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Centre for Applied Research
on International Markets, Banking,
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Sovereign Investment Lab



Università Commerciale
Luigi Bocconi

Towards a New Normal

Sovereign Wealth Fund
Annual Report 2014

Sovereign Investment Lab

The Sovereign Investment Lab is a group of researchers brought together in the Baffi Carefin Centre For Applied Research on International Markets, Banking, Finance and Regulation at Università Bocconi. The Lab tracks the trends of sovereign fund investment activity worldwide and conducts path-breaking research on the rise of the State as an investor in the global economy. Research output aims to meet the highest scientific standards, but also to be accessible for a variety of stakeholders also outside academia: institutional investors, policymakers, diplomats, regulators, and the media.

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From the Editor

If one looks at the short history of sovereign wealth funds (SWFs), the outcomes are nothing short than impressive. Since 2005, when our fellow Andrew Rozanov coined the influential term, SWFs have exponentially grown in number, size, and relevance in the global financial community. Definitions vary but even by applying the restrictive standards of the Sovereign Investment Lab, we count today thirty five SWFs in operations with around \$5 trillion under management, carrying off the prize of the fastest growing class of asset owner of the last decade.

Size matters, obviously, but SWFs have not only grown up but also shown unique qualities and characteristics. Backed by their respective sovereigns, they tapped the vast accumulated wealth of foreign reserves and unleashed their potential as liability-free, long-term investors. In their quest for diversification, SWFs have also been able to acquire very large equity stakes, to surf the ebbs and flows of market fluctuations with countercyclical investments, and to span the entire spectrum of assets classes and investment styles. As a consequence, SWFs are today considered a distinct type of institutional investor, inspiring a flourishing research and a vibrant debate amongst practitioners and policymakers. But probably the most surprising achievement of the SWF industry over the last decade is how perception changed towards them. From “barbarians at the gate” shaking the foundations of market capitalism, they are today amongst the most courted and sought for partners in high finance deal making.

In spite of these remarkable achievements, SWFs cannot rest on their laurels. Game-changer developments in the global economy are currently under way, challenging their mission, strategies, and behavior. SWFs of all stripes, those originating from commodity rich economies and from heavily exporting countries are facing testing times. We are at a critical juncture in the history of SWF. How will the SWF industry evolve? Which funds will survive and successfully adapt to the regime that we call the “New Normal”?

We are glad to present our annual report on SWF investment in 2014. The reader will find here the usual high quality data which made the Sovereign Investment Lab

a world-famous source for independent, reliable information on global SWF transactions. Additionally, this issue boasts contributions from distinguished SIL fellows such as Massimiliano Castelli, Fabio Scacciavillani, Diego Lopez, and Andrew Rozanov, providing unique analyses about the future trends in the SWF landscape.

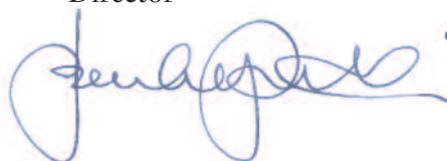
Under the new normal, the global economy has fundamentally altered its growth patterns, with emerging economies converging to the level of more advanced countries. The two main engines of SWF growth – emerging markets exports and high energy prices – are today a spent force, and for the foreseeable future the inflows of foreign exchange reserves into (once) heavily exporting countries will continue to slow down. SWFs are trying to smooth the effect of falling revenues by pushing returns on their investments, tilting their allocation in favor of larger, and riskier equity deals, and even in their more traditional “safe and big” asset classes, SWFs are taking a more active, affirmative stance on corporate governance issues. But lower commodity prices and exports would not only reduce inflows, but also lead to increased domestic pressure on politicians to raid the SWF coffers to sustain the domestic economy. As the Russian case clearly illustrates, SWFs will then be asked to act as “rainy day funds”, and this shifts asset allocations in favor of less risky, more liquid assets. The major challenge, which is also apparent in this year activity, will be solving the sovereign trade-off between financial returns and fiscal stabilization. In this game internal governance will be paramount: when the tide is rising, fuzzy, conflicting mandates and rules are easy to reconcile. But when the tide goes out, one discovers which SWF has been swimming naked.

2014 has been a crucial year for SWFs. The main facts can be summarized as follows.

- **Less deals, more investment.** *In 2014, we observed 18 SWFs completing 133 equity investments with a total publicly reported value of \$68.6 billion. This represents a 23 percent decrease in the number of transactions we reported in 2013 and a 39 percent increase in investment value.*

- *The rise of mega-deals.* The distribution by value is highly skewed, with the top ten acquisitions accounting for more than 50 percent of total investment. The average deal size has dramatically increased relative to 2013, reaching a stellar \$516.2 million this year.
- *Real estate galore:* the scale of investments in brick-and-mortar tripled relative to the previous year, reaching an all-time high in the history of SWF activity. With 32 publicly reported deals worth \$31.5 billion, real estate represents 24 percent of operations and 46 percent of total reported investment value in 2014.
- *Banks missing:* the slowing down of investments in the financial sector continues apace. For the first time in ten years, in 2014 the deals completed in the sector did not reach the \$10 billion price tag.
- *A surprising appetite for innovative sectors, with a venture capital twist:* In 2014, SWFs overcame their conventional reluctance to invest in broadly defined “strategic sectors” by completing 13 deals for a reported deal value of \$2.1 billion in high-tech sectors, often at the early stage.
- *A more balanced geography:* developed markets (primarily US and the UK) still get the largest share of investments with 55 percent of total deal value, but mark a 10 percent decrease relative to previous year. Allocations shifted in favor of Asia-Pacific (especially China) and the MENA region, with inflows accounting, respectively, for 26 percent (\$18.1 billion) and 17 percent (\$12.1 billion) of total investments. In 2014, Eurozone looked unattractive for SWFs, with the exception of Italy, finally entering their radar screens.
- *The unstoppable rise of Singapore:* in 2014, the combined activity of the two Singaporean funds, GIC and Temasek, has been truly impressive. These funds alone completed 57 deals worth \$27.6 billion, more than doubling the amount invested in the previous year.

Bernardo Bortolotti
Sovereign Investment Lab,
Director





Introducing Sovereign Wealth Funds

The term “sovereign wealth fund” has come to be used as a catch-all term for any state-owned investment vehicle funded from budget surpluses, regardless of its purpose, strategy, asset allocation or investment behavior. In reality, the sovereign investment universe is much more complex since the management of national reserves depends on the unique circumstances of individual countries. Some states such as Venezuela, Chile, or Algeria choose to establish stabilization funds to protect their currencies and budgets against excess volatility. Others like India, or Saudi Arabia, keep large surpluses in foreign exchange reserves due to the volatility of their income streams and structural deficits. The Japanese perceive that providing for their aging population is their most pressing priority, so they maintain their wealth in large pension funds. Oil-rich nations in the Persian Gulf region invest their oil revenue surpluses abroad to provide for future generations when their oil reserves are depleted.

Since the purpose of each fund is defined by its country’s unique macroeconomic requirements, sovereign investment vehicles have immensely diverse investment strategies, behavior, and asset allocation. That said, if we examine their portfolios, they can be loosely grouped into buckets along a spectrum of financial risk from central banks and stabilization funds (which hold the most-liquid and lowest-risk assets), pension and social security funds (also interested in seeking returns for their beneficiaries), to domestic investment and state-owned enterprises (which have the riskiest and most-illiquid assets).

Sovereign wealth funds are just one type of sovereign investment vehicle and can be placed in the middle of

this spectrum. SWFs have an independent corporate identity (they are not managed by a central bank or finance ministry) and invest for commercial return over the long term. Unlike central-bank, stabilization, or public pension funds, SWFs have no explicit liabilities—i.e., their assets are not routinely called on for stabilization or pension contributions—so they can have a greater tolerance for risk and illiquid assets to generate superior returns. As such, these funds have a strategic asset allocation that incorporates a wide range of assets that can include any of the following: equities, bonds, private equity, real estate, hedge funds, exchange-traded funds, futures contracts, commodities, etc. These investments may be made through asset managers or directly, in domestic assets or international markets.¹

Against this background, a “Sovereign Wealth Fund” is an investment vehicle that is:

- 1 Owned directly by a sovereign government
- 2 Managed independently of other state financial and political institutions
- 3 Does not have predominant explicit current pension obligations
- 4 Invests in a diverse set of financial asset classes in pursuit of commercial returns
- 5 Has made a significant proportion of its publicly reported investments internationally

¹ All SWFs with equity portfolios, and many with only fixed-income portfolios, employ asset managers. However, the funds that invest a significant proportion of their portfolios directly often do so through a series of wholly owned subsidiaries that often are registered in low-tax environments such as Mauritius or the Cayman Islands.

Table 1: Sovereign Wealth Funds, Assets Under Management

| Country | Fund Name | Inception Year | Source of Funds | AUM 2014 (US\$BN) |
|---------------------|---|----------------|----------------------------|-------------------|
| Norway | Government Pension Fund – Global [£] | 1990 | Commodity (Oil & Gas) | 895.09 |
| China | China Investment Corporation ^{**} | 2007 | Trade Surplus | 652.74 |
| UAE-Abu Dhabi | Abu Dhabi Investment Authority [†] | 1976 | Commodity (Oil & Gas) | 773.00 |
| Kuwait | Kuwait Investment Authority [†] | 1953 | Commodity (Oil & Gas) | 548.00 |
| Singapore | Government of Singapore Investment Corporation [†] | 1981 | Trade Surplus | 320.00 |
| Russia | National Wealth Fund and Reserve Fund [£] | 2008 | Commodity (Oil & Gas) | 152.74 |
| Singapore | Temasek Holdings [§] | 1974 | Trade Surplus | 167.20 |
| China | National Social Security Fund [§] | 2000 | Trade Surplus | 197.91 |
| Qatar | Qatar Investment Authority [†] | 2005 | Commodity (Oil & Gas) | 256.00 |
| Australia | Australian Future Fund [§] | 2006 | Non-Commodity | 93.82 |
| UAE - Dubai | Investment Corporation of Dubai [†] | 2006 | Commodity (Oil & Gas) | 70.00 |
| Libya | Libyan Investment Authority [†] | 2006 | Commodity (Oil & Gas) | 66.00 |
| UAE-Abu Dhabi | International Petroleum Investment Company ^{**} | 1984 | Commodity (Oil & Gas) | 68.39 |
| UAE-Abu Dhabi | Mubadala Development Company PJSC [£] | 2002 | Commodity (Oil & Gas) | 66.32 |
| Kazakhstan | Kazakhstan National Fund [†] | 2000 | Commodity (Oil & Gas) | 77.00 |
| Republic of Korea | Korea Investment Corporation ^{**} | 2005 | Government-Linked Firms | 72.00 |
| Malaysia | Khazanah Nasional Berhad ^{**} | 1993 | Government-Linked Firms | 41.18 |
| Brunei | Brunei Investment Agency [†] | 1983 | Commodity (Oil & Gas) | 40.00 |
| Azerbaijan | State Oil Fund of Azerbaijan [§] | 1999 | Commodity (Oil & Gas) | 34.93 |
| Ireland | Ireland Strategic Investment Fund ^μ | 2001 | Non-Commodity | 22.20 |
| New Zealand | New Zealand Superannuation Fund [§] | 2001 | Non-Commodity | 21.67 |
| East Timor | Timor-Leste Petroleum Fund [£] | 2005 | Commodity (Oil & Gas) | 16.83 |
| UAE - Dubai | Istithmar World [†] | 2003 | Government-Linked Firms | 11.50 |
| Bahrain | Mumtalakat Holding Company ^{**} | 2006 | Government-Linked Firms | 10.74 |
| UAE | Emirates Investment Authority [†] | 2007 | Commodity (Oil & Gas) | 15.00 |
| UAE-Abu Dhabi | Abu Dhabi Investment Council [†] | 2007 | Commodity (Oil & Gas) | 15.00 |
| Oman | State General Reserve Fund [†] | 1980 | Commodity (Oil & Gas) | 9.00 |
| Angola | Fundo Soberano de Angola [†] | 2012 | Commodity (Oil & Gas) | 5.00 |
| Nigeria | Nigerian Sovereign Investment Authority [*] | 2012 | Commodity (Oil & Gas) | 4.00 |
| UAE-Ras Al Khaimah | Ras Al Khaimah Investment Authority [†] | 2005 | Commodity (Oil) | 2.00 |
| Vietnam | State Capital Investment Corporation [†] | 2005 | Government-Linked Firms | 0.60 |
| Kiribati | Revenue Equalization Reserve Fund [†] | 1956 | Commodity (Phosphates) | 0.50 |
| Oman | Oman Investment Fund [†] | 2006 | Commodity (Oil & Gas) | 2.50 |
| São Tomé & Príncipe | National Oil Account | 2004 | Commodity (Oil & Gas) | < 0.01 |
| UAE - Dubai | Dubai International Financial Center | 2002 | Government-Linked Firms | Unknown |
| | | | Total OIL & GAS | 3,116.80 |
| | | | TOTAL TRADE SURPLUS | 1,337.85 |
| | | | TOTAL OTHER | 274.21 |
| | | | TOTAL AUM | 4,728.86 |

£ AUM as of May 12, 2015

** AUM as of 31 December 2013

† Estimate by SWF Institute as of 12 May 2015

£ AUM as of 1 May 2015. In 2011, the assets under management refer to the National Wealth Fund only.

§ AUM as of 31 March 2015

μ The Ireland Strategic Investment Fund (ISIF) was established on 22 December 2014 with a statutory mandate to invest on a commercial basis in a manner designed to support economic activity and employment in the State. The assets of the National Pensions Reserve Fund (NPRF) became assets of the ISIF on the ISIF's establishment (except for assets governed by foreign law which remain NPRF assets until their transfer). €7.2 billion in the NPRF "discretionary portfolio" will be available for investment in accordance with the ISIF's mandate as set out above. €15 billion in the NPRF's "directed portfolio" will continue to be managed at the direction of the Minister for Finance. The process of transferring all remaining NPRF assets to the ISIF is currently underway. AUM as of the end of 2014.

£ AUM as of 31 December 2014

* Sovereign Investment Laboratory estimate of assets under management (AUM). SWFs of Angola and Nigeria have been added to the SIL list in 2014.

This is the definition that the Sovereign Investment Lab uses to identify the funds addressed in the body of this report and listed in *Table 1* on the left.

The landscape of sovereign investment has changed in the last years as many countries have launched or proposed new funds. We think that it is interesting to follow these developments, as some of these new born sovereign investment funds (SIF) may graduate in the future as fully-fledged SWFs, and enter in our radar screens.

This is the case of the Fundo Soberano de Angola (FSDEA), officially established in October 2012 with \$5 billion of seed capital from Angola's oil revenues to stabilize impact of commodity price volatility, invest in domestic infrastructure, and invest internationally. The Fund has invested in the sub-Saharan hospitality sector, through the establishment of a dedicated Hotel Fund for Africa worth \$500 million. Additionally, the FSDEA has also created a \$1.1 billion dedicated infrastructure fund that focuses on equity investments in energy, transport and large industrial developments domestically and across the sub-Saharan African region. The Fund also launched five new dedicated investment funds with initial investment values totaling USD \$1.4 billion over the next three- to-five years. These funds are dedicated to making private equity investments in mining, timber, agriculture, healthcare, and promoting regional growth.

Another important addition to our list is the Nigerian Sovereign Investment Authority (NSIA). In November 2011, newly-appointed finance minister Ngozi Okonjo-Iweala announced to set up a SWF to

better manage part of country's large - but historically mismanaged - oil revenues. The fund was established in June 2012 and commenced operations in October 2012 with an initial allocation of US\$1 billion in seed capital and US\$100 million per month revenue inflow. NSIA's investments are made through three distinct funds: the Future Generation Fund (FGF), the Nigeria Infrastructure Fund (NIF) and the Stabilization Fund (SF). The Board of Directors resolved to apportion 40% of the assets transferred to NSIA equally to each of the Future Generations Fund and the Nigeria Infrastructure Fund. The minimum amount, 20% was allocated to the Stabilization Fund. The NIF focuses entirely on domestic investments in selected infrastructure sectors with an investment horizon of more than 20 years through multiple economic and market cycles, and in recognition of the long-term nature of infrastructure investments. The objective of the FGF is to invest in a diversified portfolio of appropriate growth investments in order to provide future generation of Nigerians a solid savings base for such a time as the hydrocarbon reserves in Nigeria are exhausted. The SF is the smallest of the three NSIA pools of capital and its purpose is to act as a buffer against short-term macro-economic instability associated with considerable government revenues derived from hydrocarbon exports; for this reason it has a short time horizon and a low returns target. Nigeria's sovereign wealth fund has made its first ever investment in September 2013, handing over \$200m to UBS, Credit Suisse and Goldman Sachs to manage a fixed income portfolio. As of May 2014, 100% of the Stabilization Fund has been invested (the \$200m handed over to banks this week since the capital preservation is the main aim, with the

In 2014, Fondo Soberano de Angola and the Nigerian Sovereign Investment Authority enter the SIL SWF list

fund acting as a buffer against short-term economic instability), and approximately 50% of the Future Generation has been deployed. The first two investments by Nigeria Infrastructure Fund were made in the Fund for Agricultural Finance in Nigeria (FAFIN) and in the Nigeria Mortgage Refinance Company (NMRC). In February 2014, the fund announced its commitment to the Second Niger Bridge project.

While we record these two new entries, it is certainly useful to notice that the several projects aimed at establishing sovereign investment funds have been swamped completely or delayed sine die by the slump in oil prices. Relative the 2013, we do not report any significant advancement in that direction in countries like Lebanon, Liberia, Maldives, Saudi Arabia, Scotland, Sierra Leone, Slovenia, South Africa, and Tanzania, which officially announced a SWF since 2008. Most of these countries, and particularly for those from sub-Saharan Africa, missed the opportunity to capture pro-cyclical commodity wealth when prices were on the rise. Now, in times of economic decline and fiscal distress, political leadership's effort to save and invest for the benefit of future generation will likely lead to a bumpy ride.

Table 2: New Sovereign Investment Funds Launched or Proposed Since January 2008

| Country | Date fund proposed officially | Rationale for Fund, funding source, and discussion | Status, as of May, 2015 | SIL Definition Items | | | | |
|------------------|-------------------------------|--|--|----------------------|---|---|---|---|
| | | | | S | I | L | C | A |
| Brazil | June 2008 | Brazil established the Fundo Soberano do Brasil (FSB) with the purpose to reduce inflationary impact of government spending, minimize real appreciation, and support Brazilian firms' foreign investment. It was funded with \$6.1 bn initial capital and an additional government bond issue of \$5.9 bn. | In September 2014, \$1.5bn withdrawn to finance the budget | ✓ | ✗ | ✓ | ✗ | ✗ |
| France | 2012 | BPIFrance was launched in late 2012 by President Francois Hollande and formed following a merger between CDC Entreprises, the former "sovereign wealth fund" Fonds Strategique d'Investissement, and OSEO. It operates as a public investment bank designed to support small- and medium-sized businesses and provide seed capital to companies and industries with a high growth potential. | BPIFrance has \$25.8bn in assets under management and an established organizational structure. Unlikely to become a SWF | ✓ | ✓ | ✗ | ✓ | ✗ |
| Ghana | 2010 | In 2011 the government has launched two funds: Ghana Heritage Fund and the Ghana Stabilization Fund with a minimum of 30% of state's projected oil revenues to be allocated. Initially funded with \$69.2 mn, by the end of 2013 the funds managed \$450ml. | Both funds have invested in fixed income securities. In April 2014, a debate ignited about the use of the funds to support the domestic economy. | ✓ | ✓ | ✓ | ✓ | ✗ |
| Greenland | 2008 | After a US Geological Survey in 2008 estimated that 31 bn barrels of oil lies off Greenland's coast, Greenland's parliament approved creation of a SWF, based on Norway's model, to be funded by oil revenues. To date, no commercial quantities of oil have been produced. | The launch of the SWF has been postponed | | | | | |
| India | April 2008 | A government-appointed panel of experts recommended setting up a SWF to earn a higher return on India's \$300bn foreign reserves. India's central bank long opposed this, since country has a very low savings rate and large fiscal deficit, but pressure continued to build. In late 2013, the government proposed the floating a new company — the India Overseas Investment Corp Ltd (INOIC) — that will invest in the ownership of natural resources assets overseas to create long-term resource security without drawing on the forex reserves that will continue to be managed by the Reserve Bank of India. | The launch of the SWF has been postponed | | | | | |
| Iran | 2010 | The National Development Fund of Iran was set up by the Ahmadinejad government in 2010 to help break country's economic isolation and to benefit future generations. Mandated to invest at least 20% internationally, the rest locally. | Currently NDFI has reported value of about \$35 bn | ✓ | ✓ | ✓ | ✓ | ✗ |

| Country | Date fund proposed officially | Rationale for Fund, funding source, and discussion | Status, as of May, 2015 | SIL Definition Items | | | | |
|-------------------------|-------------------------------|---|---|----------------------|---|---|---|---|
| | | | | S | I | L | C | A |
| Israel | January 2012 | After two enormous natural gas fields were proven off Israel's coastline, the government proposes a new SWF to be funded from the state's future gas revenues. The fund will invest in education and health and will help develop Israel's high-tech export industries. | The parliament's Science and Technology Committee approved the launch of the SWF in January 2014, but the SWF is not yet operational. | | | | | |
| Italy | 2011 | Italy launched the Fondo Strategico Italiano with a seed capital of euro 4.4 bn. FIS's purpose is to acquire minority interests in promising, large Italian companies, strengthen infrastructure and strategic sectors for the national economy. Signed partnerships and JV with Qatar Holding, Russian Direct Investment Fund, Kuwait Investment Authority and Korea Investment. | First investment in May 2012, total investment euro 1.3 bn | ✓ | ✓ | ✓ | ✓ | ✗ |
| Mongolia | April 2012 | Government announced plans to use proceeds from mining vast newly-discovered mineral deposits to set up SWF with an initial \$600 mn capitalization, but the struggle against declining mineral revenues and inflation has slowed down the process. | In April 2014, the draft law on the Future Heritage Fund has been submitted to Parliament | | | | | |
| Panama | May 2012 | Legislation passed to establish the Fondo de Ahorro de Panamá (FAP), a sovereign wealth and stabilization fund, to be funded through Panama Canal revenues in excess of 3.5% of GDP. | Launched in May 2014, FAP reported assets worth \$ 1,2 bn, primarily invested in fixed income securities | ✓ | ✓ | ✓ | ✓ | ✗ |
| Papua New Guinea | February 2012 | Prime Minister Peter O'Neill announced that one new liquefied natural gas (LNG) project would ultimately contribute over \$30bn (ten times the country's GNP) to a new SWF. The SWF bill was quickly approved unanimously by PNGs Parliament in February 2012. | The LNG project has started its first exports in 2014, but the launch of the SWF is still pending | | | | | |
| Tanzania | September 2012 | The Natural Gas Revenue Fund (NGRF) is the proposed sovereign wealth fund of Tanzania. It will manage the revenue accrued from the sale of its natural gas. The fund will be managed by the Bank of Tanzania. | Expected to be launched in 2015 after the enactment of a bill by the National Assembly | | | | | |
| United Kingdom | December 2014 | Chancellor of the Exchequer George Osborne confirmed plans for a new sovereign wealth fund for the North of England. The new fund would use tax receipts from the exploitation of shale gas reserves in the North of England to invest in economic development projects in the region. | Announced but not yet established or funded | | | | | |
| Zimbabwe | November 2013 | In Zimbabwe, the senate on 23 September 2014, passed the Sovereign Wealth Fund of Zimbabwe Bill (H.B. 6A, 2013) that will see the establishment of a Zimbabwean SWF. The proposed SWF will be funded from up to a quarter of mining royalties in respect of gold, diamonds, coal, coal-bed methane gas, nickel, chrome, platinum and such other mineral that may be specified, mineral dividends and government grants. | Planned but not yet approved. | | | | | |

(S) Owned directly by a sovereign government

(I) Managed independently of other state financial and political institutions

(L) Does not have predominant explicit current liabilities

(C) Invests in a diverse set of financial asset classes in pursuit of commercial returns

(A) Has made a significant proportion of its publicly reported investments abroad

Source: Sovereign Investment Lab

SWF Investment in 2014

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Laura Pellizzola, SIL, Università Bocconi, and Fondazione Eni Enrico Mattei

Activity

In 2014, we observed 18 SWFs completing 133 equity investments with a total publicly reported value of \$68.6 billion. This represents a 23 percent decrease in the number of transactions we reported in 2013 and a 39 percent increase in investment value. As we will see, the past year brought about a number of game-changing developments in the global economy which could sway sovereign investment. Nevertheless, the new forces coming into play did not prevent SWFs from staging a strong return after a rather quiet 2013.

