periods respectively. Also ADIA only publicises long-term results. On a 20-year basis, it delivered 7.6% as of 31st December 2012.

SWFs also publicise returns since their inception to give account of the way their wealth has been managed across their lives.

Since its inception in 1990, the Norwegian fund delivered an annualised rate of return of 5.7% in nominal terms, corresponding to a meagre 3.75% in real terms. This performance is in line with other pension funds, but below the returns the wider capital markets may offer, showing that the fund in the past has not completely exploited its long-term horizon and ability to withstand periods of great volatility, or managed to maximise the benefits of a lack of liquidity constraints. In order to get better performance, the fund has recently started to change its investment approach, becoming more active, shifting towards emerging markets, and starting to invest in real estate. This new approach is already paying off, as shown in Figure 11. We will further analyse these trends in the following sections.

CIC posted a cumulative annual return of 5.7% since its inception in 2007. The fund started its operations just at the outset of the financial crisis and its performance reflected the turmoil. Mainly for this reason, it has a patchy record on its investments outside China and has often come under fire from other national bodies for the poor performance of its investments abroad. In 2014 the National Audit Office even blamed the losses incurred by CIC in its overseas holdings on mismanagement and dereliction of duty.

Temasek can boast a quite more attractive return of 16% since its inception in 1974. This different performance is explained not only by the time horizon of the longer life span of the fund, but also by the fund's approach of allocating a portfolio entirely to equity, including a high share of private equity, and its ability to withstand higher volatility.

In the current low yield environment in which liquidity is abundant and investors are desperately in search of decent returns, it will be challenging to maintain or improve such performance. This is the main challenge SWFs face in the coming years. We will see next how they intend to tackle the issue.

3. SWFs' Equity Investments

Considering the importance of equity in SWFs' portfolios, we want to examine in depth their investments in this asset class, analysing their trends through the years and their allocation to geographic regions and sectors. We will consider a broader universe of SWFs compared to the previous section. Unfortunately, this will still not represent the complete universe of acquisitions as the opacity of SWFs makes the task almost impossible to accomplish.

3.1. A snapshot across the years

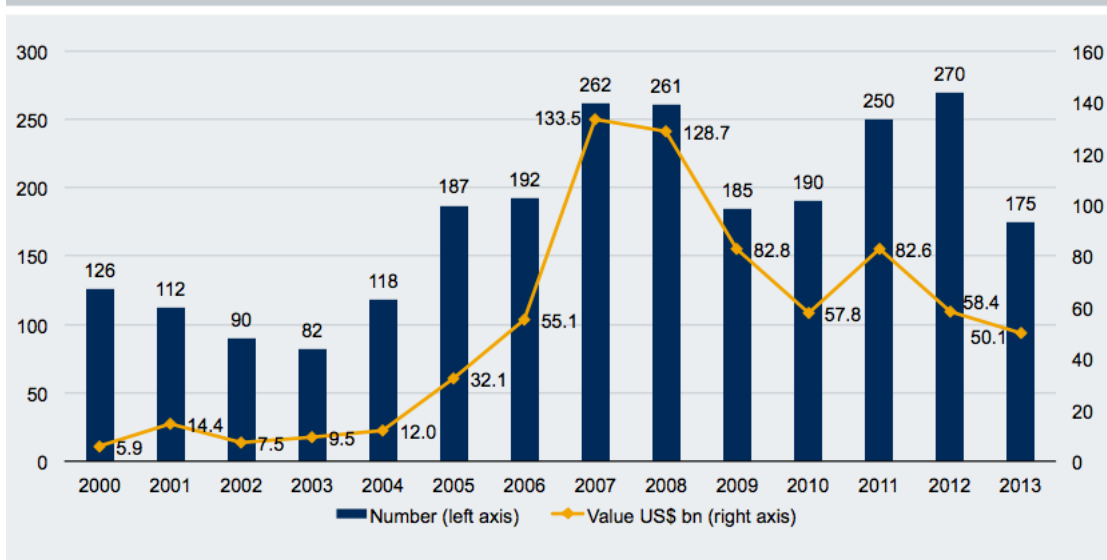
SWFs reached two peaks in their investment activity in international equity markets. The first was in 2007 with 262 investments totalling \$134 billion⁸. The second peak was reached in 2012 with 270 deals totalling \$58.4 billion.

Immediately after the financial crisis, in the years 2009 and 2010, SWFs slowed their investment activity. This seems quite reasonable if one considers that the financial resources flowing into SWF coffers were accumulating at a decreasing pace. Indeed, lower oil export revenues and lower trade surpluses

resulted into slower wealth accumulation for SWFs, which in turn translated into slower growth and slower investment activity than in the previous years. This suggests that although SWFs are supposed to be less affected by market cycles, they are still constrained by the surrounding macroeconomic environment. Notwithstanding this relative slowing down, in 2009 and 2010 SWFs were still able to exploit opportunities to pick up distressed assets cheaply. With the bull stock market that followed, SWFs started to invest again, reaching levels similar to pre-crisis ones in 2011 and 2012. In 2013, however, SWFs' acquisition activity slowed down again. With the bull equity market that made the S&P index more than double since 2009, equities started to appear expensive. In the M&A market the search for yield increased competition among investors, reducing sovereign funds' advantage as providers of liquidity in cash-starved markets.

The most active spenders across the time span considered were Singapore's Temasek and GIC along with the Chinese CIC, while outside Asia the most active fund was QIA.

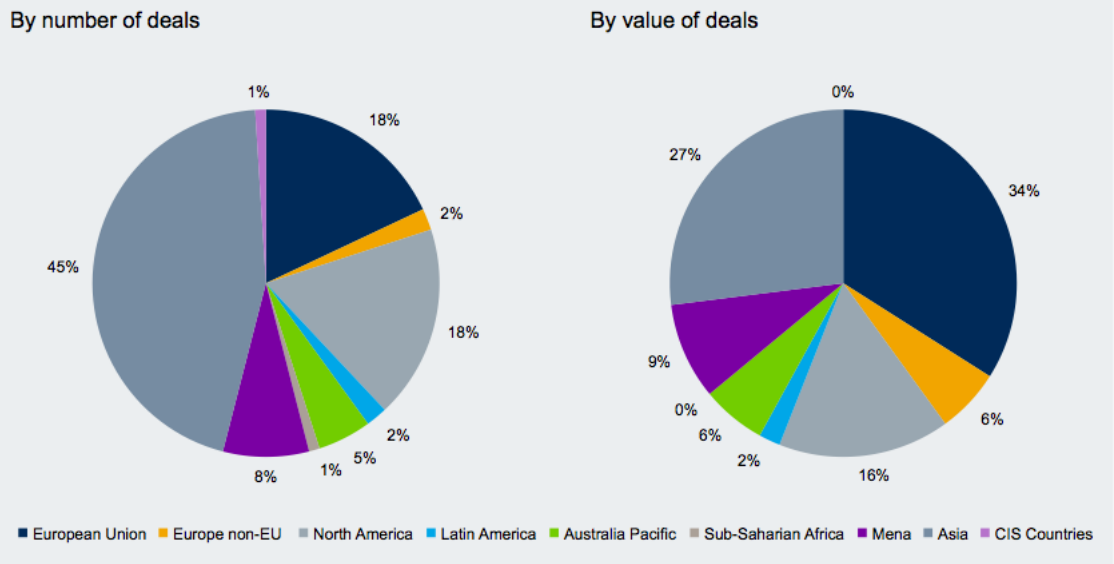
Figure 12: SWFs' equity investments between 2000 and 2013* (\$ bn on the right axis; number of deals on the left axis)



