Sovereign INVESTMENT LAB

# Follow the Money

## SOVEREIGN WEALTH FUND ANNUAL REPORT 2011

Università Commerciale Luigi Bocconi

Paolo Baffi Centre on Central Banking and Financial Regulation

**Sovereign**
INVESTMENT LAB

The Sovereign Investment Lab is a group of researchers brought together in the Paolo Baffi Centre of Central Banking and Financial Regulation at Università Commerciale Luigi 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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# Contents


**1** From the Editors

**5** Sovereign Wealth Funds in the Sovereign Investment Landscape

**11** SWF Investment in 2011

11 Activity
12 Sectors
16 Geography
20 Funds

**25** Articles

25 Long Term Tail Risks in Sovereign Wealth and Reserve Management
*Andrew Rozanov*

29 Direct Investments by Sovereign Wealth Funds: A practitioner's view
*Georges Sudarskis*

35 Taming Leviathan: Towards a Regulatory Framework for Sovereign Wealth Funds
*Victoria Barbary, Bernardo Bortolotti*

41 A Brave New World For Sovereign Wealth Funds
*Nasser Saidi*

**45** Appendix

45 Spotlight on Research
52 Methodology

In a volatile economic environment, SWFs are looking for long-term assets with sustainable income streams. Infrastructure, such as electricity distribution has been attractive.

# From the Editors

Although sovereign investors have been on the radar for some years now, they continue to be one of the most important, and yet, least understood investors in the global landscape. Since the financial crisis of 2008, governments throughout the developed world have been forced to intervene in their domestic markets, becoming the lenders of last resort. From bailouts of UK banks and the US auto industry, quantitative easing, to the EU bailouts of Ireland and Greece, and stricter regulation of banks under the Basel III regime, Western governments are taking a role in the global economy not seen since the rolling back of the state in the 1980s.

A similar trend is occurring in several emerging countries, where national wealth is rapidly accumulating at extraordinary rates thanks to persistent surpluses from natural resource rents and trade. The wealth captured in sovereign investment vehicles is invested both in their domestic economies to encourage development and in global companies to diversify their wealth and preserve it for future generations.

The rise of sovereign investment across the globe is thus a sign of weakness in some countries (mostly in advanced economies), and in others of emerging economic power and sustained growth.

It is hard to say whether we are observing a convergence of models, with politicians in the crisis-hit advanced economies attempting to rein in the destructive forces of financial capitalism, and politicians in emerging countries experiencing free markets for the economic advancement of their economy. At any rate, sovereign investors are here to stay for the moment. There does not appear to be a rapid retrenchment of the state in crisis-hit countries, while Canada, Australia, New Zealand, and some Nordic countries such as Norway and Sweden have already embraced state capitalism with their large state pension and pension reserve funds already investing in international equity and debt markets, as well as in alternatives worldwide.

This new trend gives rise to questions about the costs and benefits of sovereign investment, such as their ability to invest for the long-term, as against the potential for the investment to carry higher political risk, and the corporate governance role of these new actors. It also asks questions about maintaining free movement of capital if large swathes on investment are flowing to advanced countries from less established democracies, and how these trends will affect global imbalances, global financial architectures, and the new geopolitical order. This is the ambitious research agenda of the Sovereign Investment Lab.

This report aims to provide a real insight into the investment behaviour of sovereign wealth funds in 2011 using our world-leading database of direct investments by a group of thirty sovereign funds. Our analysis aims to bring academic rigour and insight to financial professionals, taking insights gained from our data and making them accessible and relevant to the strategy decisions of asset managers, and investment bankers, as well as other professions that serve sovereign funds. To propose answers to some of the most pressing questions surround SWFs, we have brought together contributions from some leading academics and practitioners in the field: Andrew Rozanov, Georges Sudarkis and Nasser Saidi.