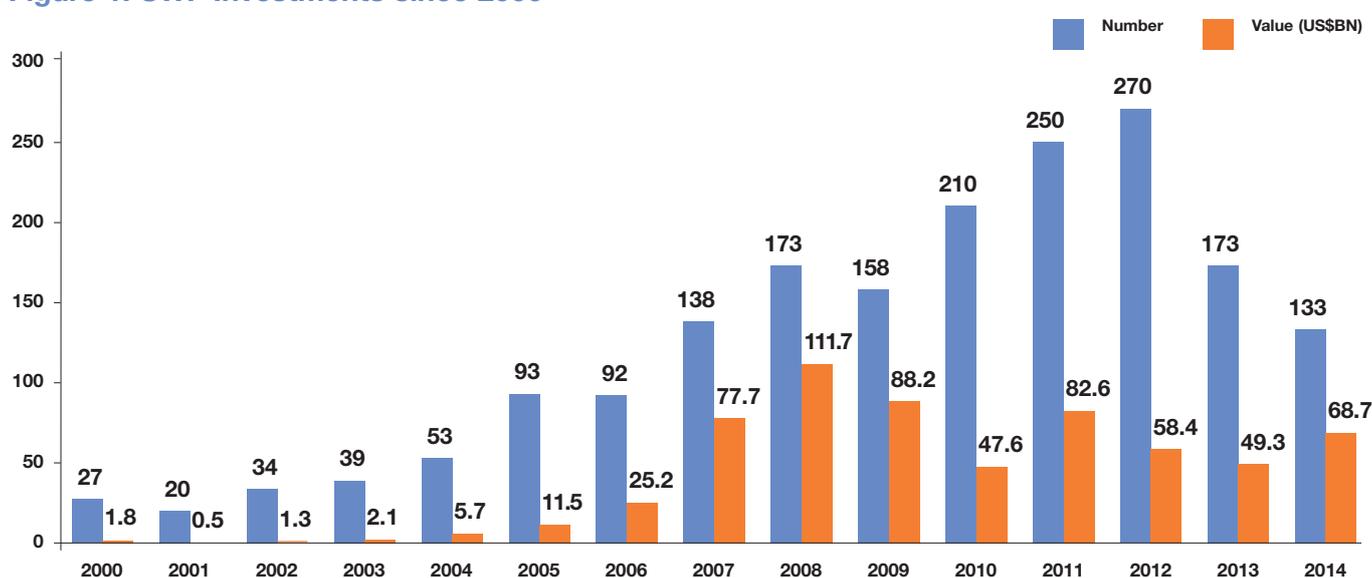
By the end of October 2014, the US Fed announced officially the end of its extraordinary monetary stimulus through “quantitative easing”. Strong economic growth and a positive outlook of the labour market showing the unemployment rate falling from 7 to 5.8 percent marked the end of the recession in America. Repercussions were strongly felt in financial markets, with stock prices rising more than 10 per cent over the year, and the US dollar appreciating against all other currencies. While the United States recovered in full, emerging economies remained in the doldrums. China missed its 2014 annual growth target of 7.5 percent, forcing the People’s Bank of China in November to cut interest rates for the first time in two years in an effort to bolster growth amid a slowdown in housing sales. Leaders of other Asian largest economies—including Japan, India, and Indonesia—tried to find their footing in the face of economic headwinds with limited success, while most European countries end the year reporting subpar growth and with a great deal of uncertainty over the horizon. With the “great deceleration” of emerging economies continuing

Despite a subdued economic outlook in emerging countries and the oil price collapse, in 2014 SWF equity investment surged

apace and Europe in the sidelines until the benefits of quantitative easing materialize, the United States remain the main drivers of moderate global growth over the medium term. As textbook macroeconomics suggests, convergence in growth rates of advanced and emerging economies is taking place, and this partly explains the slowing down of SWF’s assets accumulation with respect to the roaring early 2000s.

These recent global macroeconomic developments relate to a landmark economic event of 2014: the oil price crash. Oil prices fell about 50 percent during the second semester of 2014, from the peak of nearly \$110 a barrel in June to a low of around \$53, as a flood of crude from US shale disrupted the market. The Organization of Petroleum Exporting Countries convened in November, but after a few days of negotiations decided not to cut production, and prices fell further.

The economic consequences of the oil crash quickly materialized. Broadly speaking, the sharp decline in oil prices involves redistribution from savers to consumers: real incomes in importing countries such as Japan, Europe and the US increase at the expense of oil-producing countries. Among these, Russia was certainly the most severely impacted. In 2014, the

Figure 1: SWF Investments since 2000

Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

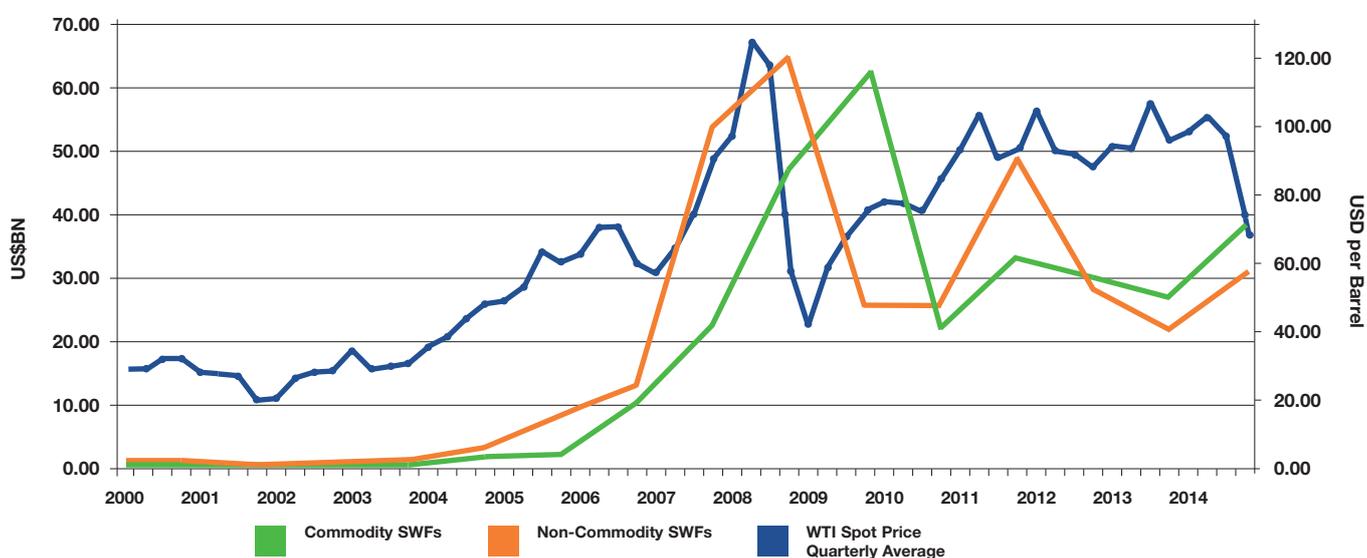
economy contracted 5 percent, also due to the sanctions Western countries imposed as a response to the Ukrainian crisis. The rouble collapsed, stoking inflation and dragging down the Russian banking sector to face its biggest crisis since 2009. Moscow tapped \$130 billion of foreign exchange reserves to support the currency and the banks, and importantly withdrew a total of about \$20 billion from its two SWFs, the Reserve Fund and the National Welfare Fund.

While the Russian case could be considered more an outlier than the norm, lower oil prices impose painful fiscal adjustment across the board in the Gulf. HSBC recently predicted that with a stabilized oil price at \$60 dollar a barrel, about \$200 billion would vanish from public budgets of exporting countries, turning public finances from surplus into deficits to the end of 2016.

Throughout this process, existing SWF could play a stabilizing role, and consequently may shrink in size and investments. The same forces that are sweeping public budgets in the Gulf are currently delaying the rise of new African SWFs. Angola, Ghana, Nigeria, Gabon, and other countries struggled to establish sovereign investment funds to save windfall revenues for future generations, but failed to capitalize them when oil prices were peaking, and today their survival is threatened by the need to fill fiscal holes in the budget as oil revenue slides.

Investments by commodity SWFs (as opposed to trade surplus SWF, which are more pro-cyclical) tend to react with a lag to price shocks of the underlying commodity. Indeed, despite the oil price collapse in 2014, we document a surge in the value of SWF investments, even if the number of operations

Figure 2: SWF Investments by Source and the Price of Oil, 2000 - 2014

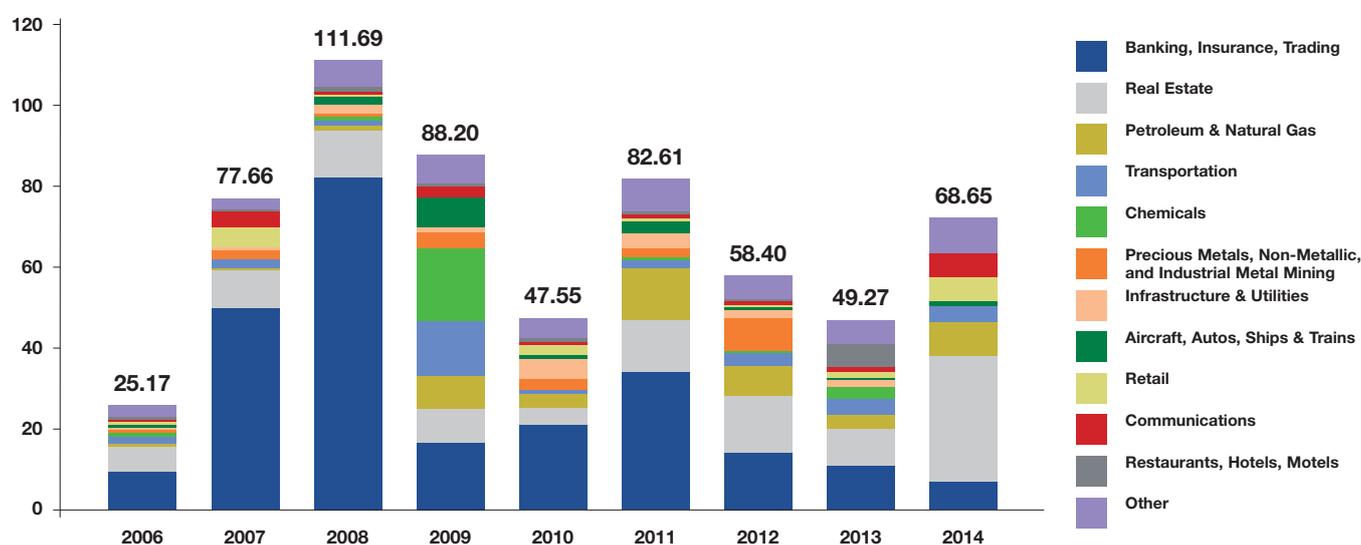


Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi and EIA

declined. As a consequence, relative to 2013, we report a dramatic increase in the average deal size, reaching \$516.2 million this year. This price tag brings us back to the level of the 2007-2009 period, at times when SWF investments were highly skewed in favour of large-scale rescues and recapitalizations of Western financial institutions. However, as it will be soon clear, banks are no longer the targets of choice by SWFs.

The trends we document are consistent with what other observers have reported in regards to aggregate SWF assets under management (AUM). Despite the weak commodity prices, aggregate SWF AUM are reported to have increased in 2014, despite the notable exception of Russia’s SWF and the postponed establishment of the planned African funds.

Weak inflows are at least partially offset by internal revenue generation and a growing asset base, at a time of low yields on sovereign bonds, explains the increase in average stakes. SWFs are being pushed more and more towards alternative assets (primarily, real estate) and increasingly shedding their previous role as passive investors. In this, SWFs have surprised us, for their capacity to adapt to a changing financial world. The legacy of the financial crisis is still shaping SWF behaviour, as the funds have learned to refuse the role of passive investors chasing momentum and content in a second-row role on the largest corporations. The larger deals are indicative of a more assertive role – a role SWFs have been pushed into by necessity. Last year, when discussing the growth of internal managerial capabilities by SWFs, we predicted it would be a while before those

Figure 3: Value of SWF Investments by Target Sector, 2006 - 2014

Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

teams would bravely venture into more focused investments. In their quest for elusive returns, SWFs are proving us wrong, but, undoubtedly, their new strategies are also riskier. Yet, SWFs have learned at least one big lesson, as they are refusing to commit the same mistake of leaving all their eggs in the same basket, the Western financial sector.

Sectors

Since the financial crisis, we have observed an increasing appetite for real estate by SWFs. Last year, however, was truly exceptional. With 32 publicly reported deals worth \$31.5 billion, real estate represents 24 percent of operations and 46 percent of total reported investment value in 2014. The scale of investments in brick-and-mortar tripled relative to the previous year, reaching an all-time high

in the history of SWF activity. With interest rates stubbornly low, SWFs are seeking out high-cash-flow assets internationally such as commercial real estate and supermarkets, and are not shying away from transactions in the billions of dollars.

While we observe a dramatic surge in the sector, the noteworthy features of 2013 real estate deals by SWFs are confirmed also this year: a high concentration of large deals in commercial property in the United Kingdom and US and the persistent decline of development projects in emerging economies. The total amounts invested in the US and the United Kingdom markets are \$11.3 and \$9.7 billion, respectively, accounting for two thirds of the total equity flows in the sector. Real estate development projects had a strong bearing on the growth of several emerging countries, and primarily in

China. But with the great deceleration of BRICs taking place, the reduced exposure to property located in emerging countries in favour of landmark assets in London or the US by SWFs is hardly surprising. As we will see, in 2014 Qatar is the only non-Western country able to attract significant investments, tapping the vast financial resources of its own SWF.

Sovereign investment in real estate last year was again a game for a few players with an established track record in the business: Singapore's GIC, Qatar's Investment Authority, and the Norwegian GPF. GIC alone spent the stellar amount of \$12.2 billion in the sector with a broad diversification across countries and geographies. GIC snapped the largest property deal in the history of SWF investment, the \$8.1 billion acquisition of IndCor, a Chicago-based company owning and operating 117 million square feet of high-quality industrial properties in key markets in the US, from the private equity firm Blackstone. This deal—following in the wake of last year acquisition of Broadgate Estates in London—put an end to Blackstone's attempts to arrange an IPO as a long-sought exit from IndCor. In partnership with ADIA, the Singaporean fund also contributed \$400 million to a \$1.3 billion purchase of Time Warner's headquarters in the Time Warner Center. In a bid to enter the Japanese capital's hot property market, GIC acquired prime office space in the Pacific Century Place Marunouchi building in central Tokyo, with a bid of \$1.7 billion. The Singaporean fund reached out successfully also into the Southern hemisphere by acquiring commercial property in Indonesia and Australia worth \$1 billion, and into emerging countries by bidding suc-

Real estate gets the lion share of investments, with a strong focus on commercial property in London and the US

cessfully for the Turkish commercial real estate developer Ronisans Gayrimenkul Yatirim Ortakligi.

While GIC boasts the largest property deal ever executed, QIA leads the 2014 ranking by total amount invested in the sector, \$12.8 billion. The specialized subsidiary of QIA, Qatar Diar, was involved in one of the few large-scale operations in real estate commercial and residential development reported this year, the acquisition of Doha-based Barwa Commercial Avenue and Barwa City Real Estate, for a combined deal value of \$4.5 billion. But last year will certainly be remembered for QIA's conquest of a landmark trophy asset in London: Canary Wharf, the East London skyscraper cluster, home of one of the world's leading financial districts. QIA joined forces with a strategic partner, Brookfield Property Partners, a Canadian fund manager, to launch a successful takeover bid of Songbird, the majority owner of Canary Wharf. QIA slated the operation by purchasing \$1.8 billion of newly issued exchangeable preferred equity securities by Songbird. After a fierce battle, Songbird's shareholders, namely the New York magnate Simon Glick, Morgan Stanley, and China Investment Corporation, accepted a \$4.1 billion offer, paving the way for the execution of one of the largest transactions in the property business. This deal is quite revealing of QIA's approach in the

M&A market, where targets are put into play with toeholds, minority stakes, and then taken over in collaboration with other SWFs or strategic investors. Only time will tell if this type of active deal-making will spread in the SWF community or whether reluctance to engage for fear of political backlash will continue to define their investment behavior. At any rate, QIA did not satiate its strong appetite with the Songbird deal as it also added another item to its Canary Wharf collection: the HSBC Tower at 8 Canada Street, acquired from the National Pension Service of Korea, this time in a friendly transaction.

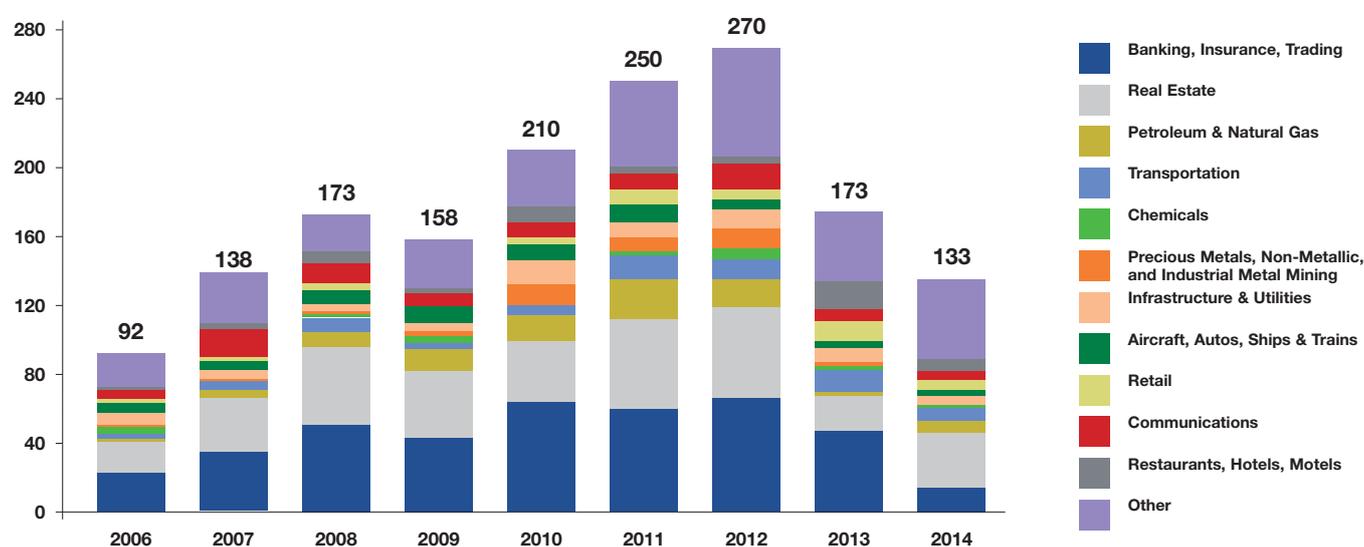
The Norwegian GPF, the largest SWF in the world, is the “new kid on the block” in the global real estate market. Limited to investing in stocks and bonds until 2010, GPF started gradually to build up a portfolio of real estate and property, and in 2014 invested in the sector 2.2 percent of its total assets. The real estate portfolio returned 10.4 percent last year, as the total fund gained 7.6 percent, its smallest rise since 2011. Given the diminished returns amid record low, and even negative, yields in key government bond markets, combined with slow growth in developed markets, the fund has received a mandate to expand in the future its property portfolio up to 5 percent of assets under management. In 2014, the fund invested \$4.7 billion, primarily in the US and the United Kingdom. The largest acquisition was a \$1.5 billion deal with Boston Properties for a 45 percent stake in three Class A office towers including the former Citigroup Center, now 601 Lexington Avenue, in New York City and the Atlantic Wharf Office Building and 100 Federal Street in Boston. GPF’s spending spree continued in London, where it acquired a majority stake in

Pollen Estate, covering more than four acres in the Mayfair district, for \$575.7 million, and the Bank of America Merrill Lynch Financial Centre, for \$944 million, from its fellow SWF, GIC. Smaller scale, albeit sizable, deals were snapped in Spain and France: the fund teamed with Prologis Inc. to pick up 1.6 million square feet of logistics space in Spain from Saba Parques Logísticos SA. It also bought Le Madeleine, a large office and retail property in Paris for \$571.6 million from BlackRock.