*Deals before the year 2000 are rare. That is why Figure 12 only reports figures for the period 2000-2013.
Source: Elaborations on proprietary dataset (Sovereign Investment Lab data for the years 2011-2013)

⁸The following analysis is based upon a proprietary database encompassing 1,903 SWFs' acquisition deals in listed and unlisted equities across a broad range of countries and sectors. The dataset combines information from international M&A databases such as Standard & Poors' Capital IQ, Thomson One Banker, FEEM-Monitor, and Zephyr. Deals span the period January 1995-December 2010 and refer to 29 SWFs. In terms of value, acquisitions totalled \$513.2 billion (corresponding to 1,448 deals out of 1,903 as not all of them report the value of the acquisition).

Figure 13: SWFs' equity investments allocation by target regions (1995-2010; %)



Source: Elaborations on proprietary dataset

3.2. Geographic allocation of equity deals: The prominent role of advanced countries

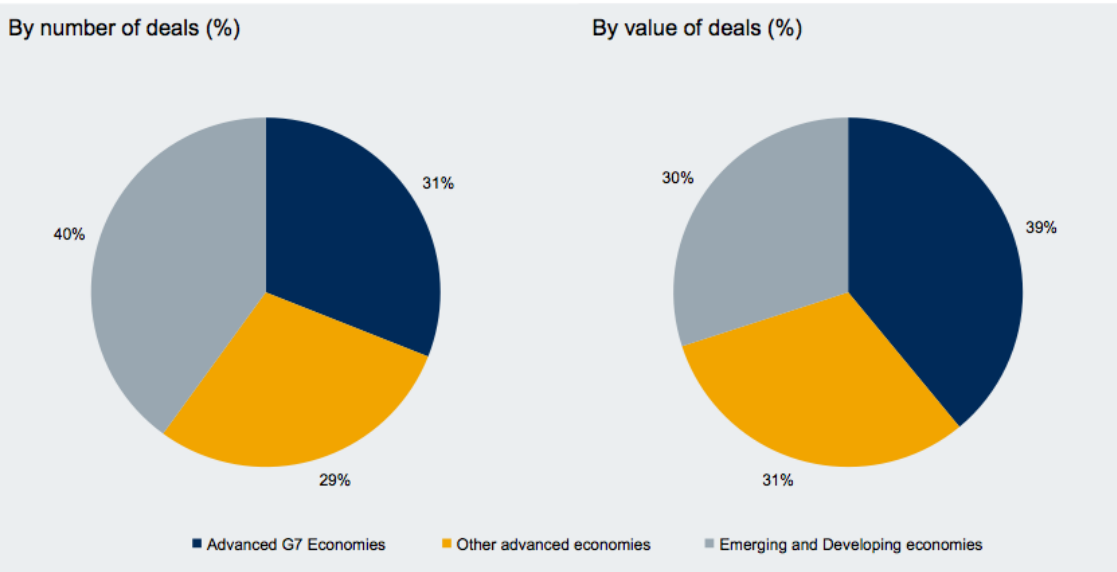
In the period 1995-2010, SWFs spread their acquisition deals throughout 102 countries. The preferred country was the US both in terms of number and value of the acquisitions followed by Singapore (in terms of number of deals) and by China (in terms of their amounts).

Focusing on geographic regions, the main recipient in terms

of number of deals is Asia, while in terms of value of the deals, the main recipient is the European Union. Middle Eastern funds tend to favour Europe, while Asian funds are more diversified, investing not only in Europe, but also in their own region and in the neighbouring Pacific area.

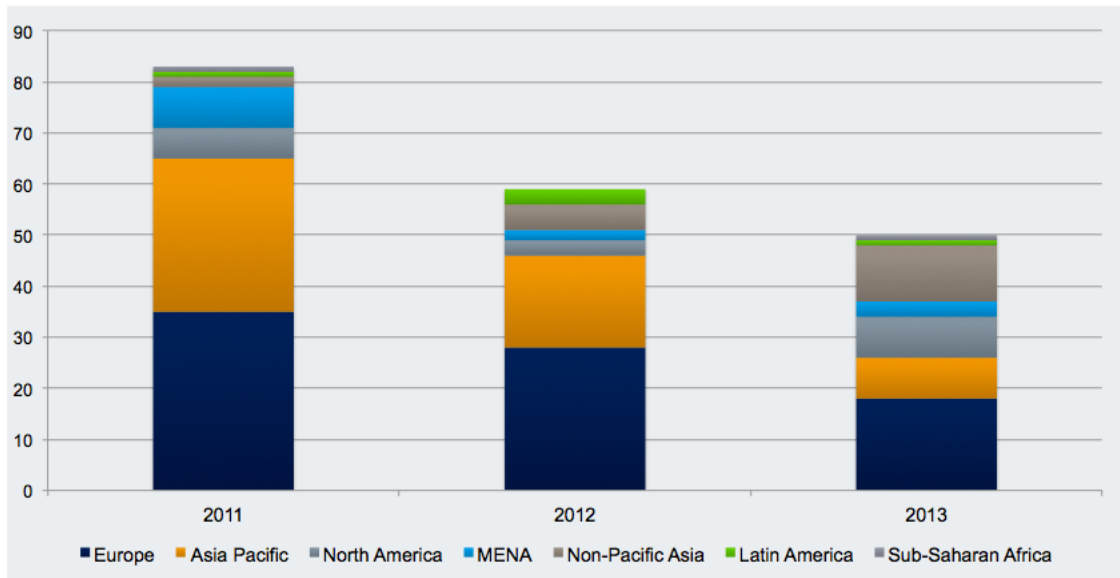
Overall SWFs prefer to invest in advanced economies. Most investments (60% in number, 70% in value) were directed towards this group of economies. According to recent