We would like to thank the whole team at the Sovereign Investment Lab: Veljko Fotak, William Megginson and Laura Pelizzola for their help in compiling the data and adding to the analysis of the report.

SWF had a vibrant 2011, despite deep mounting uncertainties and a fragile outlook especially in the eurozone. The main facts can be summarised as follows.

» **Increasing Sovereign Fund Investment Activity:** In 2011, SWFs completed 237 publicly reported, direct investments, with a reported value of $80.9 billion. This is the highest annual volume of reported deals we have recorded and represents nearly $34 billion (42 percent) more than the value of the investments we recorded in 2010.

» **Global Financial Crisis is still weighing heavily on SWF balance sheets:** financial services remained the most significant sector for sovereign fund investment in 2011, accounting for a quarter (59) of publicly reported investments made by SWFs and 43 percent of total expenditure ($35.2 billion). But this was largely the result of the continuing need to recapitalise domestic banks and continue to support those they bailed out in 2008.

» **Portfolio Diversification:** Our sovereign funds looked to diversify their portfolios across sector and geographies in 2011, with energy commodities and infrastructure accounting for a substantial proportion of investment: hydrocarbons (25 investments, $13.2 billion); and infrastructure (29 investments, $6.5 billion).

» **Safe Haven Assets:** Sovereign wealth funds sought safe-haven assets, such as London and New York real estate, and utilities in developed markets.

» **Developed Market Risk, Emerging Market Exposure:** A major trend in 2011 was sovereign funds purchasing underpriced companies in Europe for exposure to their businesses in emerging markets.

» **The "Old Boys" are rebalancing:** Despite being some of the most experienced investors, with the Abu Dhabi Investment Authority and the Kuwait Investment Authority have changed their investment patterns to apparently go overweight in infrastructure and emerging markets.

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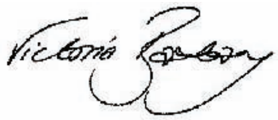

VICTORIA BARBARY, *Senior Researcher*
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DOHA FROM THE AIR

The Qatar Investment Authority is one of many sovereign funds that has a dual purpose.

*Sovereign wealth funds are only one of a range of state-owned investment vehicles.*

# Sovereign Wealth Funds in the Sovereign Investment Landscape

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 behaviour. 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, Iran, or Botswana choose to establish stabilisation funds to protect their currencies against excess volatility. Others like India, 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.

Budget surpluses generally come from one of three primary sources. The most obvious is income from natural resource rents. This has tended to be hydrocarbon wealth (particularly in the Middle East), but other natural resources such as precious stones, metals, minerals, and "rare-earth" ores, even forestry might also form the basis for a sovereign investment vehicle. The second source of sovereign fund capital is excess reserves built up from persistent trade surpluses, funds built on these foundations include the China Investment Corporation (CIC) and the Government of Singapore Investment Corporation (GIC). Finally, sovereign investment vehicles may be formed from government holdings in government-linked companies, for example, Singapore's Temasek Holdings, Malaysia's Khazanah Nasional, and the Bahrain Mumtalakat Holding Company.

Since the purpose of each fund is defined by its country's unique macroeconomic requirements, sovereign investment vehicles have immensely diverse investment strategies, behaviour, and asset allocation. That said, if we examine their portfolios, they can be loosely grouped into six buckets along a spectrum of financial risk from central banks (which hold the most-liquid and lowest-risk assets) to state-owned enterprises (which have the riskiest and most-illiquid assets).

## Central Bank and Foreign Exchange Funds

Central bank and foreign exchange funds are used for currency stabilisation and to control inflation; they are thus are highly liquid and managed by the central bank or finance ministry. For example, the Saudi Arabian Monetary Agency (SAMA) has assets of $574.4 billion, nearly 70 percent of which are invested in foreign securities, with the remainder in cash and gold.[1] Some funds, including SAMA and China's State Administration of Foreign Exchange (SAFE), may have riskier investment operations, but these departments only account for a tiny proportion of their funds and primarily are used as a hedge against currency fluctuations.