Hotel and tourism facilities have peculiar characteristics, but still share some risk-return properties of brick-and-mortar assets, so it makes sense to place them in the same bucket with real estate. In 2014, deal flow in hotels has not been particularly impressive in comparison to last year’s record, even if QIA’s confirmed its appetite for trophy-assets and luxury brands in developed markets. Via its specialized subsidiaries Katara Hospitality and Constellations Hotels Holding, QIA acquired nothing less than the Savoy’s in London, the InterContinental in New York, and The Saint Regis’ in Rome. Indeed, QIA is building a global top-end hotel portfolio, and this year’s purchases mark another landmark in the process. Similarly, ADIA snapped another deal in the sector by acquiring the London Edition, one of Marriott’s five-star luxury hotels, while Marriott will retain management of the property under a long-term contract.

The slowing down of investments in the financial sector continues apace, both in absolute and in relative terms. For the first time in the recent SWF history, last year the deals completed in the sector did not reach the \$10 billion price tag: in 2014, we

Figure 4: Number of SWF Investments by Target Sector, 2006 - 2014



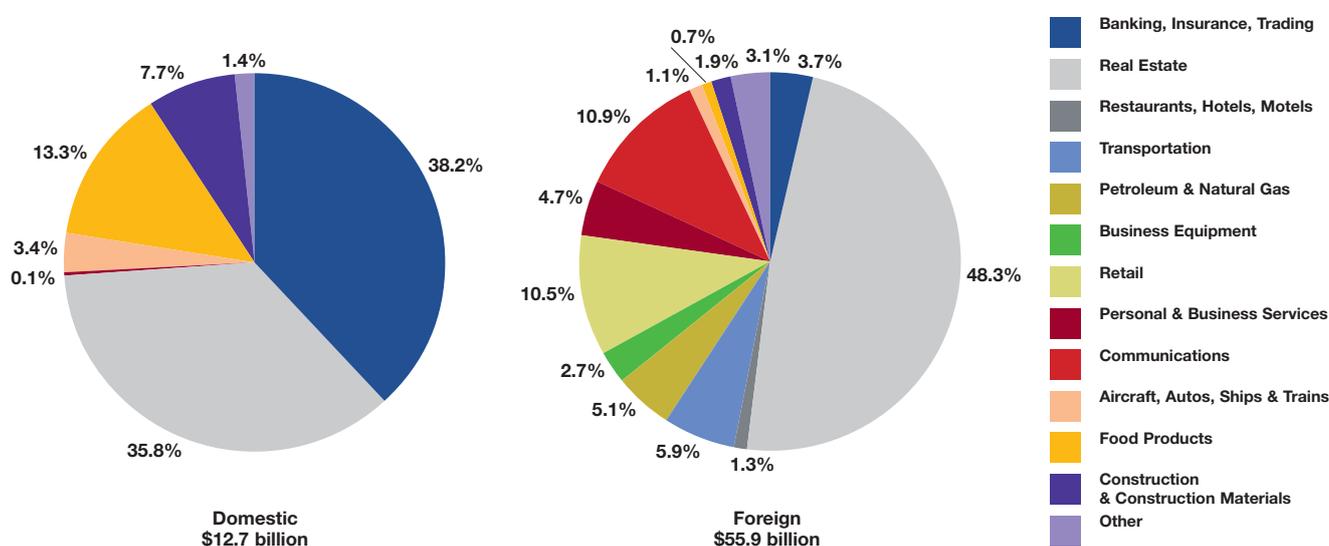
Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

report 14 acquisitions worth a “tiny” \$6.9 billion, 10 percent of total investment. In the past, investments in the financial sector attracted the lion’s share of SWF capital primarily in the form of capital injections in distressed domestic banks and recapitalizations of struggling Western financial institutions. More recently, SWFs allocated their investments primarily in foreign banks of emerging economies, aiming at gaining exposure to the sector’s recovery in countries with higher growth potential.

In 2014, the legacies of SWFs’ recent past are clearly visible in their investments in the financial sector, albeit at a smaller scale. By far, the largest deal completed last year is a quintessential sovereign-to-sovereign co-investment, involving CITIC Pacific Limited, a financial holding conglomerate engaged

in property investment and development, with a special focus on steel and iron ore mining operations in the People’s Republic of China (PRC) and Hong Kong. Fifteen strategic investors, including China’s National Social Security Fund, QIA, Temasek, and several Japanese banks and institutional investors, secured \$5.1 billion to help fund the purchase of some \$36 billion in assets from its state-owned parent company, CITIC Group Corporation. Basically, the deal will incorporate the main operating business of the parent into the Hong Kong-listed company, and this broad list of supporting anchor investors is a further sign of interest in China’s efforts to reform its sprawling state-owned enterprises. Indeed, upon completion of the deal, one of China’s premier state firms will be effectively listed on a highly reputed exchange and subject to the enhanced regulatory and share-

Figure 5: SWF Investments by Sectors in Domestic and Foreign Markets, 2014



Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

holder scrutiny, but only time will tell whether this move will also give a boost to operating performance and profitability.

While the above-mentioned deal follows in the wake of SWFs’ recent acquisitions to capture business opportunities in emerging markets, last year’s bailout of VTB, the second largest Russian bank, by the National Wealth Fund, witnesses clearly the role that domestic SWFs could play as lenders of last resort in turbulent times. Our readers may recall that in 2013 a consortium of sovereign wealth funds, including Qatar Holding, Azerbaijan’s state oil fund SOFAZ, and Norges Bank Investment Management, invested in VTB’s privatization, strengthening the bank’s capital structure. The support afforded by this group of stable shareholders did not ease the pressures exerted on the bank’s bottom line by the enforcement of

western sanctions and the slump in oil prices. In 2014, bad loans provisions more than doubled and net profit under international accounting rules was cut dramatically, causing a reduction in return on equity from 12 to 0.1 per cent. To face the most severe banking crisis since 2009, the parliament in December approved an emergency recapitalization program of about RUB 1 trillion, and \$1.94 billion of assets of the National Welfare Fund, originally planned to finance state pensions, were earmarked to VTB. This case tells us a revealing story about the vulnerability of SWFs in times of economic distress. Politicians realize that SWFs represent an important buffer that can be deployed when needed to cope with financial and economic turmoil at home. Realpolitik could quickly sway SWFs’ mission from intergenerational savings towards stabilization, absent a strong and credible institutional commit-

ment. Reportedly, around 40 per cent of the Reserve Fund's assets would have to be spent over the next three years to cover the expected increase in the budget deficit, and this could jeopardize the future sustainability of Russian funds should oil prices not recover in midstream.

Other noteworthy operations in the financial sector are joint ventures among like-minded investors. KIA and Fondo Strategico Italiano, the Italian sovereign investment fund owned by Cassa Depositi e Prestiti specialized in private equity, have launched FSI Investimenti, a jointly owned fund aimed at catalyzing international capital for direct equity acquisitions in Italy. KIA committed \$684 million in the fund, which could raise additional capital up to 7 billion euros. In a similar vein, Abu Dhabi's Mubadala and France's CDC International launched a \$413 million investment vehicle to invest in a wide range of sectors in France, targeting equity stakes in private companies as well as other asset classes including real estate and infrastructure. These moves can be interpreted as bets on European markets, as those economies are expected to recover slowly this year. However, the size of these SWF investments reveals more a diversification objective, rather than a tangible commitment.

Another noteworthy feature of last year's SWF investments is the concentration of activity in a handful of mega-deals, and contributing to the dramatic increase in the reported average deal size by value. More particularly, three stand-alone deals are dominating three distinct sectors. In consumer retail, Temasek bought a 25 per cent stake in the Hutchison Whampoa's AS Watson health and beauty chain for

The slowing down of deals in the financial industry continues apace, with the notable exception of joint-ventures amongst SWFs

\$5.7 billion, recording the second largest deal of the year. While headquartered in Hong Kong, Temasek's investment in the company highlights its focus on what it calls "recovering Europe," as the fund has a significant presence in Eastern Europe and in the UK, where it owns Superdrug. Li Ka-Shing, Hong Kong's richest man and Whampoa's ultimate owner, initially slated the company for a public floatation. Thanks to its balanced portfolio of assets, the company should have been an easy sell to investors. However, investment banks were worried about the absorption capacity of the domestic market suggested a dual listing in London or Singapore. In the end Mr Li simply sold a stake to Temasek, avoiding underwriting fees and the risks of tapping public markets, affording the preference to a long-term investor. As it happened in the IndCor case, a SWF's privately negotiated deal has once again crowded out a lucrative IPO, without the blessings of investment banks.

In a similar vein, the overwhelming majority of funds invested in the telecommunication sector stem from the Emirates Telecommunication Corporation (a subsidiary of Emirates Investment Authority, EIA) purchasing from Vivendi a 53% stake in Morocco's Itissalat Al Maghrib SA for \$5.7 billion. With a strong domestic and regional focus, EIA is the only federal SWF, representing the seven states

SWFs' investment is highly skewed due to the rise of mega-deals in commercial retail, telecommunication, and transportation

comprising the United Arab Emirates, and has not been particularly visible in recent times. Reportedly, it has amassed stakes in the telecommunication sectors, and last year's acquisition in Morocco confirms that the fund's continuing focus in the sector.

SWF investment flows in transportation are mostly concentrated in Mubadala's acquisition of Porto Sudeste, a Brazilian iron ore port terminal, from MMX Mineração e Metálicos—a subsidiary of EBX Group—in a deal worth \$2.3 billion. Mubadala's association with EBX's Batista dates back to March 2012, when the fund announced a \$2 billion investment in his Group. Mr Batista, at the time one of the world's richest men, has experienced a dramatic reversal of fortune, forcing him to sell many of EBX's assets. Mubadala joined forces with Trafigura, the second-largest metal trader, to acquire 65 percent of the company, while Batista's MMX will retain the rest.

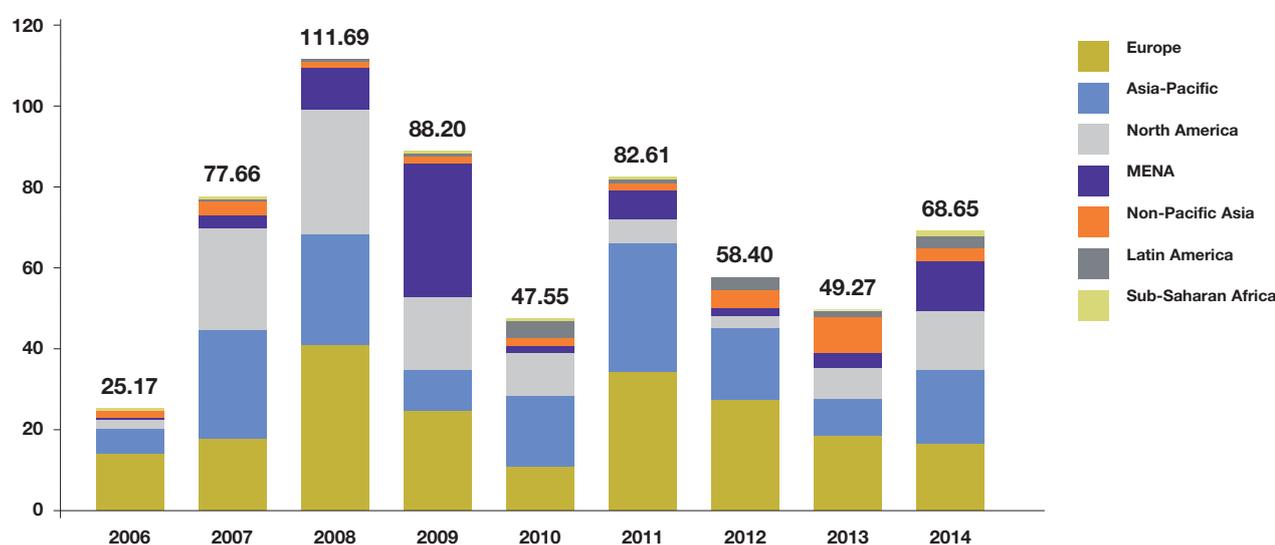
SWF investment in energy seems to be driven by two factors. The first is a preference for “crawling down the value chain,” a progressive strategy of downstream integration that can serve multiple purposes, especially for SWFs funded by hydrocarbon rent. By acquiring control over the entire value chain of the supply of energy, producing countries and their

SWFs gain higher profit margins, partially hedge their exposure to raw commodity prices, and recycle part of their revenues to ensure the future provision of exhaustible resources. The second factor applies instead to SWFs originating from the trade surpluses of countries that are big energy consumers, pouring money in the sector in order to ensure the long-term affordability of the primary inputs for their fast growing industries.

With a total of \$2.9 billion, SWF investment in energy reached a record low in 2014, mostly due to the negative outlook of energy markets: lower margins made vertical integration less attractive, and cheap oil eased the urgency of a quest for strategic resources abroad. Nevertheless, the most important energy deals reported this year are driven by these forces.

The Abu Dhabi Investment Council (ADIC) joined forces with the Dutch oil trader Vitol in a successful bid for Royal Dutch Shell's downstream assets in Australia. The consortium outbid another joint venture between Macquarie Capital and Glencore-Xstrata, the mining commodity giant. The acquired assets include the Geelong refinery, which was under threat of closure, and a 870-site retail business along with its bulk fuels, chemicals, and part of its lubricants businesses for \$2.4 billion. This deal should be put in context of a major shift which is taking place in the oil and gas sector, with industry majors reducing their exposure to the downstream business in order to focus on more profitable investments, particularly in exploration and production, and commodities trading houses, such as Vitol, opting for a more vertically integrated business model. These new players are expanding

Figure 6: Value of SWF Investments by Target Region, 2006 - 2014



Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

beyond their traditional role as middleman—selling and buying commodities in a business of large volumes but razor-thin margins—to invest in production, logistics, trading, and processing. SWFs such as ADIC are taking this bet, and testing the validity of a new model of business integration in Australia, a country which could soon overtake Indonesia as the biggest importer of refined oil products in the high-growth Asia-Pacific region.

Temasek is certainly at the forefront of the investment process leading emerging countries to tap resources abroad to satisfy their energy needs. After completing important acquisition in Europe, the SWF upgraded its strategy in the sector by launching Pavilion Energy. Pavilion is a conglomerate aiming to meet the region’s growing demand for clean and reliable energy and the ambition to develop Singapore

as a major trading hub and a key liquefied natural gas player in the region. In this direction, Pavilion acquired three offshore gas blocks in Tanzania paying \$1.3 billion for a 20 percent stake in Ophir Energy Plc, which holds 40 percent of the estimated 15 trillion cubic feet of gas in the East African country. East Africa has seen some of the world’s largest gas discoveries over the last three years, including fields off Mozambique that were estimated to hold enough gas to meet global demand for two years. However, it remains fairly bold move by Pavilion to buy into such a virgin territory where rules and legislation are still unstable and uncertain.

Geography

Since 2009, the geographical breakdown of SWF direct equity investments showed a strong preference

SWFs as venture capitalists: the rise of investment in innovative sectors

Historically, SWFs shied away from strategic sectors, to avoid raising concerns about a political agenda pursued by stealth by foreign governments as shareholder in firms. This is the reason why we have in the past observed scant investment in politically sensitive industries such as aerospace and defence, telecommunications, and information technology. Yet, the quest for returns is pushing SWFs towards new frontiers.

In 2014, a few SWFs overcame this reluctance and completed 13 deals for a reported deal value of \$2.1 billion in high-tech sectors. The most important deal in this group is the acquisition of IBM's global commercial semiconductor business, and of world-class technologies related to IBM Microelectronics, by GlobalFoundries, a wholly-owned subsidiary of Abu Dhabi's Mubadala. Under the agreement, the company will gain substantial intellectual property including thousands of patents, making GlobalFoundries the holder of one of the largest semiconductor patent portfolios in the world.

Yet, SWFs are not only entering the information technology sector by investing into established firms with rich intellectual-property portfolios. Increasingly, we are seeing SWFs providing early-stage financing, something we are more used to

associate with venture capital firms, rather than state-owned vehicles. Some of the most notable deals in this area include GIC participating in the acquisition of the US cloud-based education provider iParadigm and injecting capital in the Taiwan based internet music provider KKBox. In an even more iconic deal, QIA has made a substantial investment in the controversial mobile taxi dispatching service Uber. The high valuation of Uber has raised eyebrows, but high valuation ratios are not unusual in high-growth startups. But high valuation and growth also mean high risk: venture capital firms are used to relying on few home-run investments to counter-balance a high rate of failure. It is to be seen whether SWFs and the citizens of their host countries will have the stomachs to withstand such thrilling rides.

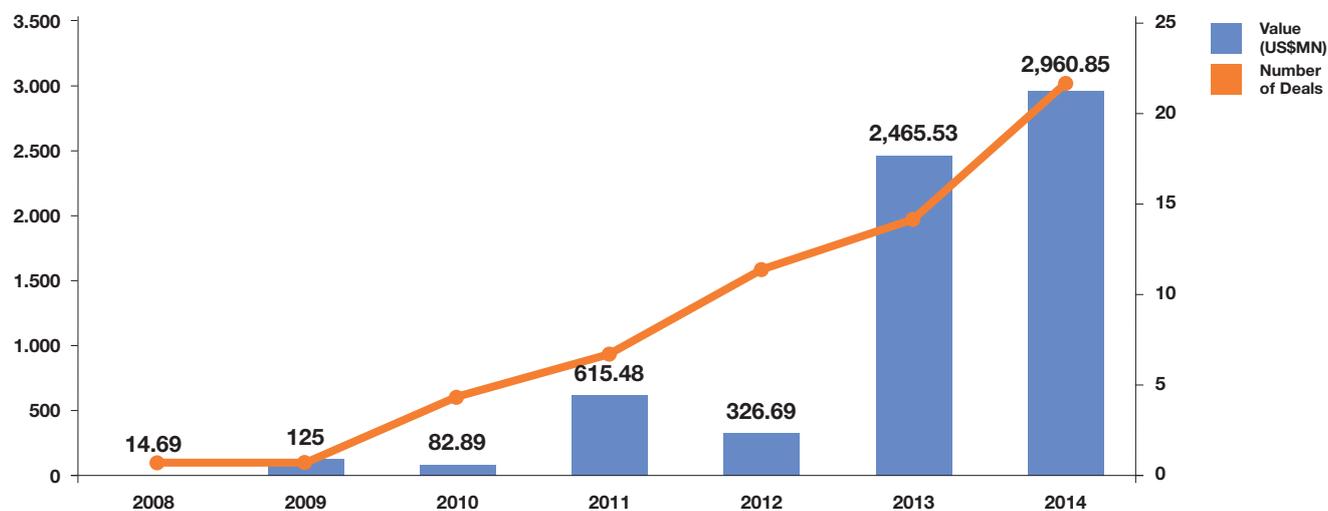
The timing of this shift might be, however, unfortunate. In recent times, we have seen an increased level of concern about both intellectual property and privacy in the digital world. SWFs have been very cautious not to upset foreign markets on the receiving end of their investments. Yet, it would be hard to imagine investments by a foreign SWF from China or the Gulf in any US-based internet firm not receiving an increased amount of scrutiny, and perhaps hostility, in the current climate.