Figure 14: SWFs' equity investments allocation by economic group of target countries (1995-2010; %)



Source: Elaborations on proprietary dataset

Figure 15: SWFs' equity investments allocation by target regions – value of deals (2011-2013; \$ bn)



Source: Elaborations on Sovereign Investment Lab data

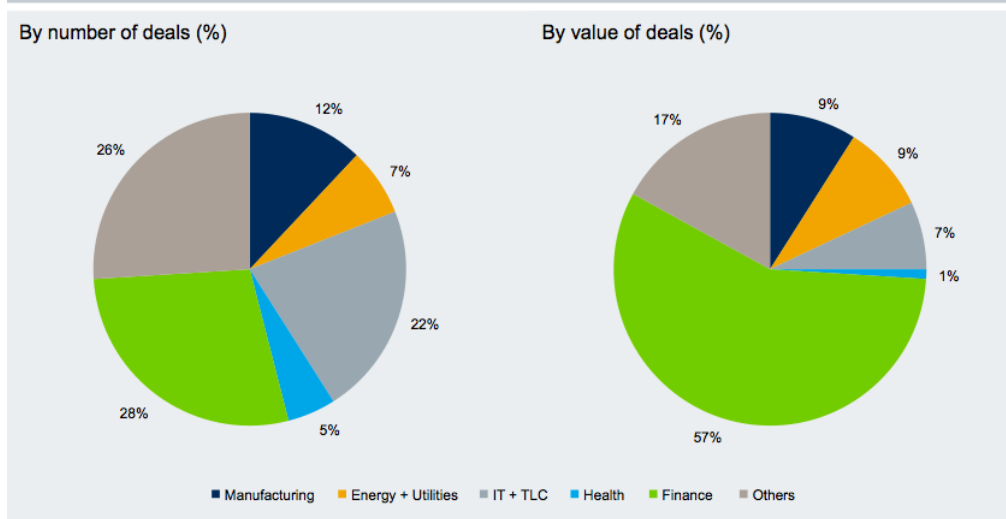
econometric evidence (Ciarlone and Miceli, 2014), the preference for advanced countries is due to: i) more developed, larger, and more liquid financial markets and ii) higher institutional standards.

This preference has not been significantly challenged following the financial crisis, in spite of the fact that the latter mainly hit advanced economies. Considering the years 2011-2013, Europe remains the preferred destination in terms of invested amount. However, some major changes may be highlighted. If we exclude Ireland, where the rescue of domestic banks was carried out by the country-owned SWF, the leading recipient

country for SWFs' investments coming from abroad in 2013 has been France, followed by the UK and Spain. This was a break from the past, because prior to 2012, the undisputed preferred destination for SWF investments in Europe was the UK.

As already noted, SWFs are involved in a process of increased portfolio diversification in terms of markets, currencies, and assets. Since the financial crisis, they started gradually to increase their exposure to emerging markets. The BRICs (Brazil, China, India, and Russia) gained particular prominence on SWFs' investment, with China leading the ranking in 2012.

Figure 16: SWFs investments by target sectors (1995-2010; %)



Source: Elaborations on proprietary dataset

Since 2013, other countries are gaining traction as China's growth slows. Among them are Russia, India, and Indonesia. A rebalancing is therefore taking place within the BRICs country group and with other emerging economies. However, the recent tensions over Ukraine, along with other more structural trends such as the US tapering (which had already caused turmoil in emerging markets after being announced in mid-2013) and reduced prospects of growth for emerging economies, rendered these emerging economies and their returns less alluring than in the past. Given that, at the same time, Europe overcame the most acute phase of its sovereign debt crisis and US growth was rekindling, it is possible that the balance will again tilt away from the emerging towards the advanced economies.

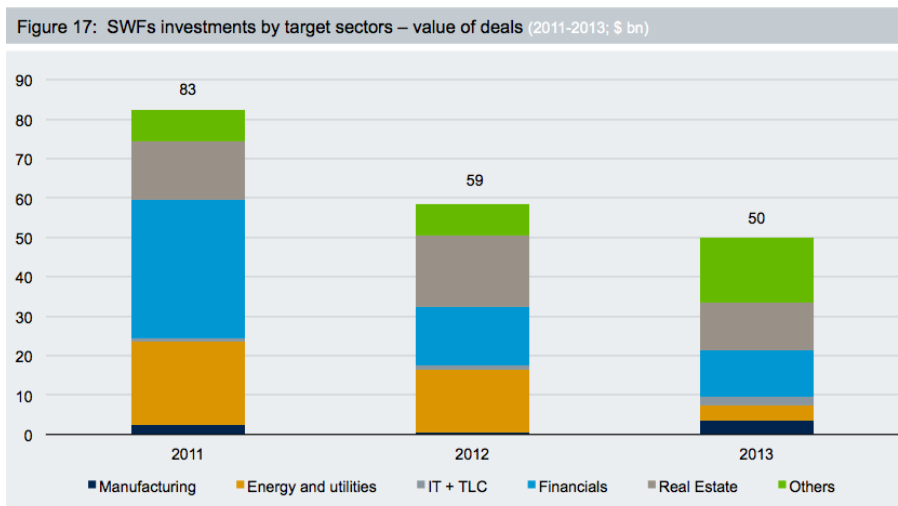
3.3. Allocation of equity portfolios to target sectors: Eroding the supremacy of finance

The preferred sector for SWFs' investments is the financial one in terms of both number (28% of the total) and value (57% of the total). The share in terms of value highlights that the average size of the deals in the financial sector is quite large. This is the fallout from the financial crisis when SWFs were called to rescue several important Western financial institutions. SWFs are, indeed, estimated to have invested almost \$72 billion between 2007 and 2008 in order to support capital requirements of some of the most prominent western financial institutions, such as Barclay's, Citigroup, Credit Suisse, Morgan Stanley, Merrill Lynch, Standard Chartered, and UBS.

This picture has not dramatically changed since the financial crisis. The financial sector remained the preferred one until

2011, with almost half of the amount invested. Some rescues of financial institutions occurred up to 2011 (for example Allied Irish Banks was rescued by the Irish SWF). Later on, in 2012 and 2013, deals in the financial sectors were mainly aimed at acquiring banks and other financial institutions in order to tap investment opportunities, especially into banks in major emerging economies such as China, India, and Russia. In this way the funds sought to reap the benefits of economic growth in these markets.