## Stabilisation Funds

Stabilisation funds, such as Chile's Economic and Social Stabilization Fund, are established to be drawn on at short notice to stabilise a country's currency at times of severe macroeconomic shock. Like central bank funds, therefore, they must be invested in a manner that gives the government owner instant access, rather than maximum return. Consequently, portfolios are liquid and low-risk, consisting of sovereign debt, cash and gold, and potentially high-quality commercial debt such as that of large diversified banks. Chile's ESSF has an investment policy to hold its portfolio "exclusively as international fixed-income instruments."[2] As a result its $14.9 billion portfolio is 85 percent sovereign debt and 15 percent bank debt.[3]

1 As at 31 March 2012. Saudi Arabian Monetary Agency, Statistical Bulletin, March 2012, Table 8. http://www.sama.gov.sa/sites/samaen/ReportsStatistics/ReportsStatisticsLib/5600_S_Monthly_Bulletin_AREN.pdf (accessed 10 May 2012).

2 Economic and Social Stabilization Fund, Third Quarter Report 2009, available at http://www.minhda.cl/english/sovereign-wealth-funds/economic-and-social-stabilization-fund/quarterly-reports.html

3 As of March 2012, http://www.minhda.cl/english/sovereign-wealth-funds/economic-and-social-stabilization-fund/financial-situation/market-value.html (accessed 10 May 2012)

## Pension and Social Security Funds

The largest government pension and social security funds collectively manage around $3 trillion. These funds have the ongoing liabilities of pensions of those who have paid into the fund when they reach retirement age. The asset allocation must ensure sufficient liquidity to pay current pension liabilities, and the risk profile is managed to ensure that it can continuously meet future obligations.

Some pension funds, such as the Canada Pension Plan Investment Board, the California Public Employees' Retirement System (CalPERS), and the National Pension Service of Korea, have balanced liability and risks to enable investing in illiquid assets such as infrastructure and private equity, apparently resulting in higher-risk, more-illiquid portfolios.

## Sovereign Wealth Funds

Sovereign wealth funds are just *one* type of sovereign investment vehicle. These are the funds addressed in the body of this report and listed in Table 1 below. 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, stabilisation, or public pension funds, SWFs have no explicit liabilities – i.e., their assets are not routinely called on for stabilisation 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 including 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.[4]