SWF Investments in IT-linked Sectors of Over US\$100 million, 2008 - 2014

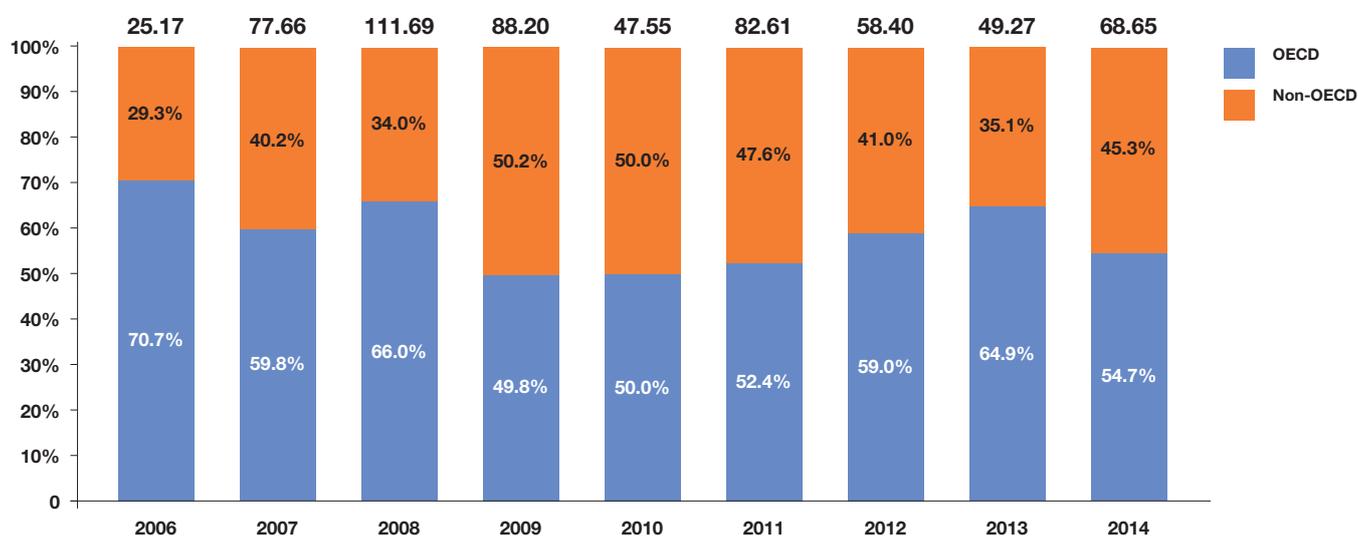
| Parent Entity Name | Target Name | Target Country | Year | Deal Size (Value US\$MN) |
|-----------------------------------|---------------------------------|----------------|------|--------------------------|
| GIC Pte Ltd | BMC Software Inc | USA | 2013 | \$1,677.53 |
| Mubadala Development Company PJSC | IBM's Microelectronics Business | USA | 2014 | \$1,500.00 |
| Temasek Holdings Pte Ltd | AsialInfo.Linkage Inc | China | 2014 | \$437.42 |
| Temasek Holdings Pte Ltd | Alibaba Group Holding Ltd | China | 2011 | \$400.00 |
| GIC Pte Ltd | iParadigms LLC | USA | 2014 | \$376.00 |
| GIC Pte Ltd | Kronos Inc | USA | 2014 | \$375.00 |
| Qatar Investment Authority (QIA) | Samsung Electronics Co. Ltd | South Korea | 2013 | \$300.00 |
| Qatar Investment Authority (QIA) | BlackBerry Ltd | Canada | 2013 | \$200.00 |
| GIC Pte Ltd | Genpact Limited | India | 2012 | \$150.00 |
| New Zealand Superannuation Fund | Datacom Group Ltd | New Zealand | 2013 | \$142.00 |
| Mubadala Development Company PJSC | Advanced Micro Devices Inc | USA | 2009 | \$125.00 |
| Temasek Holdings Pte Ltd | Cloudary Corp | China | 2013 | \$110.00 |
| GIC Pte Ltd | KKBox Inc | Taiwan | 2014 | \$104.00 |

Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

SWF Investments in IT-linked Sectors, 2008 - 2014



Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

Figure 7: SWF Investments in OECD and Non-OECD Markets, 2006 - 2014

Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

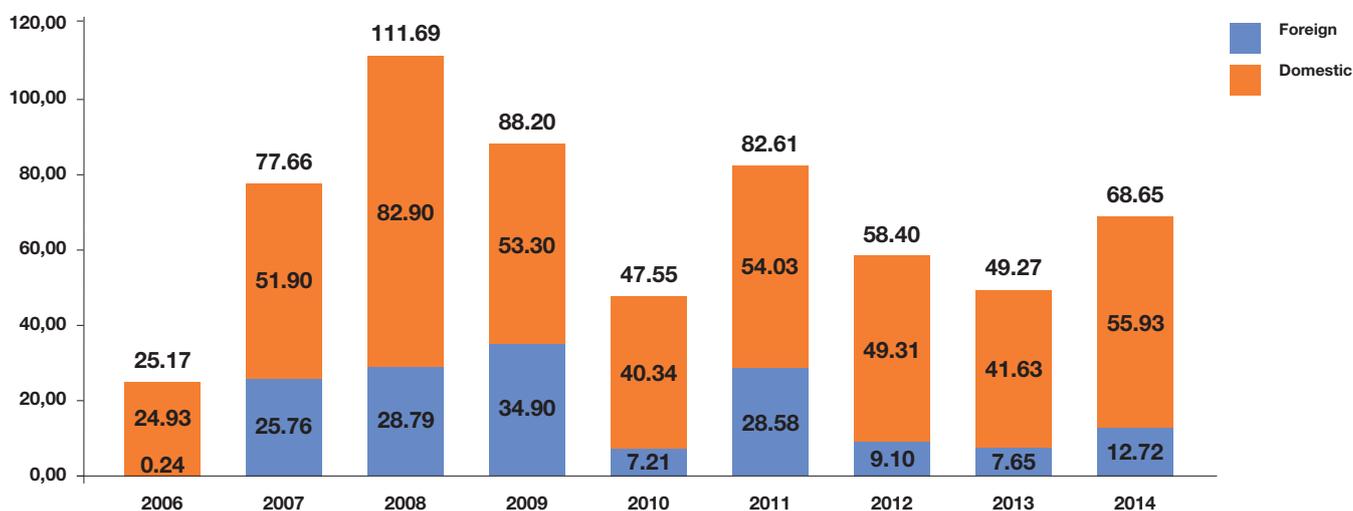
for developed economies. Mature markets, and primarily the US, started to recover from the recession, while emerging countries trapped in the so called “great deceleration” slowed down significantly. The natural consequence was a shift of SWF geographical allocation towards OECD economies. In 2014, this trend halted: mature, more developed markets accounted for 55 percent of total deal value, marking a 10 percent decrease relative to previous year.

SWFs are savvy investors, and well-equipped to seek the best diversification opportunities across geographies at any point in time. However, with their broad mandate and sovereign status, they may be called to invest at home especially if the national economy requires support, as it often happened throughout this prolonged crisis. Indeed, at the aggregate level some pro-cyclicality can be

traced in the international patterns of their investment, with international exposure expanding in “good times,” and SWFs somewhat retrenching at home when the outlook worsens. As we already mentioned, 2014 has been a turbulent year for oil producing nations, but also for the emerging economies battered by lower-than-expected growth projections. Part of the reallocation from developed economies can be explained by the increase in domestic investments, which increased from 15 to 18 percent relative to previous year. But this is just a part of the story. A more complete picture can be drawn by looking at the breakdown of investments by target region.

While the inflow into North America almost doubled relative to the previous year, we also saw big increases in Asia-Pacific and, more dramatically, in

Figure 8: SWF investment in Domestic and Foreign Markets, 2006 - 2014



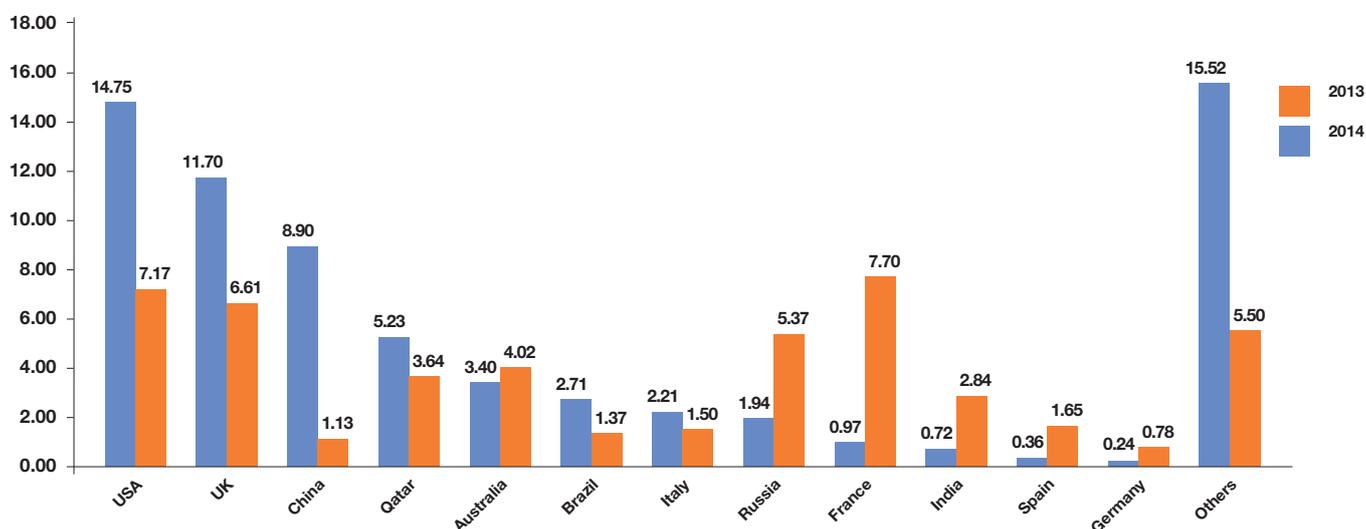
Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

the MENA region, with inflows accounting, respectively, for 26 percent (\$18.1 billion) and 17 percent (\$12.1 billion) of total investments. This was balanced by a large proportional decline in Europe. We also saw a decline in Non-Pacific Asia, while Latin America as usual did not prove able to look attractive to SWFs. The analysis by target region thus allows us to qualify more precisely the effects of the adjustments reported before: the additional \$19.3 billion flowing into the SWF coffers in 2014 have been spent in the US, in East Asia, and in MENA, contributing to a more balanced allocation across geographies.

Within the Asia-Pacific region, the main beneficiary of last year's reallocation has been China, a country experiencing quite volatile SWF investment flows in recent times. China recovered spectacularly from the

lows of 2013 (\$1.1 billion) with 16 deals worth \$8.9 million in 2014. Interestingly, with the exception of the above mentioned acquisition of CITIC Pacific by the National Social Security Fund, all the other deals involved foreign SWFs, primarily from Singapore. Increasing shares of SWF resources are thus recycled within the region in China, with a strong diversification across sectors. In this rather new scenario, Temasek, an extremely active foreign investor, is also pursuing its mission to strengthen the domestic economy with targeted investments in the local food and construction industry.

Australia's economy is not exempt from difficulties following the end of a decade-long mining investment boom, which boosted the national income and delivered several years of budget surplus. A slowdown in its biggest trading partner, China,

Figure 9: SWF Investments by Target Country in 2013 and 2014

Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

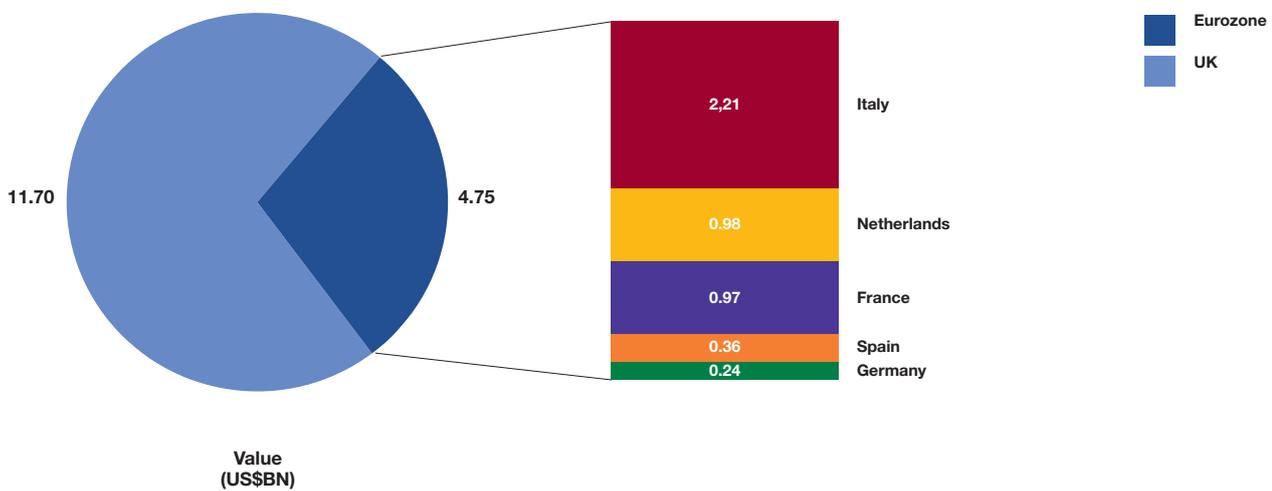
falling commodity prices, and fragile business confidence are all weighing on the economy. In spite of present difficulties, safe assets in Australia remained a very attractive asset class for SWFs in 2014. ADIA and GIC, two funds already quite exposed to the country, poured an additional \$3.4 billion in acquisitions in real estate and transport infrastructure, including the toll-road operator Queensland's Motorway.

Despite investments totalling \$16.4 billion, which make Europe the second largest target region by deal value, the trend is of a 10 percent decline with respect to last year. The continent continues to attract a large share of cross-border investment, but the projections of subpar growth, the continuing uncertainty about Greek exit from the Eurozone, and the prospect of currency deprecia-

tion under newly announced quantitative easing measures are most likely responsible for a declining level of interest in the Eurozone. A few facts about last year investments provide a vivid illustration of SWFs' mind-sets and revealed preferences: over 70 percent of the total European deal value was raised in the United Kingdom and in safe assets such as real estate, hotels, and to a much smaller scale, infrastructure.

With \$11.7 billion, the UK leads by far the ranking, taking back the prize surprisingly carried off by France in 2013. Aside from the landmark deals in real estate described earlier, we also report GIC's acquisition from US private equity Carlyle Group of the British roadside-assistant provider RAC, crowding out another long-planned IPO. The "Wimbledon model" applies, with all the main

Figure 10: Foreign SWF Investments in Europe, 2014 (US\$BN)



Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

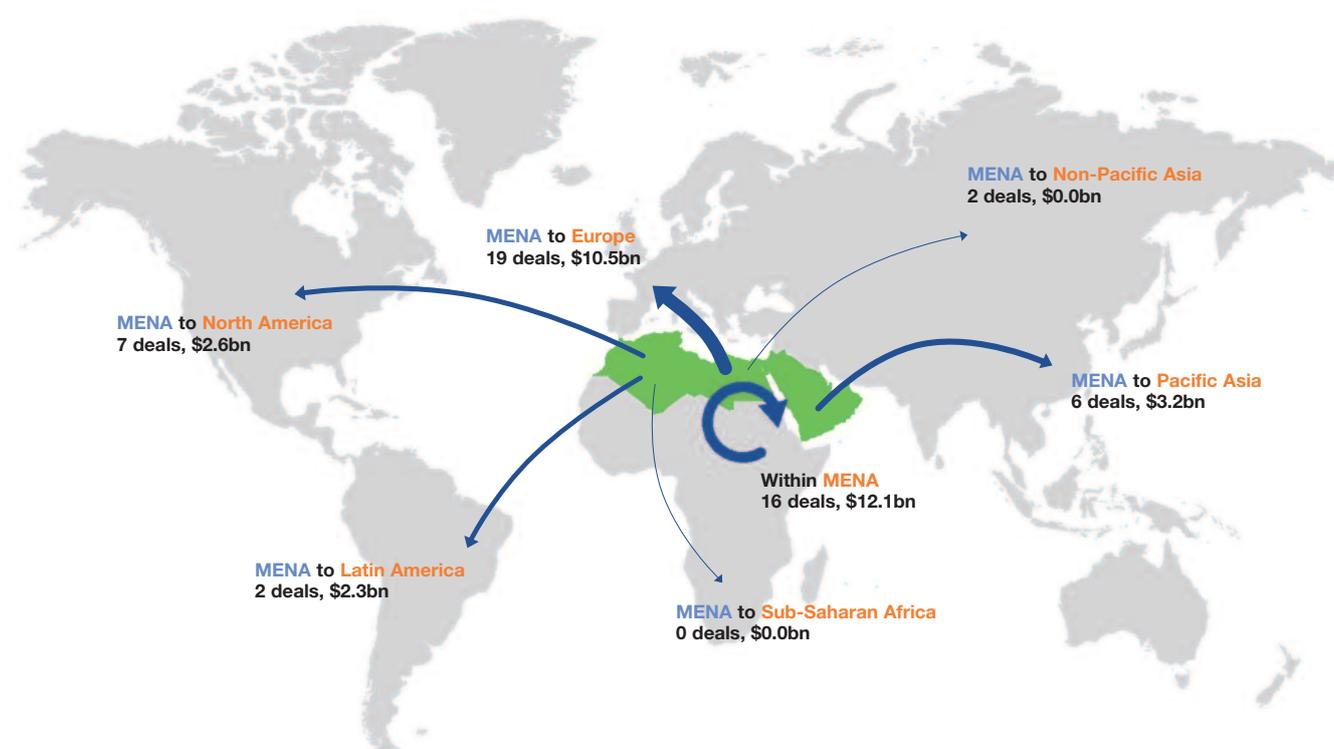
funds hyper-active in London, but the \$7.6 billion invested by QIA alone are certainly noteworthy.

Within the Eurozone, Italy, a country finally on the radar screen of foreign institutional investors, gained also the attention of SWFs. Total investments climbed to \$2.2 billion in 2014, almost a 50 percent increase with respect to the previous year. A rather interesting feature of the momentous trend in the country is the broad diversification of investments in various sectors. Real estate deals certainly are relevant, but we also report other noteworthy investments, such as the closing of the second tranche of the acquisition of Piaggio Aero by Abu Dhabi Mubadala, QIA's investment in the Italian Bank Fund, managing a portfolio of the 90 Italian branches of Deutsche Bank, and finally the first deal completed by the joint-venture IQ Made

in Italy Investment Company involving Fondo Strategico Italiano and QIA.

With the notable exception of the Netherlands, the other European countries have been almost completely neglected by SWFs. The total investment value reported in core Eurozone countries such as Germany, France, and Spain is a record low, while the Dutch dynamic, small, open economy is the only country of significant interest to SWFs. Lured by the attractive business opportunities, Temasek co-invested with RRJ Capital, run by Charles Ong, Temasek's former CIO and his former employer Temasek Holdings Pte, committing an amount of \$725 million in ING Groep NV's NN insurance business before the unit's initial public offering. The Singaporean fund also acquired a large stake in Ayden, a start-up based in Amsterdam that processes electronic payments.

Figure 11: Investment Flows from Middle East & North Africa SWFs 2014



Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

In 2014, as we already mentioned, the US has been the market of choice for investors of all stripes. But with stock prices at record highs and the US dollar appreciating against all major currencies, investing in America's sovereign debt markets became quite prohibitive. SWFs, as many other long-term investors, sought other forms of yield in alternative asset classes, and the obvious choice was real estate. Global SWFs invested in American brick-and-mortar the stellar amount of \$11.5 billion in 23 sizable deals, 82 percent of the total investment in the US. The big numbers of "safe asset" investments dwarf

the rest of the activity, even if QIA's acquisition of AMEX's travel business, GIC's investment with Ontario Teachers' Pension in XPO Logistics, and New Zealand Superannuation Fund's deal with KKR Energy are noteworthy operations.

Last year's geography of SWF investment shows a strong increase in investments in MENA, with a three-fold increase in deal value and the highest amounts reported since 2009. Unsurprisingly, these \$12.1 billion worth of investments stemmed from MENA itself, and the overwhelming majority of

Figure 12: Investment Flows from Asia-Pacific SWFs 2014



Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

deals were domestic acquisitions by the local SWFs. Within this bucket, \$5 billion were raised in real estate and in the construction business, witnessing the continuing appetite and growing demand for development projects in the Gulf, particularly in Qatar and the United Arab Emirates. SWF deals that are completed in North-Africa are instead strategic acquisitions in the region by established SWF from the Middle East. For example, ADIA acquired the Commercial International Bank in Egypt, while Emirates Investment Authority completed the landmark acquisition of

Itissalat Al Maghrib, the telecommunication operator in Morocco, the third largest acquisition completed by a SWF in 2014.