Investments in the energy, utilities, and mining sectors increased their share, representing about 25% of all the amount invested by SWFs in the years 2011 and 2012, while in the whole period 1995-2010 they represented only 9%. This testifies to the interest by SWFs in sectors that may support the development of their own economies. While this motivation can be considered valid for Asian funds, especially the Chinese ones, Middle Eastern funds invest in energy for two different reasons: a) they invest in the oil sector in order to strengthen their control of the whole value chain and b) they invest in other energy sources, including renewables, in order to diversify away from oil. Another important trend that emerged in the period from 2011-2013 was the aforementioned strong interest for real estate. The increasing share in IT recorded in 2013 shows that SWFs are also interested in investing in new technologies and e-commerce. This is particularly true for Asian SWFs. For example, Singapore's GIC funded Beijing Xiaomi Technology Co., China's largest smartphone manufacturer. GIC and Temasek also participated in the Alibaba IPO in September 2014.



Source: Elaborations on Sovereign Investment Lab data

4. SWFs In the Markets: Opportunities Or Threats?

The main issue with SWFs is that most of them are neither transparent nor regulated. This has raised many concerns, especially before the financial crisis, both from the political and the financial side. We will consider both.

4.1. Political concerns and the Santiago Principles

Concerning political worries, special attention has been given to the sectors deemed sensitive such as defence, infrastructure, and energy. Other concerns were raised about the risk that SWFs could be pursuing undeclared hidden objectives such as appropriation of technology and boosting of national champions at the expense of foreign acquired firms. The fact that many of them are owned by undemocratic countries has not helped to ease those fears. Therefore, it is not by chance that SWFs have raised the attention of policymakers, operators, scholars, and international regulators and sparked a round of protectionist reactions in recipient countries. France and Germany approved legislation between 2007 and 2008 to protect national security and public order when foreign investments were at stake and the US, in 2007, strengthened the competencies of the Committee for Foreign Investments in the United States (CFIUS). These reactions were in response to attempts by SWFs to make acquisitions in those countries.

In 2008, to avoid the spiralling of a protectionist reaction, the IMF stepped in to establish a dedicated international working group (IWG). The participants, including representatives from SWFs themselves, issued a code of conduct, commonly known as the Santiago Principles, outlining a series of principles and practices to be adopted on a voluntary basis (Generally Accepted Principles and Practices – GAPP) and aimed at addressing concerns about transparency and good governance. They cover three main areas:

- Legal framework, objectives, and coordination with macroeconomic policies
- Institutional framework and governance structure
- Investment and risk management framework

Unfortunately, the 24 Santiago Principles have been poorly implemented thus far, in spite of the creation of the International Forum of SWFs (IFSWF) established in 2009 with the Kuwait Declaration to provide a follow up to the Principles'

implementation.

Indeed, the recent change in the attitude by recipient countries towards SWFs has little to do with the Santiago Principles. The increased openness to their investments is more likely due to the consequences of the financial crisis. The balance in the trade-off between national security and the need to attract long-term capital shifted significantly towards the latter with the onset of the crisis. In the following years, the main imperative has been to attract SWFs' liquidity instead of defending strategic sectors from it. At the same time, SWFs have become far more prudent. In spite of the fact that protectionist rhetoric has largely died down, SWFs still choose to access particular sensitive markets (for example the US) in partnership with domestic investors in order to avoid any negative political reaction.

4.2. Financial concerns: From destabilizing investors to providers of long-term capital

Focusing on the financial side, the main concerns about SWFs have been dispelled on the basis not only of anecdotal evidence, but also of scientific studies that find no evidence supporting the concern that SWFs could destabilise the proper and efficient functioning of financial markets.

The first type of financial concern addressed in the existing scientific literature regards the impacts of SWF investments on target firms, and in particular, on their stock performance. Several studies analyse how the market valuation of a firm may react following an equity acquisition from a SWF. Empirical evidence on this point suggests the existence of a positive impact on target firms' stock prices in the (very) short run (Kotter and LeI, 2011; Bortolotti et al., 2010; Dewenter et al., 2010), while there is no reaction at all (Dewenter et al., 2010; Chhaochharia and Laeven, 2010; Kotter and LeI, 2011) or even a negative one in the long run (Bortolotti et al., 2010). Overall these impacts do not seem to differ significantly from the reactions triggered by other types of investors. In addition, Fei et al. (2013) show that market reaction to SWF investments tends to mitigate speculative trading, as is demonstrated by the lower cumulative abnormal returns and lower turnover volatility.

Even if we consider the supposed diversity of SWFs compared

to other institutional investors, for which the literature offers plenty of evidence, there is no link between this diversity and any threat to market integrity. For example, Chhaochharia and Laeven (2010) find that SWFs are trend chasers and pursue less portfolio diversification both in industrial and geographical terms than pension funds. Boubakri et al. (2011) show that, compared to mutual funds, SWFs exhibit different investment preferences. Dyck and Morse (2011) find that a state industrial planning variable has considerable importance in explaining SWFs' portfolio variations. Bernstein et al. (2013) find a heavier involvement of politics in SWFs investments, causing a focus on short-term economic policy goals at the expense of longer term returns maximization. Knill et al. (2013) find that SWFs act distinctively from other traditional institutional investors when investing in private equity.

On the contrary, there are several studies suggesting quite the opposite, i.e., that SWFs may benefit financial markets both in micro and macro terms. On the micro side, considering the effects on target firms, Sojli and Tham (2011) and Fernandes (2013) find that SWFs improve firm value and their operating performances. There are three important ways for this to happen:

- 1) because of SWFs' huge capital and long term horizons, which provide stability of funding;
- 2) because SWFs provide low cost patient equity capital to target firms;
- 3) finally, for their political connections, which could make available market access and government-related contracts.

On the macro side, Miceli (2013) shows that SWFs do not herd in equity markets differently from how mutual funds behave. A recent working paper by Ciarlone and Miceli (2014) suggests that the occurrence of a crisis may positively affect the likelihood of a country being targeted by SWFs' equity acquisitions. A country experiencing a financial crisis is more likely to attract equity acquisitions by SWFs and the occurrence of a crisis also positively affects the amounts invested. The paper suggests that capital flows stemming from SWFs' investment activity may end up having a stabilizing role on markets during periods of financial turmoil, protecting the targeted countries from foreign shocks, instead of propagating them globally.

These results come as no surprise considering SWFs' structural characteristics – i.e., their long-term investment horizon, the objective to preserve wealth for future generations, and the absence of any obligation to redeem. It is not by chance that the investment attitude of the most transparent and largest SWF, the Norwegian NGPF, is tilted towards patient, liquidity - supplying and market-stabilizing value strategies. The countercyclical investment behaviour of NGPF led the fund to increase the portfolio share of volatile assets when other institutional investors did just the opposite, taking advantage of investment opportunities of mispriced equity assets and avoiding the kind of herding phenomena in which asset allocations move in tandem with market fluctuations. The Norwegian fund's strategic approach and performance show how a countercyclical active asset management framework works perfectly in the case of a large SWF aiming at enhancing long term returns over time.