4 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 by end 2011**

| COUNTRY | FUND NAME | INCEPTION YEAR | SOURCE OF FUNDS | AUM (US$BN) |
|---|---|---|---|---|
| Norway | Government Pension Fund – Global | 1990 | Commodity (Oil) | 582.9 |
| UAE/Abu Dhabi | Abu Dhabi Investment Authority | 1976 | Commodity (Oil) | 450† |
| China | China Investment Corporation | 2007 | Trade Surplus | 374.3 |
| Kuwait | Kuwait Investment Authority | 1953 | Commodity (Oil) | 296† |
| Singapore | Government of Singapore Investment Corporation | 1981 | Trade Surplus | 220† |
| Singapore | Temasek Holdings | 1974 | Government-Linked Companies | 141.6 |
| Qatar | Qatar Investment Authority | 2005 | Commodity (Oil & Gas) | 135† |
| China | National Social Security Fund | 2000 | Trade Surplus | 130* |
| Russia | National Wealth Fund | 2008 | Commodity (Oil) | 89.8 |
| Australia | Australian Future Fund | 2006 | Non-Commodity | 76.5 |
| Libya | Libyan Investment Authority | 2006 | Commodity (Oil) | 64.2 |
| Kazakhstan | Kazakhstan National Fund | 2000 | Commodity (Oil) | 52.3 |
| UAE/Abu Dhabi | International Petroleum Investment Company | 1984 | Commodity (Oil) | 49 |
| UAE/Abu Dhabi | Mubadala Development Company | 2002 | Commodity (Oil) | 48.2 |
| Republic of Korea | Korea Investment Corporation | 2005 | Trade Surplus | 45 |
| Brunei | Brunei Investment Agency | 1983 | Commodity (Oil) | 39 |
| Malaysia | Khazanah Nasional Berhard | 1993 | Government-Linked Companies | 34.1 |
| Azerbaijan | State Oil Fund of Azerbaijan (SOFAZ) | 1999 | Commodity (Oil) | 29.8 |
| Ireland | National Pension Reserve Fund | 2001 | Non-Commodity | 18.9 |
| New Zealand | New Zealand Superannuation Fund | 2001 | Non-Commodity | 15.5 |
| Bahrain | Bahrain Mumtalakat Holding Company | 2006 | Government-Linked Companies | 13.5* |
| UAE | Emirates Investment Authority | 2007 | Commodity (Oil) | 10† |
| UAE/Abu Dhabi | Abu Dhabi Investment Council | 2007 | Commodity (Oil) | 10† |
| East Timor | Timor-Leste Petroleum Fund | 2005 | Commodity (Oil & Gas) | 8.9 |
| Oman | State General Reserve Fund | 1980 | Commodity (Oil & Gas) | 8.2† |
| UAE/Ras Al Khaimah | Ras Al Khaimah (RAK) Investment Authority | 2005 | Government-Linked Companies | 2.0† |
| Vietnam | State Capital Investment Corporation | 2005 | Government-Linked Companies | 0.6 |
| Kiribati | Revenue Equalization Reserve Fund | 1956 | Commodity (Phosphates) | 0.5 |
| São Tomé & Principe | National Oil Account | 2004 | Commodity (Oil) | 0.0063 |
| Oman | Oman Investment Fund | 2006 | Commodity (Oil & Gas) | Unknown |
| | | | | |
| | | | TOTAL OIL & GAS | 1,873.31 |
| | | | TOTAL TRADE SURPLUS | 769.30 |
| | | | TOTAL OTHER | 303.20 |
| | | | **TOTAL AUM** | **2,945.81** |

* Assets at End 2010 † Estimate
Source: Sovereign Investment Lab

## The Sovereign Investment Lab's SWF Definition

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

**SWFs, specifically, are usually formed for one of three purposes.** First, and usually in the case of commodity funds, is intergenerational savings. Governments receiving large incomes from a finite natural resource often choose to invest surpluses to provide for future generations at a time when the income stream will have dried up. Two of the most notable of this type of fund are the Abu Dhabi Investment Authority (ADIA) and the Kuwait Investment Authority (KIA).

The second purpose for an SWF is to diversify national reserves. As surpluses accrue, they create inflationary and exchange-rate pressures, which may have major implications for economic development in emerging economies. Diversifying national reserves relieves these pressures, while providing superior long-term returns to traditional liquid assets such as sovereign bonds. CIC and GIC are examples of such funds.

The third purpose for an SWF – economic development – traditionally has been confined to those formed from government-linked company portfolios. Temasek and Khazanah have long invested in their domestic economies, looking to develop government-linked companies and ready them for initial public offering, or to diversify and build capacity in their home economies. Now other countries, for example, the United Arab Emirates and Vietnam, are looking to achieve the same aim, in return for a healthy profit.

The International Forum of Sovereign Wealth Funds, the official representative body of SWFs, formed in 2008 to create a voluntary code of conduct, otherwise known as the "Santiago Principles," for SWF investment behaviour. It defines an SWF thus: "Special purpose investment funds or arrangements, owned by the general government. Created by the general government for macroeconomic purposes, SWFs hold, manage, or administer assets to achieve financial objectives, and employ a set of investment strategies which include investing in foreign financial assets …"[1] This broad definition, however, encompasses a wide range of organisations from the stabilisation funds of Botswana, Chile, and Trinidad and Tobago, funds owned by sub-national governments such as the Alaska Permanent Fund, as well as traditional sovereign wealth funds such as ADIA, GIC, and CIC.