Funds

Whatever criterion one selects to evaluate direct equity investments by SWFs in 2014, the combined activity of the two Singaporean funds, namely GIC and Temasek, stands out. These funds alone completed 57 deals worth \$27.6 billion, more than doubling the amount invested in the previous year. The

Table 3: SWF Investments of over US\$1 billion, 2014

| Fund | Target Name | Target Country | Sector | Deal Size Country (Value US\$ Billion) |
|-------------------------------------|---|-----------------------|------------------------------|---|
| GIC Pte Ltd | IndCor Properties Inc | USA | Real Estate | 8.10 |
| Temasek Holdings Pte Ltd | AS Watson Holdings Ltd | China | Retail | 5.67 |
| Emirates Investment Authority | Itissalat Al Maghrib SA | Morocco | Communications | 5.66 |
| Qatar Investment Authority (QIA) | Songbird Estates PLC | UK | Real Estate | 4.06 |
| Qatar Investment Authority (QIA) | Barwa Commercial Avenue Co LLC | Qatar | Real Estate | 2.48 |
| Mubadala Development Company PJSC | MMX Porto Sudeste Ltda | Brazil | Transportation | 2.35 |
| National Social Security Fund | CITIC Pacific | China | Banking, Insurance, Trading | 2.20 |
| Qatar Investment Authority (QIA) | Barwa City Real Estate Co LLC | Qatar | Real Estate | 2.08 |
| National Wealth Fund | VTB Bank | Russia | Banking, Insurance, Trading | 1.94 |
| Qatar Investment Authority (QIA) | BROOKFIELD PROPERTY PARTNERS LP | UK | Real Estate | 1.80 |
| Qatar Investment Authority (QIA) | HSBC Tower (8 Canada Square) | UK | Real Estate | 1.73 |
| GIC Pte Ltd | Pacific Century Place Marunouchi . Office | Japan | Real Estate | 1.70 |
| GIC Pte Ltd | RAC Ltd | UK | Personal & Business Services | 1.64 |
| Government Pension Fund - Global | Boston Pty Inc.601 Lexington, Boston Tower, and Boston Pty.Atlantic Wharf | USA | Real Estate | 1.50 |
| Mubadala Development Company PJSC | IBM's Microelectronics Business | USA | Business Equipment | 1.50 |
| Abu Dhabi Investment Council (ADIC) | Shell's Geelong oil refinery and petrol stations | Australia | Petroleum & Natural Gas | 1.35 |
| Temasek Holdings Pte Ltd | Blocks 1, 3 and 4, Tanzania | Tanzania | Petroleum & Natural Gas | 1.29 |
| Temasek Holdings Pte Ltd | Olam International Ltd | Singapore | Food Products | 1.25 |

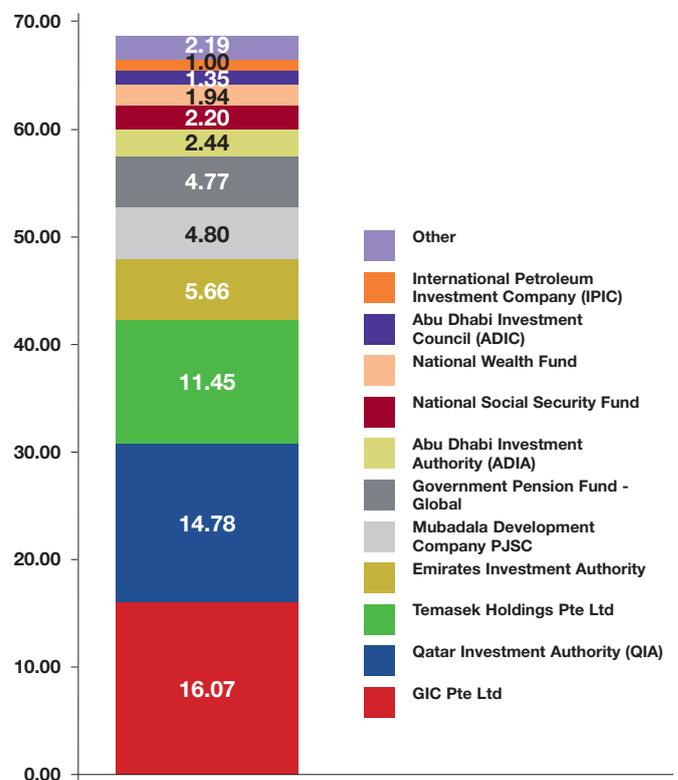
Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

increase in total investments by GIC has been particularly impressive both in terms of the stepped-up pace and of the average deal size, which increased eight times from \$80 million to \$640 million. At first sight, these numbers appear at odds with the fund’s distinctive missions: Temasek is a strategic investor commonly focused on larger stakes, while GIC is a fund aiming at global portfolio diversification. However, we find a somehow blurred distinction between the two funds, in light of the large real estate deals, exemplifying a “private equity” style adopted in these alternative asset classes.

Only time will tell if in the future Singapore funds will be allowed to take on similar long term risks by investing in illiquid, albeit valuable, assets. Singapore’s government recently announced that it is “now ready” to include part of SWFs capital gains in its annual budget as the country spends more on its subway network, airport, education, and social security to support an aging population. So the funds should be ready to set aside funds for the government and to contribute to the state coffers. And such a shift in distributions is inevitably going to affect performance. Indeed, this will force Singaporean SWFs to both hold more liquid assets and settle for the lower returns those imply, or to face losses when divesting less liquid instruments. At the same time, internal turmoil is clear, as Temasek recently revealed that the CEO Ho Ching is on a sabbatical leave. While the fund has cited personal reasons, recent fund performance has been well below Temasek’s self-reported target, leading to speculation about potential replacements.

After the spectacular records of last year, QIA seems to have reached a plateau, a sustained equi-

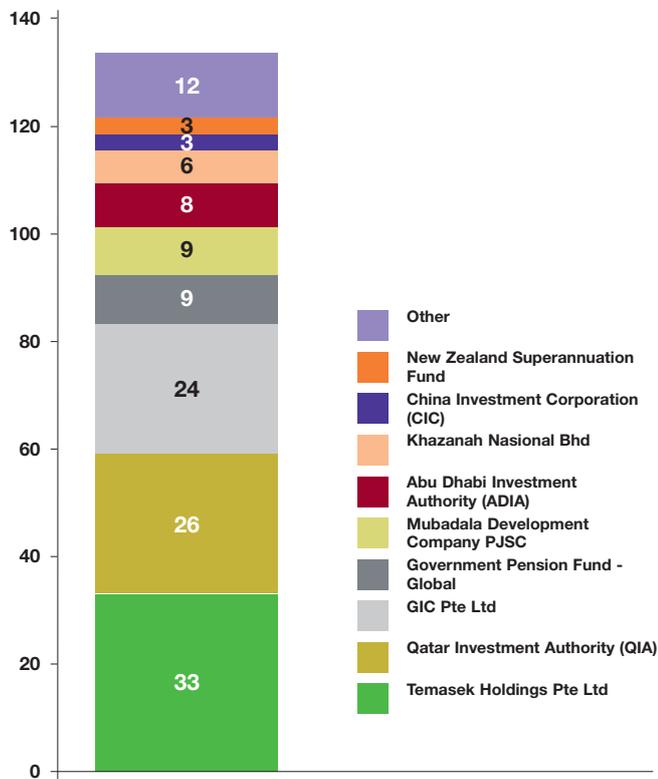
Figure 13: Value of Investments by Top Spending SWFs, 2014



Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

librium level of annual direct equity investments. In 2014, QIA is placed second in the ranking by number of deals and value, with 26 acquisitions worth \$14.8 billion. After the 2013 changeover in power with Sheik Tamim taking the throne, in December 2014 QIA’s CEO Ahmed al-Sayed was replaced with a member of the Qatari royal family, Sheikh Abdullah bin Mohamed bin Saud al-Thani, a move that some commentators interpret-

Figure 14: Number of Investments by Top Spending SWFs, 2014



Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

ed as part of the new emir’s attempts to place his own team into senior government positions. Time will tell whether QIA in the future will maintain the same profile of a highly assertive, activist global investor, and the same penchant for trophy assets – often, real estate icons – and established brands across sectors, or turn into a player with a stronger focus on economic development and stability in the region.

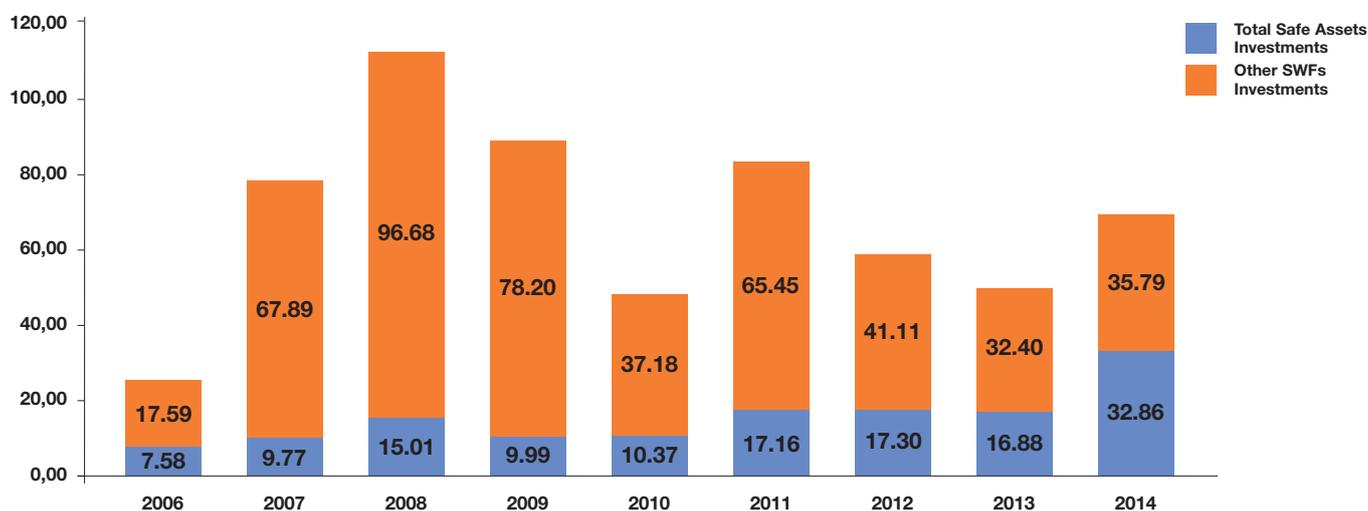
Interestingly, a new entry in the top ten list by value of investments is the Emirates Investment Authority, the federal SWF of UAE, snapping one of the largest deal of the year in Morocco. With limited assets under management, a rather blurred mission and a highly concentrated portfolio, uncertainty remains over the effective firepower and mandate of this organization.

GPFG, the largest SWF in the world, entered on our radar screen thanks to its eight uncharacteristically large-scale operations in real estate worth \$4.8 billion, while Malaysian Khazanah Nasional Behrad gained prominence as regional player in Southern Asia.

Towards a New Normal

Despite the drop in oil prices during 2014, most observers report no decline in SWF AUM during the year and, quite to the contrary, no interruption in the growth trend observed since 2008. Nevertheless, aggregate statistics might be masking more complex individual realities, epitomized by Russia withdrawing over \$20 billion from the National Wealth Fund and Reserve Fund since 2013 to offset the impact of falling oil prices, but also of Western sanctions related to the Ukrainian conflict. Russia’s unique economic predicament might have accelerated a trend that is yet to affect other commodity-based funds. There is a predictable time lag between a drop in commodity prices and a decline in fund inflows into SWFs; yet, it is hard to imagine a prolonged slump in commodity prices not having an effect on SWF funding. For now, Russia is an isolated case, but it might be a herald of things to come.

Figure 15: SWF Investments in Safe Assets*, 2006 - 2014



* Safe Assets category includes Infrastructure & Utilities, Real Estate and Restaurants, Hotels, Motels sectors.

Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections. Source: Sovereign Investment Lab, Università Bocconi

Below the surface, other deep changes are already underway. The global economy has altered its growth patterns, and emerging economies are converging to the level of more advanced countries, slowing down the inflows of foreign exchange reserves into (once) heavily exporting countries. The slump in oil prices has been something of a canary in a coal mine with regard to this outlook that we call the new normal. SWFs are trying to smooth the effect of falling revenues by pushing returns on their investments. In their quest for higher yields, SWFs are tilting their allocation in favour of larger, and riskier equity deals, even experimenting with new investment models more akin to private equity and venture capital. Yet, even in their more traditional “safe and big” asset classes, SWFs are taking a more active, affirmative

stance on corporate governance issues. The recent push by the Norwegian GPF to obtain proxy access in US companies is a revealing sign of a definite change in attitude.

But lower commodity prices and exports would not only reduce inflows, but also lead to increased domestic pressure on politicians to raid the SWF coffers to sustain the domestic economy. In Kazakhstan, the press has reported President Nazarbayev multiple times discussing using the assets of the national SWF to support the domestic fiscal budget, including very concrete plans of a withdrawal of approximately \$5 billion from the fund. While that is still less than 10% of the total assets of the fund, internal governance and proper oversight are important to prevent politicians from raiding the funds to avoid or delay painful

policy choices. Venezuela effectively killed its SWF between 2001 and 2003 to cover holes in its fiscal budget, in what were widely seen as populist moves aimed at sustaining a regime refusing to recognize its economic failures.

The experience of Venezuela is certainly an extreme case, but the shocks to commodities are revealing that SWF mandates are not black-and white. In practice, it is never purely about long-term investing: SWFs are often asked to act as “rainy day funds,” and this shifts asset allocations in favour of less risky, more liquid assets.

Torn between the Scilla of financial returns and the Charibdys of fiscal stabilization, for the SWFs community the coming years will not be simply a challenge of survival. Rather, they will constitute a challenge of identity. Many SWFs operate under multiple, often conflicting and fuzzy, mandates: inter-generational saving, domestic development, and revenue-smoothing are easy to reconcile while the tide is rising. But a lack of growth or, in some cases, a shrinking asset base, will force some painful choices in the years to come.

Strong internal governance will then be paramount in solving this sovereign trade-off. The existence of clear and well defined rules will make the difference between Chile’s use of its fund to weather the crisis, and Russia and Venezuela raiding their funds to support their own political rulers and business oligarchs. There is a clear lag in the shock from commodity prices to the domestic economies - and to SWF funding - and the following years will reveal which SWFs sit atop robust foundation.



What Will SWFs Look Like in 2020?

Massimiliano Castelli

UBS Global Asset Management

Fabio Scacciavillani

Oman Investment Fund

Sovereign Wealth Funds (SWFs) are a most visible part of the tectonic shift that, unleashed by the globalization, are reshaping the economic and financial geography in the twenty-first century. The rapid upsurge in the XXI century of assets under management (AUM) by SWFs has been driven by the need to diversify the investment of foreign exchange reserves. In the 1980s and 1990s, such reserves were largely seen as a buffer against external shocks, hence they were managed in an extremely conservative manner. As the amount of reserves increased, governments felt that excess reserves could be transferred from central banks to specialized institutions capable of delivering higher returns, diversifying investments across regions, asset classes and currencies.

The accumulation of foreign reserves primarily in emerging countries – but also in developed countries with sizeable commodities exports such as Canada and Norway – was propelled essentially by three intertwined phenomena: 1) The advent of China and other Asian countries as a massive part of the global manufacturing value chain which led to large and persistent current account surpluses; 2) the upsurge in commodities' demand necessary to build factories, infrastructure and housing for the new urban middle class; 3) and, last but not least, an unprecedented rise in capital inflows into emerging markets after a wave of capital account liberalization.

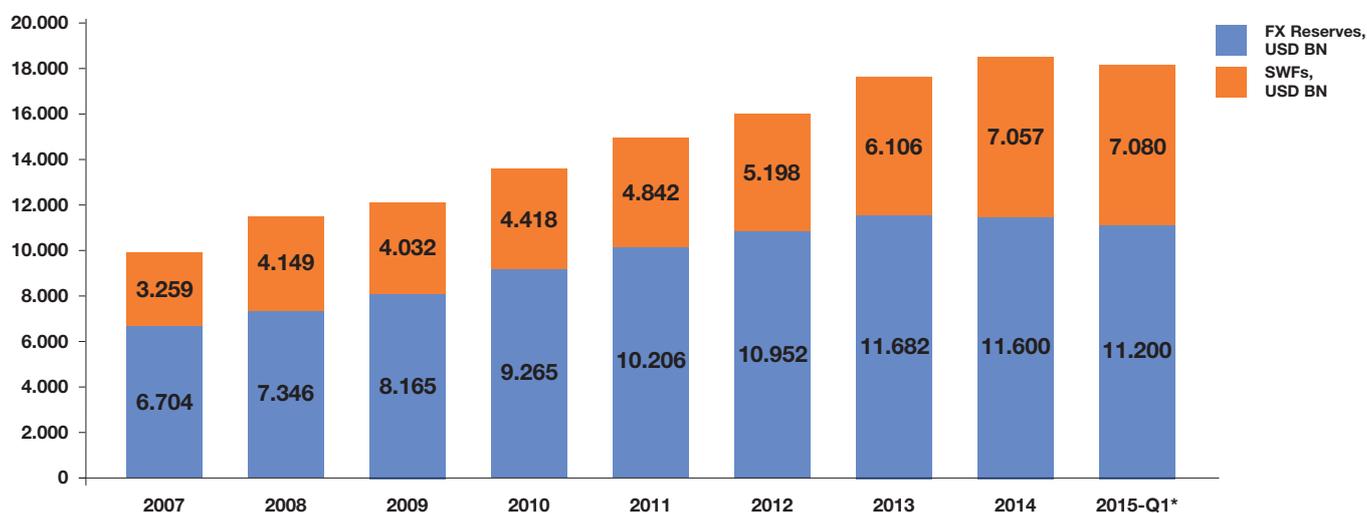
In this sense, the rise of SWF has mirrored the shifting balance in the world economic barycenter away from developed economies and towards the new Asian economies and some populous countries such as Russia and Brazil. Essentially, the surge in capital flows that we witnessed over the past 30 years has been the engine of rebalancing in the distribution of global wealth from mature economies, primarily the US, Western Europe and Japan to countries which enjoy favorable demographics and appear to yield a higher return on capital.

FX reserves' growth has slowed down sharply

The growth in global FX reserves in the past decade has largely been an emerging markets (EMs) phenomenon. In 2014, EM economies accounted for USD 7.7 trillion of FX reserves, nearly 70 percent of the total. China alone accounted for nearly USD 4 trillion and oil-exporting emerging markets for another USD 1.6 trillion. The Accumulation of FX reserves managed by EM economies continued uninterrupted during the financial crisis, albeit at a slower pace than in previous years. Up to 2008, FX reserves were growing at nearly 20 percent per annum; between 2008 and the end of 2013, growth decelerated to below 10 percent.

In 2014, for the first time since the early years of the

Graph 1: Sovereign Assets Under Management, USD BN



* Estimate

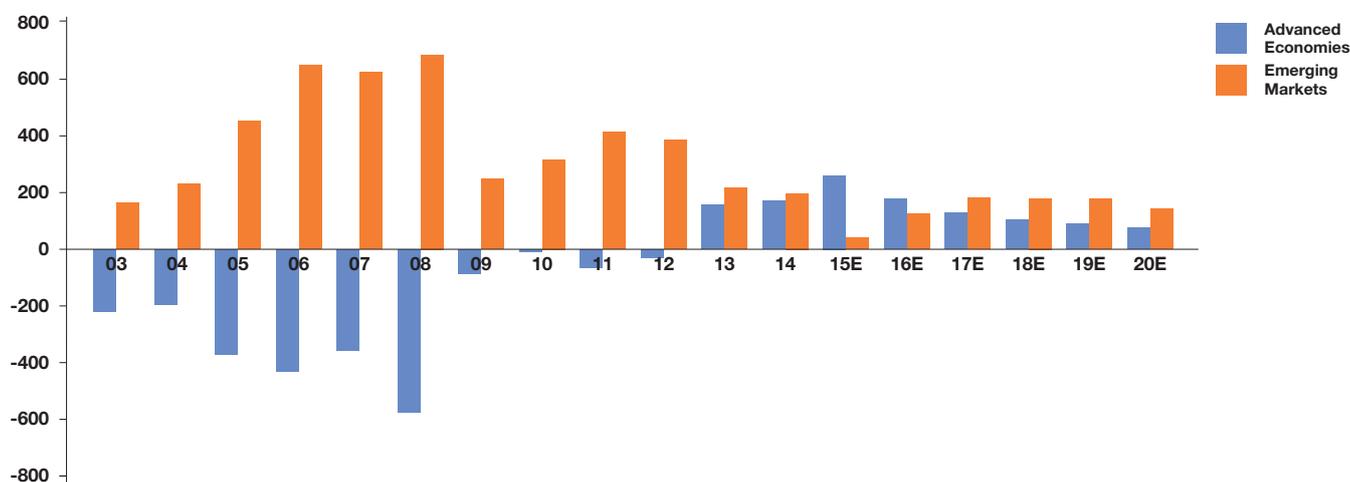
Source: IMF, Sovereign Wealth Fund Institute

XXI century, growth in FX reserves went in reverse: according to IMF data, in 2014 total FX reserves excluding gold fell by around USD 100bn, largely reflecting a drop in reserves held by emerging markets. The fall in EMs reserves continued and accelerated in the first quarter of 2015 with a drop of about USD 400 billion, corresponding to a decrease of 5 percent compared to 2014-end levels. A key question is whether the reversal in the growth of FX reserves is just a pause in a long-term trend that will eventually resume, perhaps at a more muted pace. Or whether this secular trend has come to a halt and, in that case, what are the implications for the global economy and global capital markets.

The recent fall in FX reserves reflects a marked weakening in the three key drivers mentioned above.

China and other emerging markets are engaged in a transition whereby exports-led growth gives way to a domestic driven services sector. As a consequence the commodities cycle went into reverse, so prices of raw materials and hydrocarbons, barring disruptive events, will likely fluctuate for the rest of the decade around a mildly upward trend.

With regards to current account balances, advanced economies' trade deficits fell dramatically from the all-time high touched in 2008 (USD 574 billion) and actually turned into surpluses in 2013. According to the latest forecasts by the IMF (April 2015), this is unlikely to change over the next few years as advanced economies as a whole will remain in surplus up to 2020, largely reflecting persistent current account surpluses in Europe more than compensat-

Graph 2: Current Account Balance in Advanced and Emerging Countries, USD BN

Source: IMF 2015

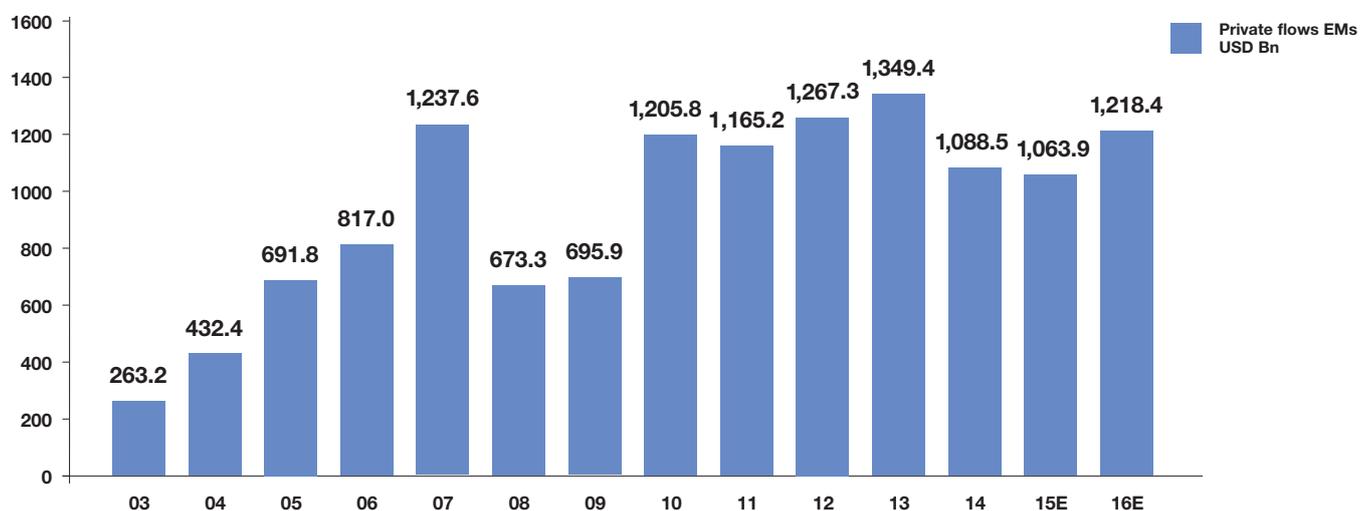
ing for sizeable deficits in the US and a few other advanced economies. Similarly, but with an opposite sign, in 2014 the current account surplus in EMs fell by about two thirds from the peak touched in 2008 (USD 684 billion) and according to the IMF it will remain close to this level for a few years.