4.3. Counter-cyclical behaviour: The role of SWFs during the recent financial crisis

Anecdotal evidence suggests a similar story in terms of counter cyclicity when, in the years 2007-2008, at the outset of the financial crisis, SWFs came to the rescue of several financial institutions on the verge of a liquidity crisis (Table 2).

If SWFs behave in a countercyclical way, this stands in stark contrast with the behaviour of other major institutional investors who tend to exhibit procyclical investment attitudes in times of financial stress. For example, during the recent global financial crisis, mutual funds massively divested from crisis-hit markets, contributing to crisis transmission.

As there is no convincing empirical evidence of the destabilization potential of SWFs, we believe that past fears were misplaced. In fact, SWFs offer many opportunities given their anti-cyclical stabilizing investment attitudes, potential to support their domestic economies, and long-term horizons. It is mainly for these reasons that the attitude by recipient countries has changed so markedly after the financial crisis, with SWFs embraced as part of the community of institutional investors.

4.4. On the opportunity side: Tapping SWFs' resources to cope with financial turmoil at home

Another benefit of SWFs is that they have the resources to cope with financial turmoil at home. In times of financial crisis, SWFs provided the needed resources to rescue their domestic

or regional economies from trouble.

For example, the National Irish Pension Reserve Fund (NPRF) provided support to the national domestic banking system, which was on the verge of collapse. The Irish SWF was required to inject \$12 billion into Allied Irish Banks in 2011. This big investment turned the Irish fund into the biggest spender for that year among SWFs.

QIA and KIA provided funds, as well, to support their respective domestic banking systems. Between 2011 and 2013, QIA spent \$1.3 billion to provide capital to four of its domestic banks. Since 2008, the SWF from Qatar spent over \$3 billion to bail out its domestic banking system. No figures are available for KIA.

The Russian Reserve Fund was required to channel liquidity into the Russian Stock Exchange in 2008. Its total assets decreased by \$107 billion (of which \$36bn went to bank bailouts) from \$133 billion at the end of 2008 to \$26 billion at the end of 2012. It started to recover only in 2013, with assets totalling \$87 billion, still far from the peak reached in 2008. The current Ukrainian crisis seems poised to trigger another

scenario like the 2008-2009 crisis. The Russian central bank has been asked to use its reserves to finance the maturing debts of Sberbank, VTB, and VEB (which are under Western sanctions). These three banks alone may require \$75bn from the central bank over the next 18 months, and other state groups are also asking for financial support. If we consider the requirement to keep at least \$180 billion of foreign exchange reserves to cover six months of imports, and the possibility of speculative attacks or sudden capital flight, it is clear that the support needed will most likely involve the coffers of the Reserve Fund, which is intended for a rainy day.

If we go still farther back in time, we find that during the Asian financial crisis of the late 1990s, Singapore was spared any consequence in terms of international bailouts and IMF intervention and conditionality, only thanks to the injections of liquidity provided by the country's two SWFs.

All these interventions testify to the countercyclical role SWFs may have not only in international markets, but also (and especially) in their domestic economies. They represent a buffer of wealth that can be deployed when needed to cope with financial and economic turmoil at home.

Table 2: Investments in financial institutions (2006-2008; \$ million)

Date	SWF	Target	Value (\$ mn)
27 Mar 2006	Temasek	Standard Chartered	4,000
06 Oct 2006	Istithmar	Standard Chartered	1,000
23 Jul 2007	Temasek	Barclays	2,000
27 Nov 2007	ADIA	Citigroup	7,500
10 Dec 2007	GIC	UBS	9,760
19 Dec 2007	CIC	Morgan Stanley	5,000
27 Dec 2007	Temasek	Merrill Lynch	4,400
15 Jan 2008	GIC	Citigroup	6,880
15 Jan 2008	KIC	Merrill Lynch	2,000
15 Jan 2008	KIA	Merrill Lynch	2,000
16 Jan 2008	KIA	Citigroup	3,000
28 Jan 2008	QIA	Credit Suisse	3,000
8 Febr 2008	GIC	UBS	14,400
25 Jun 2008	QIA	Barclays Bank	3,500
27 Jul 2008	Temasek	Merrill Lynch	3,400

Source: Quadrio Curzio and Miceli, 2010

5. Looking to the Future

After a brief overview of the past and present role of SWFs, we may now turn our attention to their future role in financial international markets, first trying to gauge their potential growth in coming years in terms of assets under management and, second, trying to outline the major trends going on in their investment strategies and their impacts on the rest of the financial universe.

5.1. SWFs' growth prospects

SWFs have increased rapidly in the last decade in terms of both number of funds and AuM, thanks to the increasing oil revenues and accumulation of central bank foreign currency reserves. In the medium- to long-run, they are expected to grow further, albeit at a slower pace than forecasted before the crisis. Before 2008, SWFs were expected to reach \$12 trillion by 2015. However, following the financial crisis, these optimistic projections have been revised downward. According to some more recent estimates (Castelli and Tagliapietra, 2012), SWFs' total AuM may reach \$10 trillion by 2016. Even if slower, this pace still remains higher than for other financial investors. However, these more cautious projections may still be too optimistic if one considers several recent geopolitical events that could impact SWFs' growth. For example, the shale gas revolution has turned the US into a net exporter of gas, that will be virtually self-sufficient in energy by 2030. This phenomenon may represent a threat to oil-exporting countries, thus affecting their accumulation of financial sovereign wealth. Another important phenomenon is the slowing down of export surpluses in emerging countries such as China, where higher wages and gradual currency appreciation are increasing manufacturing costs. Both these phenomena will lower these countries' current account surpluses and hence slow wealth accumulation of their SWFs.

The average annual rate of growth experienced by SWFs in the years after the crisis (2010-2013) was 11%. There is no reason to suspect SWFs may grow faster in the coming years. Projecting this rate of growth through the years 2014-2018 (figure 18), SWFs are not expected to surpass the threshold of \$10 trillion before 2018 (they will total \$9.6 trillion by 2017). This estimate appears in line with the current economic and geopolitical scenario.

With resources slower to accumulate and interest rates staying so low, the time may come when SWFs decide to start accumulating debt. Indeed, Temasek, Mubadala, and a few other funds have already started doing so.

5.2. Investing for the long term: The growing role of infrastructure

Investing in infrastructure is high on the agenda of international organizations such as the OECD, IMF, World Bank, and G20. While the banking sector has traditionally been the main provider for this type of investment, deleveraging and new regulations (Basel III) have led banks to reduce their long-term lending. Considering the fragility of public accounts, other sources of infrastructure funding are necessary.