With regards to capital flows into emerging markets, these have been on a secular upward trend since the early 2000s as the distribution of global wealth shifted in favor of these economies, pushed by demographics and pro-market reforms. According to data provided by the International Institute of Finance (IIF), private inflows into these economies increased five-fold in a decade to reach USD 1.3 trillion in 2007. In 2008-09, capital flows halved as the global economy narrowly escaped a financial market meltdown and investors flew to the safe haven of the US dollar.

However, that drop proved only temporary as capital flows recovered very fast and by 2013 capital flows into EMs surpassed the pre-crisis years. Thanks to better macroeconomic fundamentals, improved governance and credit expansion, EMs recovered faster than advanced economies and investors poured money into these economies as they diversified away from advanced economies trapped in a spiral of anemic growth and fiscal consolidation.

An additional driver behind the fast recovery of capital flows towards EMs in the aftermath of the financial crisis has been the loose monetary policies in mature economies which have been "pushing" portfolio funds into EM assets. Nearly USD 1 trillion of portfolio funds flowed into EM stocks and bonds over 2010-13 and in selected countries portfolios flows actually surpassed Foreign Direct

Graph 3: Capital Flows into Emerging Countries, USD BN



Source: IIF

Investment (FDI) for the first time in many years.

Such phenomenal rise in portfolio flows is however unlikely to continue over the medium term and in fact preliminary data for 2014 already point to a drop of about 20 percent in portfolio flows while FDIs appear to be relatively stable. The reasons behind this fall include, first of all, the worsened economic growth outlook for many EMs: growth differentials with advanced economies stand at a low since the financial crisis. Secondly, but no less important than the former, is the expected normalization in US interest rates which is reducing the "push" factor in portfolio flows to these economies, the so-called super taper tantrum.

All in all, the IIF expects portfolio flows into EMs to remain very volatile in the medium term and about

20 percent below the 2013 peak. The pull-out of funds from EM assets and the consequent pressure on EM currencies is inducing the authorities of these economies to eventually use FX reserves to stem market pressure.

Developments in China and commodity exporting economies are key

Most of the surplus in EMs is accounted for by China and, until last year, by the Middle Eastern oil exporters. Since 2008, in fact, the current account balance of emerging markets excluding China and Middle Eastern economies has been negative and in 2014 it amounted to a deficit of more than USD 200 billion. The IMF forecasts that this trend will persist and eventually strengthen over the next few years largely as a result of the fact that, at current oil

prices, Middle Eastern oil-exporting economies will have a balanced current account up to 2020. This is a substantial difference when compared to previous years when their surplus averaged USD 200 billion per year, thus accruing to the coffins of their SWFs.

In addition to the level of oil prices that will determine the pace of accumulation or the reduction in foreign assets accumulated by Middle Eastern exporters, to a large extent the future growth in FX reserves depends on developments in China. According to official data, Chinese FX reserves fell by USD 113 billion in the first quarter of 2015, the third consecutive quarterly drop after having peaked at USD 3.99 trillion. The drop in FX reserves is in line with rising capital outflows which have been larger than the rising surplus in the current account reflecting the drop in commodity prices, translating into a balance of payments deficit of about USD 80 billion in the first quarter of the year.

When talking about capital outflows from China it is easy to be carried away by the news headlines; in fact it is not the first time that the Chinese balance of payments swung into deficit over the last few years and given the uncertainty surrounding the Chinese macroeconomic adjustment, increased volatility in capital flows should not come as a surprise. More crucial in this regard will be the structural changes occurring in the Chinese economy as a result of the reforms implemented by policy makers, notably the gradual liberalization of the capital account and the removal of capital controls.

The increasing flexibility granted to Chinese firms and households to hold FX they earn abroad, in

fact, translates into lower FX reserves: as a result the composition of the Chinese International Investment Position is changing with a fall in reserves held by the central bank and a rise in direct investment abroad and portfolio investment by corporates and individuals. Such gradual process is actually what the Chinese authorities would expect as a result of increased diversification into foreign assets by Chinese savers rather than a sign of panic about China's slowing economy.

Eventually, and in line with the ongoing opening up of the Chinese financial sector, the share of FX reserves in China's International Net Investment Position will converge towards that prevailing in other Asian exporters: for instance, in Japan FX reserves represent about 17 percent of total external assets as the bulk is held by corporates and individuals. In China FX reserves are still two thirds of its International Net Investment Position.

Overall, should the pace of financial liberalization continue as expected, Chinese FX reserves will continue to decline. This process could be further reinforced by the "going out" policy being pursued by the government, reflected in the FDI deficit experienced in 2014 (the first since 2004); and the recent initiatives launched by China to diversify FX reserves such as the Asian Infrastructure Investment Bank (AIIB) and the so-called Silk Route Fund.

Return on accumulated wealth will become more important

The era of rapid growth in FX reserves is probably over and a decrease in absolute terms will eventual-

ly be determined by developments in the energy markets and the speed of liberalization of the Chinese capital account. As a result new inflows into SWFs might not entirely dry up, but certainly will be severely curtailed. This means that future growth in AUM will be driven primarily by returns. Furthermore if the newly launched Asian Infrastructure Bank starts its activities in earnest, key funding could come from the coffers of SWFs. However, there might be exceptions if the governments will deem that the central bank management of the reserves is too conservative and will transfer a sizeable part to SWFs that deliver better returns.

The impact of the slowdown in inflows is already visible in the most recent data. According to the Sovereign Wealth Fund Institute, SWFs AUM barely increased in the first quarter of 2015 despite the strong returns generally experienced during this period: negative inflows have probably been fully compensated by positive returns over the period. This is unlikely to change over the medium term should energy prices remain around current levels as widely expected.

This means that SWFs' AUM are likely to grow relatively slow over the next few years, probably at around 3-5 per cent; should returns on asset classes be lower in the future – as we argue below - we might also experience periods of negative growth in the AUM of SWFs.

Evolution in the investment behavior of SWFs

How will the investment behavior of SWFs change as a result of the slowdown in inflows? Will SWFs reduce their exposure to risky assets as for instance

In the future, with inflows into SWFs severely curtailed, AUM growth will be primarily driven by returns provided by equities and illiquid asset classes

by increasing exposure to more liquid and less volatile asset classes such as fixed income? We doubt it. First of all, while it is true that SWFs AUM are likely to grow slower than in the past, SWFs still sit on considerable amounts of wealth accumulated during their heydays. For most countries with SWFs, this amount of assets exceeds that required for precautionary motives (i.e. fiscal stabilization), thus leaving ample room for an asset allocation more skewed towards risky assets with higher expected medium term returns.

Secondly, the era of ultra-low fixed income yields might end with the expected rise in US interest rates but globally, monetary conditions are likely to remain very loose for a prolonged period of time and quantitative easing in Europe has just started: the quest for yield among SWFs is therefore likely to continue as these institutions try to protect the real value of their accumulated wealth.

Thirdly, in a scenario of rising interest rates, the mark to market losses suffered on fixed income assets could be substantial. Assuming a crawl up in global interest rates over the next five years – a mild tightening according to historical standards – the

return on global government bonds of advanced economies will be close to zero or slightly negative over the next five years.

The best allocation to protect the portfolio value in such an environment is to diversify away from fixed income assets towards equities and more importantly illiquid asset classes such as real estate, private equity and infrastructure. Indeed, as shown in the introductory article of this report, in 2014 SWFs increased their direct investments despite the sharp drop in oil prices indicating that the appetite for this type of investments is unlikely to ebb as a result of slowing funds inflows.

Finally, the changed conditions in the global financial sector, with commercial banks less willing to take long-term risk because of more stringent regulations is opening up new investment opportunities for long-term investors such as SWFs. For instance, the infrastructure sector is evolving fast under the impulse of policy makers eager to attract more non-public funds into this sector. At the right conditions, SWFs are likely to embrace these opportunities by pouring money into real assets with solid prospects of delivering steady returns above those achievable in publicly traded fixed income and equity. SWFs have established themselves as very active investors in global capital markets over the last decade; this is unlikely to change as a result of the slow-down in the growth of their assets.



To Branch (or Not to Branch) Overseas

Diego Lopez
PwC

Sovereign Investors continue to grow rapidly in number and size. Depending on the definition, these are a group of Government-related funds with over USD 12 trillion of assets under management (of which USD 6.3 trillion comes from Sovereign Wealth Funds¹), looking to acquire assets globally. While their investment profile and targets may seem similar at times, they are a highly heterogeneous collection of institutional investors with different backgrounds, missions and values that approach their goals very differently.

Origin and geography

Most of the wealth sitting on the books of these investors has its origins in public budgetary surpluses fueled by commodities exports, foreign exchange reserves or pension contributions. The location of the fund is therefore not necessarily correlated with the GDP or purchasing power of its country in the global context. Of the G8 economies, only Canada, the US and Russia have sizeable Sovereign Investors.

In fact, the majority of these players are located in the so-called emerging markets. 70% of the funds in terms of both number and size are headquartered in the Middle East, North Africa and Asia-Pacific regions. If it weren't for the huge Norwegian Fund

and for the Dutch Pension Funds, Europe would lack any significant Sovereign Investor. And this will most likely remain unchanged in the near future, as most Governments having conversations to set up new investment vehicles are from Africa or Latin America.

Human capital

Sovereign Investors are relatively new players in the global markets. When Michael Douglas characterized Gordon Gekko in the 1987 film Wall Street, only 15 Sovereign Investors were in place and their holdings were rather domestic or relatively small. Today, the average age of these investors is not yet 20 years old.

The financial crisis however brought these investors to the forefront pretty quickly, as their liquidity levels offered them a pivotal role in the recovery of global markets. And thanks to the stress-free and tax-free status of many, they were able to hire those exiting the main investment houses of London and New York.

There are certain demographic characteristics that drive Sovereigns' human capital needs and policies:

- National talent: Some of the largest Sovereign Investors face demographic constraints. Norway is a 5 million people-country that hosts a USD 890 billion-fund. There are just 1.4 million

¹ <https://www.preqin.com/docs/samples/The-2015-Preqin-Sovereign-Wealth-Fund-Review-Sample-Pages.pdf>

Emiratis, 1.2 million Kuwaitis and 0.3 million Qataris in the world, who combined own almost USD 2 trillion in assets. And GIC and Temasek, who together manage over half a trillion in assets, are owned by only 3.3 million Singaporeans. Despite having ambitious programs in place to develop and nurture local talent, most funds look overseas to recruit the best talent around the world. Today, between 30% and 75% of the workforce of these funds are non-nationals, who do not generally hold any executive position.

- **Reverse brain drain:** The contrary is true for the Chinese funds. It is difficult to ascertain how many foreigners work for CIC, SAFE, NSSF or HKMA, but they probably represent less than 5% of the total workforce – and the same could probably be said of the Russian funds. Given the enormous population and the increasing number of Chinese and Russian nationals studying in Ivy League colleges and working for top-notch I-Banks, these funds don't need to recruit foreigners but to lure their own people back to their country.
- **Challenging attractiveness:** The typical location of their headquarters makes it more challenging for Sovereign Investors to attract talent. Oslo, Beijing and Kuwait are not necessarily first choices for top graduates or investment professionals. This issue has been covered by Bachher and Monk, who believe that Sovereign Investors are almost exclusively successful at hiring the “green” (early career individuals looking for a fast track career), the “grey” (experienced professionals escaping fast-paced cities) and the “grounded” (people with ties to the region)².

Investment strategy consequences

Sovereign Investors are generally risk-averse – especially the Pension Funds whose liabilities will become more evident in the next few years as their pension obligations are realized. They have traditionally invested in developed markets and liquid assets, in search for high returns with a tolerable risk level.

While this approach was adequate for fixed income and equities, which do not necessarily require a local exposure, it is presenting a challenge as investors move into direct investing / co-investing and alternative assets. Real estate, infrastructure and private equities are complex asset classes that require a deeper knowledge of the local markets. At the same time, capital appreciation is becoming more challenging and Sovereign Investors must enhance their asset management skills and reduce the fees paid to external managers in order to increase their net-of-fees returns. All this translates into a need to build in-house capabilities, by either hiring experts from different geographies or creating a presence on the ground.

Offices overseas

Faced with the challenge of attracting international talent to their distant headquarters, several Sovereign investors are choosing to open additional offices in the main international financial centers (IFCs) or in markets that they are focusing on but are not necessarily familiar with. These offices can be broken down into (i) operational branches with full investment capabilities, (ii) representative offices

² <http://fletcher.tufts.edu/~media/Fletcher/Microsites/swfi/pdfs/2012/Monk%20SWF%20Human%20Resources.pdf>

Operational branches and Representative offices overseas

| SI | HQ | Dar es | | | | | | | | |
|------------|--------------|--------|---------|----------|---------|--------|-------|------|----|----------|
| | | Amman | Beijing | Brussels | Chennai | Salaam | Hanoi | HCMC | HK | Istanbul |
| AIMCo | Edmonton | | | | | | | | | |
| APG | Amsterdam | | | ✓ | | | | | ✓ | |
| Aust Super | Melbourne | | ✓ | | | | | | | |
| BIA | Brunei | | | | | | | | | |
| Caisse | Montreal | | ✓ | | | | | | | |
| CIC | Beijing | | | | | | | | | |
| CPPib | Toronto | | | | | | | | ✓ | |
| GIC | Singapore | | ✓ | | | | | | | |
| HKMA | Hong Kong | | | | | | | | | |
| Khazanah | Kuala Lumpur | | ✓ | | | | | | | ✓ |
| KIA | Kuwait | | ✓ | | | | | | | |
| KIC | Seoul | | | | | | | | | |
| LIA | Tripoli | | | | | | | | | |
| Mubadala | Abu Dhabi | | | | | | | | | |
| NBIM | Oslo | | | | | | | | | |
| NPS | Seoul | | | | | | | | | |
| OMERS | Toronto | | | | | | | | | |
| PIF | Ramallah | ✓ | | | | | | | | |
| QIA | Doha | | ✓ | | | | | | | |
| SAFE | Beijing | | | | | | | | | |
| SGRF | Muscat | | | | | ✓ | | | | |
| SOFAZ | Baku | | | | | | | | | |
| Teachers' | Toronto | | | | | | | | ✓ | |
| Temasek | Singapore | | ✓ | | ✓ | | ✓ | ✓ | ✓ | |

dedicated to marketing and non-transactional operations, and (iii) holding entities without economic substance. Let's focus on the first two categories, before we focus onto tax considerations.

The Kuwait Investment Authority (KIA) is known not only for being the first Sovereign Wealth Fund to be set up, in 1953 – before the emirate had gained independence from Great Britain, but also for having opened the first ever overseas office of a Sovereign Investor, with the Kuwait Investment Office (KIO) in London in 1965. KIO is a full operational office and has gained an increasing role throughout the years. It is currently the largest Sovereign Investor's overseas office with well over 100 professionals, it receives 10% of the country's budgetary surplus, and it manages some of its international investments – including real estate assets through St Martins Property and infrastructure assets through Wren House.

But KIA is not the only player with an office in London or New York. In spite of not hosting any of their headquarters, both cities combined have over 1,000 professionals working for 29 overseas offices of Sovereign Investors. Opening an office in an IFC seems a win-win situation: it allows a closer interaction with external asset managers and is a temporary solution to attract international talent.

This is well known by NBIM, whose 44% of manpower works in five offices outside Oslo³, and by Temasek and GIC, who have 12 and 10 international offices, respectively. The Singaporean funds are pioneers in their approach to new markets, and have tentacles in all major IFCs as well as in emerging countries of their focus within Asia and Latam. GIC

³ <http://www.nbim.no/contentassets/Off9cd1d5c8e4737a7b7262d3ec167d4/norges-bank-investment-management-annual-report-2014.pdf>

| | London | Lux | Mexico DF | Mumbai | New York | Paris | Rio de Janeiro | San Fran | Sao Paulo | Seoul | Shanghai | Singapore | Tokyo |
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for instance has 20 professionals with base in Sao Paulo, who speak the language and understand the local market – and manage a portfolio of over 20 investments in Brazilian private companies. Similarly, Temasek has 10 staff in Brazilian soil looking at 10 holdings.

Earlier this year, the State General Reserve Fund of Oman announced⁴ the opening of its first office abroad in Tanzania – a country the Sultanate has blood relations with, “in order to capitalize on the growing opportunities in Sub-Saharan Countries”. It is now the first and only non-African Sovereign Investor to have a physical presence in the African continent.

All in all, and depending on the definition, it is estimated that Sovereign Investors employ around 20

thousand professionals. Of those, over 1,600 (i.e. 8%) work in one of the 70 operational branches and representative offices overseas shown in the table below. We expect this number to increase further over the next few years as these institutional investors mature and focus on new and unfamiliar markets.

Cultural and Geopolitical issues

Not all Sovereign Investors will be opening offices overseas though. KIA (with its fully operational branch in London and its representative office in Beijing), QIA (with representative offices in Beijing, London, Mumbai and potentially New York) and Mubadala (who recently opened an office in Brazil to provide on the ground coverage of its investments) seem to be only active among Gulf Sovereign Investors.

⁴ <http://www.sgrf.gov.om/news9.html>

On any given day, dozens of the investment professionals based in the Middle East are in London and New York meeting people, interviewing new candidates and discussing investment opportunities. You will find them working on Starbucks' Wi-Fi and asking their GPs to print documents for them – but their employers are still reluctant to create a presence overseas.

There is a cultural explanation to this. Professors Bohnet and Al-Ississ of Harvard Kennedy School call it “the elasticity of trust” and analyze the different approach of Arabs and Westerners when it comes to relationships and trust. While Western corporations try to mitigate the costs of a potential breach or “betrayal” (e.g. offering damages to the other party), organizations from the Gulf try to prevent or minimize as much as possible the likelihood of this risk-taking, known as *gharar*. By extension, Gulf Sovereign Investors will minimize the risk of anything going wrong in an overseas branch by preventing one in the first place.

Another interesting case study is the China Investment Corporation. Many will remember the fierce opposition that made Chinese State-Owned Enterprise CNOOC withdraw its USD 18.5 billion takeover bid for California-based Unocal in 2005, and the trade tensions between China and the US. Not surprisingly, when CIC decided to open an international office at the beginning of 2011, it initially chose Toronto to “ramp up its Canadian holdings” particularly in the resource sector. Two years later, CNOOC acquired Calgary-based Nexen for USD 15.1 billion in the single largest foreign takeover by a Chinese company. However, due to

the investment losses faced in Canada and to the substantial US rebound, the Chinese fund recently decided to shut its Toronto office and finally join SAFE and HKMA in New York.

To summarize, the expansion of offices overseas is a delicate matter that may reflect the momentum in the foreign relationships of two given countries. Sensitive decisions like this are normally taken at Government level and then executed by the relevant Sovereign Investor.

Tax considerations – BEPS

The Santiago Principles are a set of voluntary guidelines published by the IMF in 2008 that define best practice behaviors for SWFs and cover the potential privileged status of SWFs based on their government status. In practice, this translates into certain countries granting favorable tax status to selected investors, including Sovereigns, under certain shareholding thresholds. In the US, this issue was addressed at the end of 2011 by the Internal Revenue Service, who revisited section 892 and issued the most significant new guidance in 23 years.

However, given their global holdings and assets, Sovereigns still face the complexities of many different tax regimes. While most funds are tax-exempt in their home countries, they can often be subject to taxes on income and gains earned from investments in other countries. Depending on double taxation treaties and other agreements, capital gains or withholding taxes on interest and dividends can be significant.

Most Sovereigns establish holding companies outside of their home jurisdiction in order to ring-fence from liabilities or claims arising in the underlying investments. Such holding companies may be domiciled in many different jurisdictions including Luxembourg, the Netherlands, the UK and Cayman, for various reasons including their corporate law regime, stable tax systems and availability of double tax treaties.

However, in recent years, there has been increasing attention on the ways in which Multi-National Corporations (MNCs) manage their international tax position. This has been accompanied by increased focus from other stakeholders including Non-Governmental Organizations, politicians and the media over what is a “fair” or “right” amount of tax to be paid. In some cases this attention has been focused on MNCs which are seen to have very little real presence or economic activity in low tax jurisdictions.

Momentum has built up behind this sentiment leading to the G20 sponsoring the OECD’s Action Plan on Base Erosion and Profit Shifting (BEPS), which is defined as “tax planning strategies that exploit gaps and mismatches in tax rules to artificially shift profits to low or no-tax locations where there is little or no economic activity, resulting in little or no overall corporate tax being paid”.

BEPS’ Action Plan aims to tackle this through coordinated and far reaching international tax reform and is likely to increase pressure on multi-national structures that are perceived to result in a tax advantage. This represents potentially the most wide-rang-

ing, coordinated and well supported reform of international tax for many years and we are already seeing its impact with tax authorities being emboldened by the BEPS approach to be more aggressive in their approach to tax.

As a result, Sovereign Investors will increasingly need to carefully consider the economic and operational substance of their investment structures going forward in order to mitigate adverse tax consequences as well as potential damage to their reputation resulting from media attention, tax litigation or audits.

Just another property

Because of Sovereign Investors’ propensity to invest in Real Estate in prime city locations, high rents for an office space are not usually an obstacle. However, some funds are starting to consider buying out these offices. Last January, Norway’s NBIM acquired Queensberry House, the offices they had been renting for years in Mayfair for almost USD 300 million. Others like the QIA lend the space they own to their sister-organizations: Al Jazeera has recently moved its London offices from Harrods to The Shard, both owned by the Qatari fund. The Qatar Airways’ ticket office remains in Harrods.

This is not shared by all Sovereign Investors with large presence overseas though. Temasek chose its offices in London and New York in 2013 based on location, and managed to pay at the time the highest rents in six years for its new European headquarters in St James’s. Maybe this will change when The Pinnacle, a real estate development half a mile away they just invested in, finally opens in a few years

from now. It will be the second tallest building in London (and Europe), just after The Shard.

Sovereigns are sophisticated investors and will keep acquiring properties that create a long-term value proposition. The decision of which real estate to invest in is not necessarily correlated to the decision of opening an office overseas, but it would not be surprising if some of these properties are used to establish new presences overseas.

Shall we or shall we not?

Sovereign Investors have a global mandate and need to be close to their markets of focus. There is a geographical mismatch between the source and the use of funds of these investors and an unprecedented flow of capital from emerging economies to developed markets. Never before had an institutional investor managed most of its portfolio in remote jurisdictions without even a representative office.

This poses some challenges in both the long term and the short term. In the longer run, there are programs in place to make their headquarters more appealing and to develop the local population up to “Western” standards. However, the need is immediate and the best solution may be hiring bespoke foreign professionals or opening an international office and hiring experts on the ground, especially in light of the shift in strategy and increasing focus of these funds into new asset classes and geographies.

On the one hand, Sovereign Investors are transitioning into direct investing / co-investing and focusing more on alternative assets, which in certain occa-

sions, can require a presence overseas. For example, Khazanah chose San Francisco – joining GIC and Temasek in the Bay Area – to open its first office outside Asia at the end of 2013, given an increasing investment focus on Venture Capital. Other funds may consider opening an office in Australia very soon, after a number of them have benefited from the privatization programs and invested in several infrastructure assets down under.

On the other hand, competition for prime assets in developed markets is fierce, and some of these funds have started to look at completely new markets, which they are generally not familiar with. A good example of this is Brazil, which has seen four institutional investors opening offices in the last few years – GIC, Temasek, CPPib and Mubadala. The next big target may be Africa, where SGRF has recently opened an office to look at opportunities in Sub-Saharan Countries. It is difficult to imagine a Sovereign investing directly into an African company without an explicit knowledge of the continent and particular country.

It is not a straight forward process though. First, a decision must be taken in respect to whether opening an operational branch or a representative office, depending on the strategy and focus on that specific territory. Second, there may be some cultural background or political issues besides the pure economic reasons between the nations involved. But given the increasing tax scrutiny on offshore financial centers, Sovereign Investors may have no better choice than opening a proper subsidiary overseas. At the end of the day, most funds have already a portfolio of properties where to choose it from.

Sovereign Wealth Funds and Heritage Assets: a Cross-Border Cultural Arbitrage

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In this article, we look at a potentially new area of collaboration between two different types of sovereign wealth funds (SWFs), located in distinctly different geographical and economic settings. On the one hand, there are large, cash-rich sovereign investors, with inter-generational investment horizons, located in relatively small and prosperous open economies in some of the most dynamic parts of the world – the Arabian Peninsula and South-East Asia. These sovereigns are committed to using their accumulated wealth not only to improve the material well-being of their citizens, but also to help strengthen their national and cultural identity, whilst leaving behind a long-lasting cultural heritage for future generations. On the other hand, there is a group of smaller, domestically-orientated, catalyst-type SWFs located in heritage-rich, but cash-poor economies of the Old World, which are struggling with low growth, high budget deficits, large and growing national debt burdens, and – as a result – a permanently shrinking fiscal space to support and maintain, amongst other things, their massive accumulated cultural riches and heritage assets. We believe this situation presents both sides with a potentially huge opportunity, which we refer to as ‘cross-border cultural arbitrage’.

This article is structured in three parts. First, we briefly look at Abu Dhabi, Qatar and Singapore, which represent the three cash-rich open economies with highly evolved and multifaceted SWF arrange-

ments and a strong commitment to building and nurturing world-class cultural centres. Then we consider their ‘opposite numbers’ – France, Italy and Russia – which represent the heritage-rich, but cash-poor and/or debt-laden economies with recently established SWFs, which are focused on attracting catalytic, long-term foreign investment into their domestic economies. In the third and final part of the article, we offer some specific thoughts on how the two sides could work together to build mutually beneficial, long-term sovereign partnerships around heritage assets.

But first, let us define the terms. The concept of ‘heritage assets’ used in this article is loosely based on the framework introduced in the report “Valuing Heritage Assets”, prepared in March 2009 by Kingston University on behalf of the Royal Institution of Chartered Surveyors (RICS) and HM Treasury. These are assets held and maintained principally for their contribution to knowledge and culture, including portable assets (e.g. collections of objects held by museums and galleries) and real estate assets (e.g. historic properties and related sites). For the most part, we focus on museum-quality art. Therefore, unless stated otherwise, we use the terms ‘heritage assets’ and ‘art investments’ interchangeably throughout this article. However, when we refer to the broader heritage eco-system, we also include the following two asset categories:

- Related businesses, such as auction houses, dealerships, galleries, as well as specialist financing, insurance, storage, transportation, valuation, restoration, and art market information firms;
- Infrastructure and properties used for displaying, storing, transporting, and trading in art.

Sovereign Investors in Heritage Assets

We focus on Abu Dhabi, Qatar and Singapore because these three sovereigns meet the key criteria which make them, in our view, natural long-term investors in heritage assets. All three are small, dynamic and open economies, which also happen to be some of the richest countries in the world, as measured by GDP per capita, both in nominal and PPP terms. Singapore already boasts a highly industrialised economy with well-developed domestic infrastructure, while Abu Dhabi and Qatar are quickly catching up, as they have been investing massively over the last decade to upgrade and diversify their economies, while also building out a world-class infrastructure. All three boast some of the largest accumulated pools of sovereign wealth in the world, managed by a highly evolved network of multiple sovereign entities: in the case of Singapore, there is GIC and Temasek, while in Abu Dhabi and Qatar one finds, amongst other entities, ADIA and Mubadala, and QIA and Qatar Holding, respectively. All three sovereigns have the experience of investing in various illiquid and esoteric assets traded in private markets. And importantly, they all have explicit ambitions and long-term plans to develop and enhance their national heritage and cultural presence, which is the crucial factor underpinning our proposal for ‘cross-border cultural arbitrage’.

Abu Dhabiⁱ

To understand why Abu Dhabi is at the top of our list, one needs to consider the broader development plans which the emirate has set for itself as its long-term goal. As part of their economic diversification efforts, Abu Dhabi’s strategic planners have targeted high-end cultural tourism as a priority development area. And they certainly do not lack in ambition! The idea is to establish the capital of the United Arab Emirates as the art capital of the Middle East, and ultimately a cultural destination alongside London and New York. This ambition is backed by a massive endowment of oil and natural gas (the emirate has 9% of the world’s proven oil reserves and 3% of its gas reserves), as well as one of the largest accumulated pools of sovereign assets, managed primarily by ADIA, but also the Abu Dhabi Investment Council, International Petroleum Investment Company, Mubadala Development Company and other arms of the government (with a total aggregate asset size conservatively estimated at US\$ 830 billionⁱⁱ).

The emirate’s cultural tourism and heritage-building strategy has been developed by the Abu Dhabi Tourism Authority (ADTA), which is a specialist arm of the government. Underneath ADTA, there are two important units charged with implementing this strategy: the Office of the Brand of Abu Dhabi (OBAD) and the Tourism Development Investment Company (TDIC). The latter is spearheading the development, at a total estimated cost of US\$ 27 bil-

ⁱ The description of Abu Dhabi’s policy is based on Davidson (2009) and Thompson (2014).

ⁱⁱ Sovereign Wealth Centre website, accessed on 5 May 2015, available at: <http://www.sovereignwealthcenter.com/fund-profiles.html>



Heritage-rich, but cash-poor economies could tap the sheer SWF resources to boost investment in culture

lion, of the cultural hub on Saadiyat Island, which in Arabic means the ‘island of happiness.’ Situated just north of the urban centre of Abu Dhabi, this island will boast several iconic cultural landmarks. First, there will be the Guggenheim Abu Dhabi museum, designed by Frank Gehry and covering a massive site of 30,000 square metres, which is more than double the exhibition space of the New York Guggenheim and one and a half times the exhibition space of the Bilbao Guggenheim. Then, there is the Louvre Abu Dhabi museum, designed by Norman Foster and covering a similarly large site of 24,000 square metres. The island will also include a performing arts centre, a New York University campus, the Zayed National Museum, and a maritime history museum designed by the famous Japanese architect Tadao Ando.

For our purposes, the most relevant and interesting aspect of these development plans is the specific format of engagement and long-term collaboration between the Abu Dhabi government and the respective Western museums. According to Thompson (2014), in 2005 an agreement was concluded between the Abu Dhabi Authority for Culture and Heritage (ADACH)ⁱⁱⁱ and the Solomon R. Guggenheim Foundation in New York to establish a Middle Eastern version of the contemporary art

museum. In exchange for licensing the brand and providing expertise and direction, the foundation receives payments and a licencing fee, the details of which have not been disclosed. In 2007, ADACH concluded a similar contract with the French Republic, the details of which, at French insistence, were made public. According to the terms, the Abu Dhabi government was to pay US\$ 525 million to use the Louvre brand for 30 years, with an additional US\$ 247 million to borrow between 200 and 300 artworks over 20 years, sourced not only from the Louvre’s collection, but also from Musée d’Orsay, Centre Georges Pompidou, and other French museums.

In addition, a separate payment is to be negotiated to allow the Louvre Abu Dhabi to share in special art exhibitions each year for 15 years. Finally, US\$ 214 million is paid for management and curatorial advice, bringing the total payment from the Abu Dhabi government to their French counterparts to just over US\$ 1 billion. When combined with the estimated construction cost of US\$ 490 million for the Norman Foster building to house it, the price tag for establishing the Louvre Abu Dhabi alone comes to a cool US\$ 1.5 billion. And this does not include the amount which the emirate will have spent on acquiring works of art for its own collection, to be exhibited at the museum at its opening and also subsequently, as it grows larger. The explicitly stated position of TDIC, as articulated by Ms. Rita Aoun-Abdo, the Lebanese-born director of the cultural

ⁱⁱⁱ The Abu Dhabi Authority for Culture & Heritage (ADACH) was a statutory body in the United Arab Emirates that administered cultural heritage in the Emirate of Abu Dhabi. In 2012, it merged into the Abu Dhabi Tourism & Culture Authority.

department and the spokesperson for the museum project, is that the acquisitions process “will never compromise on quality.”^{iv}

Given the impact of the global financial crisis of 2008-09, it is not surprising that this massively ambitious cultural and heritage project has run into its fair share of hiccups over the years: originally planned for completion by 2012, the work on Saadiyat Island is still ongoing, with the Louvre Abu Dhabi now expected to open sometime in 2016. But the emirate does have the advantage of a comfortable financial cushion which it can always rely on to serve as a back-stop to make sure that all their strategic plans eventually come to fruition. It is clear that massive amounts of sovereign wealth have been deployed to build the Saadiyat vision. What is less clear is whether any individual SWF was explicitly tapped to finance and/or oversee the cultural and heritage projects. Davidson (2009) writes about “heavy involvement” by the Mubadala Development Company in the project and even goes

so far as to classify TDIC as a Mubadala subsidiary. However, he also acknowledges that the exact nature of “the relationship between Mubadala and the TDIC is unclear.” He notes that “it is widely understood that the TDIC is under Mubadala’s umbrella, with ADTA being its sole shareholder.” He also notes some overlaps in board membership between the two organisations at the time.^v

Qatar^{vi}

Qatar’s royal family has been on a multiyear, multibillion dollar acquisition spree in the art market, putting itself firmly on the map as one of the most influential players with some of the deepest pockets. Of the 1.4 million residents living and working in Qatar, only 240,000 are citizens. Given its vast natural gas reserves, it is no wonder that the country has the highest per capita income in the world: its annual GDP per citizen of US\$ 149,000 is more than three times that of the United States. The royal family seems to be in direct competition with Abu Dhabi in trying to develop the capital city Doha into a world-class cultural and arts centre. In 2009, it opened the Museum of Islamic Art, designed by the world-renowned architect I.M. Pei, whose iconic glass pyramid structure in the French Louvre has become one of the instantly recognisable symbols of Paris. In 2011, it also opened a temporary home for the Arab Museum of Modern Art (‘Mathaf’). And the work on building many more museums and expanding the local arts scene continues unabated.

^{iv} According to Thompson (2014), the acquisition budget for the Guggenheim Abu Dhabi was reported in the press at US\$ 600 million. If the whole amount is to be spent before 2017, it is probably more than the combined acquisition funds of the top 25 art museums in North America, excluding the Getty, over the same period. Cocks (2014) reports that the Louvre Abu Dhabi has spent an estimated € 50 million a year on acquisitions so far, with the authorities letting it be known that more may be available for exceptional works in the run-up to the official opening of the museum. It is no wonder that the emirate has become a major presence in the art market: Thompson (2014) quotes a well-connected art dealer, who estimates that the Abu Dhabi and Qatar museums are collectively purchasing 300 museum-quality works a year – an average of one each business day, 52 weeks a year. Over a decade, that translates into a total of 2,000 to 3,000 works of art destined to move to the Gulf.

^v At the time of writing, we could not ascertain any direct or definitive relationship between TDIC and any of Abu Dhabi’s sovereign wealth funds.

^{vi} This part is based mainly on Thompson (2014).

The drive to develop Doha into one of the arts and culture capitals of the world is spearheaded by Sheikha al-Mayassa Bint Hamad al-Thani, the 32-year-old daughter of the former Emir and the sister of the current Emir of Qatar. The actual planning and implementation of the strategy is the responsibility of the Qatar Museums Authority (QMA), which recently announced that it will build as many as 10 new museums over the next decade. QMA is led by Roger Mandel, former deputy director at the National Gallery in Washington, who says that the QMA's mission formulated by the Sheikha is to "reinvent museums for the 21st century." Thompson (2014) notes a subtle but important difference between Qatar's and Abu Dhabi's heritage-building philosophy: while the former is based on the personal vision of the Sheikha, the latter is rooted much more in the institutional history and traditions of its partner museums – the Guggenheim and the Louvre. But the competition between the two royal houses in terms of art acquisition is rumoured to be quite spirited: for example, members of the royal families and wealthy locals from the two emirates are said to have acquired 19 of the 30 most expensive works from Christie's 2009 Yves Saint Laurent Pierre Berge sale in Paris. Thompson (2014) notes that if Abu Dhabi's annual art acquisition budget exceeds that of the top 25 US museums (excluding the Getty), then Qatar's annual art budget – if there is any formal limit at all – most likely exceeds Abu Dhabi's.

Just like in the case of Abu Dhabi, most of the financial resources deployed for these ambitious cultural projects appear to have been sourced from the sovereign wealth accumulated over the years from hydro-

carbon exports. And just like in Abu Dhabi, there is no immediate evidence of any SWF entity being directly involved in financing or overseeing these projects. But to be fair, in the case of Gulf monarchies, the lines between sovereign wealth funds and the wealth funds of sovereigns are often blurred and indistinguishable, certainly for anyone observing these developments from outside the region.

Singapore

Unlike the two emirates above, the city-state of Singapore has not been quite as prominent on the international art scene, although it does not mean that its government has no ambitions in this area. As far back as 1995, it launched a programme called "Global City for the Arts," aimed at bringing in foreign artists, specialists and professionals in the art market and related fields (e.g. auctioneering, museum ownership and management, art consultancy, authentication, insurance, restoration, etc.) Subsequently, Singapore set itself yet another objective, explicitly formulated in the so-called Renaissance City Report (2000): to establish the city-state as "a global city of the arts and a cultural centre in a globalised world." More recently, Singapore took another important step in implementing this vision by announcing plans to open the new National Gallery, which will form part of the celebrations of the 50th anniversary of Singapore's founding as an independent state in 1965.^{vi} But in the case of Singapore, it is not just these cultural development plans and heritage-building programmes that form the backdrop for our proposed

^{vi} For more information, see Renaissance City Report (2000), Renaissance City Plan III (2008), Kong (2012), and National Gallery Singapore website.

‘cross-border cultural arbitrage’. Another important consideration is the city-state’s long-term strategy of building a world-class private banking and asset management centre, which is envisaged to eventually become on par with Switzerland. Art investment and advisory are increasingly becoming part and parcel of any high-end private bank offering, so developing related centres of excellence and expertise, while also nurturing a broader local heritage eco-system, would fit Singapore’s development plans perfectly.

Sovereign Catalysts for Heritage Investments

In this section, we focus on France, Italy and Russia because these three countries meet the following key criteria: all three have massive accumulated heritage assets, the majority of which are stored in vaults without seeing the light of day and without generating commensurate financial or aesthetic returns^{viii}; all three have world-class universal museums and various art institutions, with deep traditions of art connoisseurship and curatorial skills; all three have budget deficits and/or growing national debt challenges, which means all three are struggling to maintain appropriate funding levels for arts and culture; finally, all three recently established sovereign investment vehicles which are designed to serve as catalysts to attract long-term foreign direct investment into strategically important segments of the local economy.

^{viii} For example, according to Wikipedia, in 2008 the Louvre contained more than 380,000 objects, of which only 35,000 were on display. Similarly, in the Hermitage museum in St. Petersburg, only 12% of more than 3.1 million objects were on display in 2014.

France^{ix}

In late 2008, the French government and the Caisse des Dépôts Group (CDC) established a dedicated sovereign investment entity called Le Fonds Stratégique d’Investissement (FSI), or the Strategic Investment Fund, capitalised at € 20 billion and tasked with supporting strategically important French firms and enterprises with long-term equity investments. After several years of successfully deploying capital in different sectors of the French economy, and following a large-scale reorganisation, the fund is now part of a broader organisation underneath the CDC umbrella called BPI France. Another example of a direct catalyst-type SWF is a more recently formed entity called CDC International Capital. Established in February 2014, this full subsidiary of CDC is an investment company tasked explicitly with forming long-term investment partnerships with other SWFs and institutional investors. It is already constructively engaged with its peers in Abu Dhabi, Qatar and Russia: the aggregate investment potential of these three sovereign partnerships is close to € 1 billion, which will be deployed to support French firms, with a particular focus on emerging countries and growth markets. More investment projects and other potential partnerships are reportedly in the pipeline.

Italy^x

Applying essentially the same template as France’s FSI above (and using an Italian name which pro-

^{ix} For more details, see websites for Caisse des Dépôts et Consignations and CDC International Capital.

^x For more details, see website for Fondo Strategico Italiano.

duces an identical acronym), in July 2011 the Italian government set up its own version of a catalyst-type SWF called Fondo Strategico Italiano (FSI). It is a holding company for equity investments, which is co-owned by the Cassa Depositi e Prestiti Group (CDP) and Banca d'Italia, with 80% and 20% shares, respectively. The Italians added an interesting and novel twist to this concept by opening up the share capital of this fund to other interested institutional investors, both Italian and foreign. The subscribed and paid-up share capital was € 4.4 billion, with the objective to raise up to € 7 billion. Recently, FSI entered into a joint venture for a maximum value of € 2 billion with Qatar Holding for investing in the classic “Made in Italy” sectors of the economy – fashion brands, furniture and design, food, and tourism. FSI’s stated objective is to acquire primarily minority holdings in companies of “significant national interest”, which cover various sectors of the Italian economy and which explicitly include “management of cultural and artistic heritage.”

Russia^{xi}

The Russian Direct Investment Fund (RDIF) was established in June 2011 to serve as a catalyst to attract foreign direct investments in the equity stakes of companies in strategically important high-growth industries of the Russian economy. The fund’s mandate is to co-invest alongside large and sophisticated global investors, primarily Western private equity funds and various SWFs from around the world, to make these investors feel more comfortable investing in Russia, which is often per-

ceived as carrying higher political, operating and reputational risks. RDIF’s committed capital from the Russian side is US\$ 10 billion, and its management company is 100% owned by VEB, the Russian state development bank. In principle, up to 20% of the fund’s capital can be invested overseas, but with the provision that such projects directly contribute to the fund’s overall mission of attracting high-quality, long-term investments and top-level expertise into Russia.

Partnership and Co-Investment in Heritage Assets

We will now look at the rationale and some of the practicalities of partnering up and co-investing in heritage assets by the two different types of SWFs – in other words, the ‘why’ and ‘how’ of our proposed cross-border cultural arbitrage. Of course, as our earlier discussion of the cooperation between Abu Dhabi and France has amply demonstrated, there is no reason why such cross-border engagement cannot be executed without direct involvement by SWFs from either side. But we would argue that putting SWFs at the centre of any such arrangements can offer additional unique and complementary advantages when planning, designing and executing long-term strategies with respect to heritage assets.^{xii}

^{xi} For more details, see website for Russian Direct Investment Fund.

^{xii} It is important to acknowledge that while there are no past cases of SWFs investing in art, there is one very famous case study of a public sector pension fund in the United Kingdom – the British Rail Pension Fund – having invested in museum-quality works of art between 1974 and 2000, earning a very respectable rate of return upon final exit. More details on this case study are available in Eckstein (2010).