Institutional investors, in particular insurers and pension funds, have started to plug the gap. Being characterised by long-term liabilities, they are increasingly attracted by investing in infrastructure, which offers inflation protection and stable yields. The number of investment opportunities is on the rise and, at the same time, the number of financial companies providing infrastructure funds is also increasing. The share of pension funds in the nine largest direct infrastructure funds increased by around 14% in 2012. Opportunities are also fostered by multilateral development banks willing to leverage their expertise with the huge liquidity institutional investors may provide.

In 2012, The European Commission and the European Investment Bank launched the EU project bond initiative targeted at responding to the financing gap in European infrastructure in the fields of transport, energy, and information and communication technology. Project bonds are designed to enable eligible infrastructure project promoters, usually public private partnerships (PPP), to attract additional private finance from institutional investors issuing debt in the form of EIB guaranteed bonds (project bonds). In this way, capital market investors would directly buy the bonds, enjoying the upgraded credit rating (investment-grade, preferably in the 'A' category) provided by the EIB guarantee. In addition to this initiative, increasing use of ad hoc instruments (such as securitization) is also on the agenda to finance European infrastructure. The debate of political economy in Europe is shifting from

austerity to increasing capital spending and enhancing the growth potential of the region.

In spite of all this blossoming of opportunities, accessing the sector for traditional institutional investors remains a challenge. For example, the financial regulation being approved (Solvency II) offers no incentives for investing in the long run. In this respect, SWFs seem better equipped to contribute to cover the funding gap for infrastructure. They are not subject to the strict regulatory constraints of traditional institutional investors and, being government funded entities, they pursue not only return maximization targets, but also objectives of promoting investments and growth.

SWFs have, indeed, recently engaged into a diversification of their portfolios towards alternative investments and, in particular, real estate (as previously discussed). Investing in infrastructure helps to preserve real long-term returns, while providing more attractive yields. This type of investment is increasingly seen as a golden opportunity for investors, characterised by long-term horizons and not bound by strict regulations or liquidity constraints, as SWFs are. Railways, roads, airports, and regulated utilities are increasingly accessible. This broadens the appeal of the asset class. In addition, tapping the field of energy infrastructure makes sense for oil-rich countries that want to acquire more control over the entire energy supply value chain.

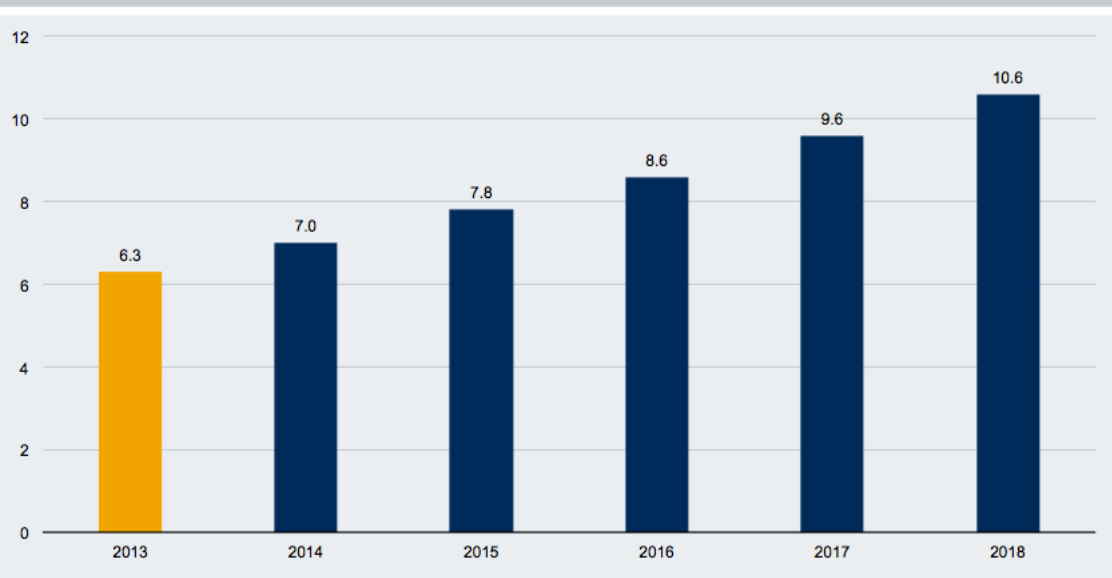
SWFs such as CIC, GIC, KIA, and QIA have already tapped into the sector in Europe and emerging countries. In July 2013, the Kuwait sovereign wealth fund announced plans to spend £5bn on infrastructure investment in the UK. GIC struck a deal in 2013 to invest \$135 million in Aegea Saneamento e Participações, the water and sewage treatment arm of Grupo Equipav, the Brazilian conglomerate. CIC has owned holdings, since 2012, in several high-profile British assets, including Canary Wharf, Heathrow Airport, and Thames Water. In Norway, which hosts the largest and most prominent SWF in the world, the debate is raging about the possibility to extend the mandate to invest the assets of the domestic SWF into infrastructures alongside the recently added portfolio of real estate.

Unfortunately, SWFs are often ill-equipped to assess opportunities in this field. At the same time, it is expensive to develop the in-house skills needed to be an engaged partner in a strategic alliance involved in an infrastructure project. Not by chance, SWFs are joining other investors in the process of bulking up their internal investment teams with infrastructure specialists.

5.3. Increasing shareholder activism

SWFs, from being completely passive shareholders, are increasingly becoming active ones. In the past, they chose not to exercise their shareholder rights in order to avoid any political opposition or regulatory backlash, as they were

Figure 18: SWFs' growth estimates (2013-2018; \$ bn; orange for actual figures, blue for estimates)



Source: Elaborations on Quadrio Curzio, Miceli (2010), Ciarlone, Miceli (2013) and Sovereign Wealth Fund Institute

continuously under political and regulatory scrutiny. The change in the attitude towards SWFs by recipient countries has allowed the funds to take a more active stance. However, their activism remains of a “defensive” sort, mainly addressed to protect wealth in the long term and similar to the activism pursued by pension funds, while quite different from the kind of “offensive” activism pursued by hedge funds. Being long-term investors, SWFs have the final aim of preserving the long-term value of their wealth. Their activism is intended to achieve this target, avoiding the risk of monitoring deficit that they incurred in the past when they were totally passive. An emblematic case was the vocal opposition by the Qatar SWF, the mining giant Xstrata’s biggest independent shareholder, to a potential \$80 billion merger with Glencore in the summer of 2012. Had QIA not approved the deal, the merger would not have succeeded, as it eventually did in early 2013.