Broadly speaking, there are at least three reasons why involving SWFs can make sense in the context of long-term investment in, and management of, heritage assets. First, by introducing the rigorous commercial logic and long-term financial discipline inherent in institutional fund management, the process of acquiring art works and investing in art-related businesses, real estate and infrastructure will no longer be constrained by the bureaucratic logic and the usual pitfalls of annual budgetary allocations and spending. An annual allocation of a fixed amount from the government's general budget carries with it a number of limitations and risks: if the allocation is not used up fully for a number of years, there is a real risk that it will be cut. So the incentives for the ministry of culture and the museums involved are skewed towards spending the whole budget and acquiring artworks in times when it may be sub-optimal to do so. However, the art market, just like markets in more traditional asset classes, is subject to valuation cycles and periods of boom and bust. Therefore, it is more efficient and logical to deploy more money to acquire high-quality art works at distressed prices in times of art market dislocations rather than spend ludicrous amounts of money in times of euphoria and wildly unrealistic valuations.^{xiii} Also, if development plans call for increased investment

in, and support of, related art businesses and cultural infrastructure, an SWF team focusing on art acquisitions can always reach out to their colleagues in the private equity and real estate/infrastructure departments to obtain their input and to benefit from their expertise when making the necessary investment decisions.

Secondly, when one considers the size of a typical art acquisition budget allocated to museums by governments in countries like France, Italy and Russia, one cannot help but feel sorry for the extremely limited resources that curators at these museums have at their disposal. Compared to the multibillion dollar reserves available to their Middle Eastern counterparts, they simply lack the necessary 'firepower'. However, if catalyst-type SWFs in these countries were to partner up with cash-rich SWFs in the Gulf or in Singapore, one can easily imagine a situation where they could pool their resources to bid collectively at an auction and acquire a major art work on a joint-venture basis. For example, the 'Old World' SWF could commit 10-20% of the acquisition price, thus securing 10-20% of the time to exhibit the art work in question in their country's top museums. If they were to augment this cooperation with their respective art appraisal and valuation expertise, as well as their unique connections in the art world, such cooperative relationship could indeed become quite formidable and work to the mutual benefit of both parties.

Thirdly, by looking at art as long-term portfolio investment and analysing various ways of acquiring

^{xiii} Of course, one may need to make adjustments in those cases when extremely rare and exceptionally high-quality works of art appear on the market – once in a generation – precisely in times of euphoria and overvaluation. This is where the SWF's in-house team of specialists, augmented by the top-notch external advisers whose interests are fully aligned with the fund, will be expected to consider the trade-off and to make the critical judgment call on a case-by-case basis.

^{xiv} For example, see Campbell (2010).

it from a purely commercial angle, there may be novel and interesting ways of expanding one's opportunity set. For example, in addition to auction houses and dealerships, an SWF might develop relationships with a number of large private banks who lend money to wealthy individuals against art as collateral. Typically, these banks make such loans as part of a broader relationship with their high-net-worth clients, but they are usually loath to take on the risk of price fluctuations in the art market on their books. Therefore, if a cash-rich, long-term institution with a keen interest in art as investment were to come to them and offer to transfer that risk to their portfolio for a price – many private banks would happily consider it. There are already sufficiently advanced techniques in the more traditional segments of the financial markets which can be deployed for this purpose – not least credit default swaps and non-recourse asset securitisation methods.^{xiv} Incidentally, one of Singapore's SWFs already happens to hold a strategic minority stake in UBS, which is one of the top private banks not only in Switzerland but globally. Also, one of Qatar's SWFs happens to hold a similarly large minority stake in

Credit Suisse – the world's and Switzerland's other top private bank. In other words, the necessary relationships and alignment of interests among the key stakeholders are already partly in place to explore these new opportunities.

In conclusion, we would just like to invite the reader to consider this: imagine the vast heritage assets from France, Italy and Russia – assets which normally do not see the light of day due to being locked up in some obscure vaults underground – suddenly becoming available for the world to see and appreciate, in new and thriving cultural centres of Abu Dhabi, Qatar or Singapore.^{xv} This 'unlocking' of cultural values would not only enrich the lives of people around the world, but would also earn much needed new revenues for cash-strapped museums and heritage centres in the Old World, while helping SWFs in cash-rich countries enhance the provenance of their growing art collections and heritage portfolios, while also attracting high-end tourist flows to their newly established cultural centres. This is the essence of our proposed 'cross-border cultural arbitrage'.

^{xiv} Just to be absolutely clear, we are not advocating that the French, Italian or Russian museums sell their vaulted treasures. What we are suggesting here is that they could find ways to smartly and profitably lend these heritage assets to Abu Dhabi, Qatar or Singapore, as part of a broader framework of long-term collaboration around heritage assets. In other words, 'Old World' catalyst-type SWFs could mobilise their domestic museums and cultural authorities to provide art advisory and curatorial support to their Gulf or Singapore counterparts, helping them build their art collections over time, and in the process lending their vaulted treasures for unique exhibitions and cultural events alongside the growing art collections in these newly established centres, thus helping enhance their provenance and long-term value.

References

- Caisse des Dépôts et Consignations website:
<http://www.caissedesdepots.fr/en/home.html>
(accessed on 22 May 2015)
- Campbell, R. (2010) "Art Risk," Chapter 4, *Fine Art and High Finance: Expert Advice on the Economics of Ownership*, edited by C. McAndrew, New York: Bloomberg Press
- CDC International Capital website:
<http://www.cdcicapital.fr/en/> (accessed on 22 May 2015)
- Cocks, A.S. (2014) "Guggenheim Abu Dhabi To Do 1960s Onwards, the Louvre Up to That Date," *The Art Newspaper*, No. 263, December
- Davidson, C. (2009) "Abu Dhabi: Oil and Beyond," New York: Columbia University Press
- Eckstein, J. (2010) "Art Funds as Asset Class," Chapter 6, *Fine Art and High Finance: Expert Advice on the Economics of Ownership*, edited by C. McAndrew, New York: Bloomberg Press
- Fondo Strategico Italiano website:
<http://www.fondostrategico.it/en/index.html>
(accessed on 22 May 2015)
- Kingston University (2009) "Valuing Heritage Assets," *Final Report of a Research Project, Examining the Case for the Valuation of Heritage Assets*, March
- Kong, L. (2012) "Ambitions of a Global City: Arts, Culture and Creative Economy in 'Post-Crisis' Singapore," *International Journal of Cultural Policy*, 18, no.3: 279-294
- National Gallery of Singapore website:
<http://www.nationalgallery.sg> (accessed on 22 May 2015)
- Renaissance City Report (2000), *Culture and the Arts in Renaissance Singapore*, available at:
www.nac.gov.sg/docs/resources/2_finalren.pdf
(accessed on 22 May 2015)
- Renaissance City Plan III (2008), Ministry of Information, Communications and the Arts, Singapore, available at:
[https://www.nac.gov.sg/docs/.../renaissance-city-report-3-\(rcp3\).pdf](https://www.nac.gov.sg/docs/.../renaissance-city-report-3-(rcp3).pdf) (accessed on 22 May 2015)
- Russian Direct Investment Fund website:
http://rdif.ru/Eng_Index/ (accessed 22 May 2015)
- Thompson, D. (2014) "The Supermodel and the Brillo Box," New York: Palgrave Macmillan
- Wikipedia page on the Louvre:
<http://en.wikipedia.org/wiki/Louvre> (accessed on 22 May 2015)
- Петербургская Фотогазета (2014), «Краткое путешествие в фондохранилище Эрмитажа в Старой Деревне», available at:
<http://fotogazeta.spb.ru/?p=3583> (accessed on 22 May 2015)

SWFs are finally considered a distinct type of institutional investor, inspiring a flourishing research and a vibrant debate amongst practitioners and policymakers



Spotlights on research

In this section, we attempt to collect the most interesting studies pertaining SWFs that have been published (or that have made public) in 2014 and at the beginning of 2015. Our selection is by design limited, with the goal of identifying a roadmap to the most debated topics and the most influential works.

General Perspective

Alhashel, Bader. 2014. “Sovereign Wealth Funds: A Literature Review”. *Journal of Economics and Business*, 2014.

This paper reviews the research on the \$6.65 trillion dollar Sovereign Wealth Funds (SWF). The literature, which has only appeared in the last few years, focuses for the most part on the investment behavior of SWFs, especially in light of calls for the regulation of these financial entities. The literature exhibits strong support for the idea that the motives of SWFs are economic, rather than political, as their opponents would claim. There appears to be conflicting evidence as to whether SWFs increase value.

Bortolotti, Bernardo, Fotak, Veljko and Megginson, William. 2014. “The Rise of Sovereign Wealth Funds: Definition, Organization and Governance”. *Baffi Center Research Paper No. 2014-163*.

This paper addresses the difficulties of accurately defining a SWF, discusses the evolution of the original SWFs from stabilization to wealth funds, and examines how SWFs are organized and funded. We also detail the key measures developed to assess the operational and informational transparency and institutional quality of different fund by comparing the organizational structures, corporate governance systems, and investment patterns observed for SWFs with those documented empirically for other internationally active institutional investors.

Asset Allocation and Investment Strategy

Ciesik, Ewa. 2014. “African Sovereign Wealth Funds: Facts and Figures”. *Gospodarka Narodowa*, 2014(6):103-122.

This article discusses the features of sovereign wealth funds (SWFs) created from accumulated foreign reserves in African countries that export commodities. The author describes the investment targets of African SWFs, using empirical data and a research method based on a detailed analysis of available information on the investment activities of SWFs in the last 20 years. Conclusions from the analysis indicate that, due to the poor transparency of African SWFs, gathering the necessary statistics, general information and literature on the institutional arrangements and business strategies involved still remains a challenge. The study uses press articles and reports that are compared against other sources of information in order to increase credibility. Due to the small size of African SWFs, their role in stimulating the economic development of the continent is limited by many institutional, economic and political factors. African SWFs are not a homogeneous group. They can be beneficial for nations if they are used and structured properly in order to take advantage of their full potential. This implies that most of the African SWFs would have to expand their stabilization goals and move gradually to instruments intended for achieving economic development, intergenerational transfers of resources, financial sector stabilization, and promotion of regional integration.

Murtinu, Samuele and Scalera, Vittoria. 2015. “Sovereign Wealth Funds, Globalization of Capital Markets, and Internationalization Strategies”.

In this work, we study the strategies driving cross-border sovereign wealth fund (SWF) investments worldwide. In particular, we investigate how SWFs internationalize their activities, studying whether the use of vehicles – in the form of financial, corporate, or SWF majority-owned firms – to access foreign markets is influenced by fund opacity and the presence of political ties between the SWFs and the target country. We use a new dataset on SWF investments, whose size is comparable with the datasets used in the most popular SWF studies. Our Heckman-type probit and multinomial logit estimates show that: i) fund opacity leads to a greater likelihood to use a vehicle, while ii) the presence of political ties negatively affects the use of corporate vehicles only. Moreover, conditional to the use of a vehicle, the presence of political ties increases the likelihood that SWFs invest through vehicles not located in the target country. Our results control for SWFs’ strategic goals, fund politicization, SWF activism, and whether target companies operate in strategic industries.

Hassler, John, Krusell, Per, Shifa, Abdulaziz and Spiro, Daniel. 2015. “Sovereign wealth funds and spending constraints in resource rich developing countries – the case of Uganda”.

A large increase in government spending following resource discoveries often entails political risks, inefficient investments and increased volatility. Setting up a sovereign wealth fund with a clear spending constraint may decrease these risks. On the other hand, in a developing economy with limited access

to international borrowing, such a spending constraint may lower welfare by reducing domestic capital accumulation and hindering consumption increases for the currently poor. These two contradicting considerations pose a dilemma for policy makers in deciding whether to set up a sovereign wealth fund. Using Uganda’s recent oil discovery as a case study, this paper presents a quantitative macroeconomic analysis and examines the potential loss of constraining spending through a sovereign wealth fund with a simple spending rule. We find that the loss is relatively low suggesting that such a spending structure seems well warranted.

Gelb, Alan, Tordo, Silvana and Havard, Hallan. 2014. “Sovereign wealth funds and domestic investment in resource-rich countries: Love me, or Love me not?”. World Bank-Economic Premise, 2014.

Sovereign wealth funds (SWFs) represent a large and growing pool of savings. An increasing number of these funds are owned by natural resource—exporting countries and have a variety of objectives, including intergenerational equity and macroeconomic stabilization. Traditionally, these funds have invested in external assets, especially securities traded in major markets. But the persistent infrastructure financing gap in developing countries has motivated some governments to encourage their SWFs to invest domestically. Is it appropriate to use SWFs to finance long-term development needs? Does it matter whether such investments are domestic or foreign-held assets? This note considers these issues, particularly the controversial question of using SWFs to finance domestic projects, motivated partly by SWFs’ perceived importance for development.

Corporate Value and SWFs

Bortolotti, Bernardo, Fotak, Veljko and Megginson, William. 2015. “The Sovereign Wealth Fund Discount: Evidence from Public Equity Investments”. *The Review of Financial Studies*, forthcoming 2015. Thanks to their long investment horizons, ability to acquire large stakes, and lack of explicit liabilities, Sovereign Wealth Funds (SWFs) have the potential to increase firm value by being the ideal monitoring shareholders. Yet, SWFs might function as conduits of political objectives inconsistent with shareholder wealth maximization. We find that announcement-period abnormal returns of SWF equity investments in publicly traded firms are positive, but lower than those of comparable private investments, indicative of a “SWF discount”. Further, SWF investment targets suffer from a decline in return on assets and sales growth over the following three years. Our results are robust to adjustments for target and deal characteristics and are not driven by SWF target selection criteria. Larger discounts are associated with SWFs taking seats on boards of directors and with greater stakes acquired by SWFs under strict government control, supporting the hypothesis that political influence negatively affects firm value and performance.

Fernandes, Nuno. 2014. “The Impact of Sovereign Wealth Funds on Corporate Value and Performance”. *Journal of Applied Corporate Finance*, 26(1), pages 76–84, Winter 2014 - Wiley Online Library.

The last few years have seen a remarkable increase in the participation of sovereign wealth funds (SWFs) in global capital markets. In this article, the author draws on a unique dataset of SWF interna-

tional holdings—one that dates back to the year 2002 and includes individual SWF holdings in more than 8,000 companies in 58 countries—to provide evidence of the impact of SWFs on corporate values and operating performance. Contrary to claims that SWFs expropriate minority investors and pursue political agendas, the main finding of the author’s study is that SWF ownership is associated with positive changes in both corporate market values and operating returns. In support of these findings, the author also identifies three important ways that SWFs work to increase the performance and value of the companies they invest in: (1) as long-term holders that provide a stable source of financing; (2) as representatives of deep pools of international capital in search of global diversification opportunities that are likely to provide companies with a lower-cost (as well as more “patient”) source of equity capital; and (3) as politically well-connected strategic investors that enable their companies to leverage important connections when accessing new product markets.

Bertoni, Fabio, and Lugo, Stefano. 2014. “The effect of sovereign wealth funds on the credit risk of their portfolio companies”. *Journal of Corporate Finance*, August 2014, Vol. 27:21-35.

We study how sovereign wealth fund (SWF) investments affect the credit risk of target companies as measured by the change in their credit default swap (CDS) spreads around the investment announcement. We find that the CDS spread of target companies decreases, on average, following an SWF investment. The reduction in the CDS spread is higher when the SWF is established by a politically

stable non-democratic country that has a neutral political relationship with the host country of the target company. Our results suggest that creditors expect SWFs to protect target companies from bankruptcy when it is in the interest of their home country to build political goodwill in the host country of the company.

Transparency, Legal and Political Issues

Gilligan, George, O'Brien, Justin, and Bowman, Megan. 2014. "Sovereign Wealth Funds: The Good Guy Investment Actors?". CIFR Paper, 2014.

Sovereign wealth funds (SWFs) have been portrayed in some quarters as potential bad guys in global financial markets due to their supposed political as opposed to commercial intentions and influence. However, two key international developments during and since the 2008/2009 Global Financial Crisis have prompted some abatement in the hostility and mistrust displayed towards SWFs. First, SWFs provide substantial and growing sources of much-needed liquidity in global capital markets. Secondly, the Generally Agreed Principles and Practices – GAPP (The Santiago Principles) were created in 2008, which are a multilateral initiative to directly address governance issues associated with SWFs. Thus, SWFs have become a more accepted element of global financial markets and more is now known about how they operate and where their investment priorities tend to lie. However, there is still much to learn about the important roles that SWFs are likely to play in global markets, particularly how they may con-

tribute to the public good. Accordingly, this article considers the good guy potential of SWFs by elucidating how SWFs may not only be a facilitative economic mechanism but also an important tool for societal benefit. In so doing, this article focuses on the role that they might play in domestic investment in order to stimulate the growth of social capital and nation building in their home country, as well as progress made by SWFs themselves to improving their standards and processes of governance.

Sun, Xiaolei, Li, Jianping, Wang, Yongfeng and Clark., Woodrow W. 2014. "China's Sovereign Wealth Fund Investments in overseas energy: The energy security perspective". *Energy Policy - Elsevier*, Volume 65, February 2014, Pages 654–661.

Sovereign Wealth Funds (SWFs) are state-owned investment funds that invest in real and financial assets. Since the global financial crisis in 2008, SWFs' investments have resulted in national security concerns of host countries because SWFs continue to expand rapidly and have become increasingly active in real-time strategic transactions. Given this background, China, which has the biggest SWF in the world, is facing severe challenges of energy resources shortages while its plan is to accomplish social and economic development goals. Energy security is a key driving force of the energy investment policy of China's SWFs. This makes the SWF investments more complicated and more politically sensitive. The combination of sovereign rights and the strategic importance of energy also makes geopolitics more complicated and brings more uncertainty to SWF investments. This article

explores the relationship between energy security and energy investments of China's SWFs. It is recognized that the energy investment of SWFs must follow a sustainable path to coordinate energy security, economic growth, return on investment and national security concerns. Government policymakers are urged to balance the financial and political returns on SWFs against potential negative effects. The conclusion presents insights for policymakers, energy scholars and SWF researchers.

Bagnall, Allie E., and Truman, Edwin M.. 2014. "IFSWF Report on Compliance with the Santiago Principles: Admirable but Flawed Transparency". Number PB 11-14, Peter G. Peterson Institute for International Economics

On July 7, 2011 the International Forum of Sovereign Wealth Funds (IFSWF) released a report on IFSWF Members' Experience in the Application of the Santiago Principles. The report is a self-assessment of the voluntary compliance of 21 member sovereign wealth funds (SWFs) with the Generally Accepted Principles and Practices of SWFs, issued in October 2008. We commend the IFSWF for undertaking the surveys on which the report is based, for the later decision to publish the results, and for the detail included in the report. However, as with many self-assessments, the report has some flaws. The principal flaw is that the characterization of the extent of compliance with the Santiago Principles is exaggerated. The IFSWF report says that 95 percent (404 of 426 responses) of members' practices are fully or partially consistent with the Santiago Principles. But the number of potential responses is 504–24 principles for 21 funds.

Kratsas, Georges and Truby, Jon. 2015. "Regulating Sovereign Wealth Funds to Avoid Investment Protectionism". Journal of Financial Regulation, 2015, 00, 1–40.

Chinese and Emirati purchases of US companies have collapsed because of suspicions that their Sovereign Wealth Fund (SWF) status is a disguise for political ambitions. SWFs have grown in size and number, drawing the attention of many government officials because of their non-transparent nature and expansionary investment policies. Their government-controlled status and non-transparent nature have raised fears among governments of political rather than economic investment motivations. SWFs may use their economic influence to obtain critical information, transfer jobs abroad, or compromise the operation of strategically important companies. Such concerns have led to proposals for national measures to regulate investments of foreign SWFs with a view to controlling their economic and security impact. This article questions whether the existence of SWFs justifies the adoption a particular set of national or international foreign investment regulations. It offers an assessment of competing models from the viewpoint of theory, costs, and implementation. It also examines the alternative model of international self-regulation.

Appendix

Methodology

Our research methodology focuses on two main objectives: comprehensiveness of research and accuracy of information. To ensure comprehensiveness, we survey multiple sources, primarily relying on established business and financial databases but employing also press releases, published news, fund annual reports and many other data sources. To ensure accuracy, we follow a strict process for capturing deal information and we establish a clear hierarchy of sources, based on our estimate of reliability:

- 1 Financial transaction databases: Bloomberg, Thomson One, Zephyr (we have also used Datamonitor and Dealogic in the past).
- 2 Database for target firm information: DataStream.
- 3 Sovereign Fund disclosures, including annual reports, press releases and other information contained on their websites.
- 4 Target and vendor company disclosures: press releases and other information contained on their websites.
- 5 Regulatory disclosures: stock exchange filings for publicly listed companies; Regulators; SEC 13D and 13G Filings; Land Registries; Competition Commissions, and Bond/IPO prospectuses etc.
- 6 Service provider disclosures: such as lawyers, investment banks, and project financiers working with the SWFs.
- 7 Information aggregators: LexisNexis and Factiva. Those include news reported by newswires (Dow Jones, Reuters, Business Wire, Associated Press and others) and national news agencies (KUNA, Xinhua, WAM etc.) numerous well-regarded selected newspapers (e.g. *The Wall Street Journal*, *Financial Times*, *New York Times*), and their regional equivalents (e.g. *Economic Times*, *China Daily*, *The National*), and the local trade press.
- 8 Other websites, including Zawya.com, Google Finance, Yahoo! Finance, AME Info, BBC News and others. Most of the deals are amassed and consolidated from the financial transaction databases, while the other sources are mostly used for corroboration where necessary. At least one high-quality source is captured for each data point, and, where possible, multiple sources are identified. News items from information aggregators such as LexisNexis are carefully examined to ascertain the reliability of the original source.

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