However, this change of attitude requires the development of clearly defined and transparent policies and procedures for exercising voting rights, as recommended in the Santiago Principles.

The Norwegian Pension Fund provides the best example of this kind of responsible “defensive” activism and of the most transparent modalities to implement it. The activism by the Norwegian fund is well known. The fund has begun in recent years to play a role in picking the directors at its biggest holdings and it has appointed a corporate governance advisory board. In addition, the fund announced it wants to increase the number of companies in which it holds a stake of at least 5% in order to exercise its influence. Quite recently, another revolutionary move came from the Norwegian sovereign fund when it announced it would start making its voting intentions in “selected companies” public before annual meetings, while in the past it has always waited until after an annual meeting before revealing how it had voted. This should contribute to transparency in how shareholders rights are exercised. In the future, it is likely this approach will be extended to all the

companies in the portfolio.

This change represents a sort of revolution in the way shareholder activism has been exercised by institutional investors, as they rarely say how they plan to vote. In the US, for example, large pension funds such as CalPERS and CalSTRS, disclose their votes shortly before annual meetings, not enough in advance to affect the debate. Fund managers tend to reveal voting intentions only when particularly annoyed about an issue. The move has the potential to become a new standard in the way shareholder activism is exercised by large investors such as other SWFs and pension funds, ratcheting up pressure on boards and raising the odds of an increase in shareholder rebellions.

5.4. From fixed income to direct lending

The disappointing performance of fixed income portfolios in recent years, particularly in 2013, has prompted SWFs to reallocate capital from debt to equity, reducing their fixed income exposure. However, SWFs, along with other institutional investors, also started looking elsewhere in the fixed income market for better yields. Rather than exiting fixed-income altogether, SWFs are considering changing their allocation within the fixed-income universe by moving out of government bonds and into opportunities in emerging-markets credit, especially in the corporate segment, and in developed-market high-yield debt. These more adventurous investments offer more attractive yields than safer sovereign bonds, traditionally the cornerstone of fixed income portfolios. In addition, returns are strongly correlated with economic growth and the perceived associated risk is quite low, as default rates have decreased recently. Even traditionally risk-averse funds like the Hong Kong Monetary Authority have started to invest into high-yielding corporate bonds from developed markets.

However, even those more adventurous sectors of the fixed income universe, have recently proved less rewarding as the increased demand has led prices to rise and returns to fall.

SWFs along with other investors are, therefore, looking at still more risky opportunities in private debt and mezzanine loans, which provide still stronger yields at the price of near-total illiquidity. The world of direct lending to finance top end acquisitions in major cities, in particular, is starting to attract several SWFs. In March 2013, the Qatar Investment Authority (QIA) provided £200 million of mezzanine debt to Blackstone Group to refinance the 2011 purchase of Chiswick Park, an office complex in West London. In 2013, GIC signed a deal with London-based manager Laxfield Capital to invest £1 billion in the UK real estate market. What is more indicative, however, of this appetite by SWFs for direct loans, is the deal signed in October 2013 between Norway's Government Pension Fund (renown as a conservative SWF) and the real estate arm of the insurance company AXA to set up a joint venture to lend money to buyers of large top-quality properties. Not by chance, other SWFs including the Australian Future Fund, the Alaskan Permanent Fund, the Korean Investment Fund, the Chinese CIC, and SAFE, are all starting to look at the business of direct lending as a possible source of diversification in order to reap better returns.

Another interesting source of healthier yields could be represented by the market of non-performing loans, which are burdening the European banking sector. Europe's banks held €1.2 trillion worth of nonperforming loans on their balance sheets in 2012 (Sovereign Wealth Center, 2014). SWFs may be willing to be involved in the top part of the capital structure because they can deal with illiquidity and reap its premiums. After a temporary cooling towards European debt markets caused by the onset of the sovereign debt crisis, the funds are now returning to the continent, sensing that the better debt opportunities lie here. This could help rescue the European credit market, which suffers from insufficient lending by its banking sector. SWFs could be willing to fill the gap, offering a reliable alternative to the more traditional bank channel and helping the European transition from a bank-centred financial system towards one in which other institutional investors also

have an important role to play.

It is debatable whether this increased interest in direct lending and other alternative forms of fixed income represent the emergence of a new longer-term strategy or simply a way to pick up the passing opportunities markets have to offer. However, pursuing returns in these more sophisticated and specialised areas of the fixed income universe, which are laden with a lot of risk, requires considerable expertise and skilled personnel. Moreover, these products do not necessarily fit with SWFs' investment portfolios and risk profiles. Still, SWFs are better equipped than other investors to tap these more complex and risky instruments. This is because they are not only well-endowed in resources, but also have the regulatory flexibility and the proper time horizons to make long-term lending feasible and rewarding without having to worry about liquidity mismatches.

5.5. More direct investing and the build up of in-house capabilities

Until the financial crisis, SWFs showed a preference for outsourcing fund management to external asset managers. Nowadays, they tend to reconsider the value of allocating activities to external asset managers because of the agency issues and high fees. This can be considered the result of a maturing process. SWFs may, indeed, be viewed as increasingly sophisticated investors that are less willing to passively outsource their investment strategies to Western financial asset managers. This is particularly true for alternative investments such as real estate and infrastructure.

However, more direct investing means having at disposal in-house capabilities to deal with complex and risky investments. In this respect, SWFs are understaffed. They lack the needed personnel to increase their direct investing, especially in complex asset categories. For the same reason, they are also not able to undertake too many investments of a small size and tend to prefer fewer, larger deals. Another issue arises

from the importance of aligning staff incentive plans with SWFs' achievement of long-term objectives. SWFs also need to implement more accurate performance measurements, not only in order to promote a thorough communication of returns externally, but also to monitor staff performances. Many require a more systematic and transparent reporting of investments and related results.

Finally, SWFs want to be more present in the main financial centres. They want to acquire specialised human capital and activate network effects. In this way, they aim to conquer competitive advantages by finding opportunities of direct potential investments that would not be available for those who are far away. An example of this approach is the recent opening of offices by Temasek in New York and Mumbai⁹ and by GIC in Sao Paulo. This trend, however, is limited by the scarcity of personnel available.

Considering the above trends towards internalization of asset management and the blossoming of new types of investments as well as of offices around the world, it is reasonable to expect an increase in the professional staff employed by SWFs in the coming years.

5.6. Looking for partnerships: The importance of gathering together

SWFs increasingly appreciate co-investment deals. In recent years, their attitude towards teaming up with other SWFs, other institutional investors, or even commercial partners has improved. Collaboration with other investors is a way to leverage investment partners' know-how, to overcome the issue of being understaffed, and to spread risks.

Co-investment usually takes the form of direct equity investments in the same target. This has happened quite often since the financial crisis. Another form of co-investment is the establishment of joint ventures in the form of joint private equity funds between SWFs and other financial investors, including other sovereigns. Examples of this latter form of cooperation are the launches of several joint-investment funds in 2013 by the Russian Development Investment Fund with CIC, KIC, and Mubadala, and the launch of a joint investment fund by the Oman Investment Fund and the State Bank of India in 2011 to

tap the opportunities for investment in the Indian market. In Europe, QIA set up joint-funds of this kind in Italy (IQ Made in Italy to invest up to €2 billion starting with the current €300 million in Italian firms) with Cassa Depositi e Prestiti in 2012 and in France in 2013 for a €300m joint fund to invest in small and medium-sized French companies. Another possible form of cooperation is to establish joint ventures with industrial partners. This is quite common for those SWFs that have industrial development objectives, such as CIC, GIC, IPIC, Mubadala, and Temasek (the most recent example for Temasek being the co-investment with Riverstone in a new Norwegian oil-exploration company in 2014).

According to the Sovereign Wealth Centre, from 2008 to 2013, more than 70% of sovereign wealth fund joint ventures were with commercial firms. A further 28% were with other sovereign funds or government entities.

The increased preference for cooperation may also impact the insourcing of the asset management activity. Another possible way to cooperate may, indeed, take the form of establishing proprietary asset managers with other large institutional investors (i.e., pension funds or other SWFs) to share the costs of internal asset management and exploit synergies and economies of scale with investors of similar size and nature.

Many asset managers fear that the trend towards increasing partnerships with other financial investors may be the precursor to more insourcing by SWFs as a means to create and strengthen their in-house investment capabilities. They fear that SWFs may use the partnership to gain more control over their portfolios and to improve the skills of their staff without paying full fees.

Even if this may loom as a possibility, it does not appear to be the main driver of SWFs' decision to partner with other financial players. Sovereign funds may indeed have broader reasons for establishing partnerships. For example, they may desire to deliver better returns for their government owners not only in financial, but also in economic or social terms, as many of them have been entrusted with double purposes. The broadened scope of their mandate means SWFs are more interested in practical, on-the-ground expertise in their alliances, rather

⁹ Temasek for example has a network of 10 overseas offices, including Mexico City, London, Hanoi, Shanghai, Mumbai, and New York..

than simply the possibility to insource asset managers' financial skills. Finally, one cannot forget that the other partner engaged with the SWF may enjoy great benefits as well.

5.7. SWFs in the future

In order to outline a long-term view of SWFs in international financial markets, we must put together the pieces of information presented in this paper.

SWFs are engaged in a process of diversification of their portfolios both in terms of regions/currencies and assets. Concerning the first aspect, they will contribute to the shift towards emerging currencies and regions (not only BRICs, but also frontier markets). Concerning the second aspect, we could expect SWFs to diversify not only towards real estate, as is already happening, but also towards infrastructure and alternative investments in search of liquidity premiums. It is also reasonable to expect that SWFs, lacking explicit liabilities and having the proper time horizons to reap illiquidity premiums, will be well placed to explore unconventional debt securities like high-yield bonds and to tap the growing demand for direct lending in the market of corporate debt.

All this could have an impact on asset prices. In a low-yield environment, SWFs will contribute to the intensified search for higher returns with the consequent lowering of yields and liquidity premiums in the markets.

Based on what we have seen so far, we may envisage for SWFs a number of future roles as:

- counter-cyclical investors;
- owners of private equity firms and real estate properties;
- direct lenders to the corporate sector;

- active shareholders;
- partners with financial and commercial firms;
- investors in the economic development of emerging countries;
- providers of long-term, patient capital for funding infrastructure and sustainable long-term projects;
- sophisticated mature investors who want to be more directly involved in the investment process with their own staff and capabilities.

In the very long run, when the resources at the basis of their wealth (such as oil) are depleted, they will have to deploy their wealth to fulfil their promises. How is this wealth distribution likely to take place? Is it possible to gauge SWFs' behaviour in the far distant future looking at what pension funds do now with their pensioners? It is too early to tell, as no cases of this kind have taken place so far. However, SWFs present peculiar characteristics compared to pension funds. SWFs, indeed, have multiple objectives and, as it is now clear, they cannot be considered purely financial investors, being also committed to the well-being of the population they are intended to serve. For many of them, this also implies investing with strategic foresight in the development of domestic and regional economies or to cope with economic and financial turmoil in their own countries. The need for expansive fiscal measures has already caused many SWF home countries to use available resources for immediate domestic purposes. As priorities have shifted from accumulating savings and distributing wealth across generations to supporting short-term fiscal stimulus and financial sector rescues, some SWFs have anticipated the distribution of wealth they are intended to achieve in the distant future. Taking this into account, it would prove very difficult to forecast the way SWFs choose to serve their final purpose of distributing wealth to future generations.

6. Conclusions

SWFs are large, concentrated investors that have grown impressively in the recent past and are expected to grow further in the near future. While the largest share of their portfolios is devoted to equities, alternative investments are on the rise, especially in real estate and private equity. SWFs prefer to invest in advanced countries, however the share of emerging economies and frontier markets is growing. Their preferred sector is the financial industry, but commodity and energy are gaining importance.

SWFs are engaged in a process of diversification towards emerging currencies and regions (not only BRICs, but also frontier markets), alternative investments and infrastructures, and high-yield corporate debt and direct lending, and in search of liquidity premiums and higher returns that only more complex and sophisticated products may cater.

In spite of the many concerns they raised in the past, the attitude by recipient countries is today more open. By the time the financial crisis reshaped markets, SWFs seized the opportunity to improve their images and governance structures while, at the same time, the crisis eased the nerves of the recipient countries. No empirical evidence exists to show that SWFs

may have destabilizing or disruptive effects on financial markets. On the contrary, most of the empirical evidence points to a beneficial role in terms of stabilization, thanks to SWFs' long-term horizons. That is why it is today easier to accept that SWFs may have multiple mandates beyond the simple return-maximization target.

In the current low yield environment where liquidity is abundant and investors are desperately in search of decent returns, it will be challenging to preserve and increase wealth for future generations. However, SWFs seem well equipped to accomplish the target. Compared with their institutional investor peers, they may be less risk averse as they lack explicit liabilities or liquidity constraints. This may make them more tolerant to volatility and duration risk. They may buy and sell whenever the time is right, not when they are forced to do so. They have long-term horizons and are not limited by regulations.

As SWFs have definitively entered the club of institutional investors and become sought-after providers of valuable liquidity and stable funding, they may help financial markets reclaim their ideal traditional role of financing sustainable long-term economic development.

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