1 International Working Group of Sovereign Wealth Funds, Sovereign Wealth Funds Generally Accepted Principles and Practices "Santiago Principles", October 2008, http://www.ifswf.org/pubs/gapplist.htm (accessed 10 May 2012)

## Domestic Investment and Development Funds

Domestic investment and development funds are prevalent around the world. Some of these funds, like the French Caisse des Dépôts et Consignations or Cassa Depositi e Prestiti in Italy, are old institutions with historic mandates, while others, such as 1Malaysia Development Berhad and Kazakhstan's Samruk Kazyna, have been formed to accelerate development in emerging economies. These funds create new government-linked companies and joint ventures at home to facilitate economic development, help domestic companies, and manage government holdings in existing government-linked companies. These funds eventually may transition to international investment, like Temasek and Khazanah.

Additionally, there are funds, most notably in the United States, that are owned by subnational governments and invested for specific purposes. In addition to Alaska's Permanent Fund, Louisiana has $4.5 billion invested in a series of "trust funds," Oklahoma has $5 billion invested in "non-pension state funds," and Texas has tens of billions in the Permanent Schools Fund and the Permanent University Fund. Each of these funds has a specific state-level funding objective that will aid the economy or society of the state in the future.

*Some sovereign funds are hybrids, and have more than one mandate.*

## State-Owned Enterprises

State-owned enterprises (SOEs), government-linked companies, parastatals, there are any number of terms for companies owned by the government that often undertake operations in infrastructure and strategically important sectors. The highest-profile SOEs in recent years have been national oil companies from emerging markets, such as Saudi Aramco, Russia's Gazprom, CNPC of China, NIOC of Iran, Venezuela's PDVSA, Brazil's Petrobras, and Petronas of Malaysia, which have been dubbed the "new seven sisters" and dominate world oil production. SOEs are frequently confused with sovereign funds. Indeed, attempted purchases by two SOEs in the United States first brought emerging market sovereign funds to the world's attention: CNOOC's attempted acquisition of Unocal, and Dubai Ports World's acquisition of the Pacific & Oriental Steam Navigation Company, whose US subsidiary held operation leases ports in: Baltimore, Newark, Philadelphia, New Orleans, Houston, and Miami. SOEs often buy foreign assets, and some such as Angola's Sonangol are *de facto* SWFs with large investment portfolios, but SOEs are not always a vehicle for investing surpluses or, indeed, for generating wealth; sometimes they are loss-making and need to be cross-subsidised from other parts of the state finances.

## Hybrid Models

Some funds straddle one or more of these buckets. The most obvious of these are pension reserve funds such as Australia's Future Fund and the New Zealand Superannuation Fund. These funds are established to use budget surpluses to fund future public pension liabilities. Currently, therefore, these funds have no liabilities and invest with a risk profile of a sovereign wealth fund. However, their asset allocation and risk tolerance will alter when they start being drawn down.

Many SWFs with an economic development purpose are also hybrid models with a role that overlaps SOEs. Funds like Mumtalakat and Vietnam's State Capital Investment Corporation are active in the operations of many of the government-linked companies in which they are stakeholders. Their operations have many parallels to modern private equity firms that actively engage with portfolio companies to add post-investment value. However, as these funds exit their portfolio companies, which both Temasek and Khazanah are doing increasingly, they can increase their investments in financial assets, developing broad-based equity portfolios, and thus transition toward a reserve-diversification fund.

Other funds that have this hybrid role are those from Abu Dhabi, most obviously the Mubadala Development Company. Mubadala's mandate is to develop and diversify the economy of Abu Dhabi and it thus has extensive operations across many sectors within the emirate. However, it also has a for-profit foreign equity portfolio that it uses to support the investments it makes at home financially. It also undertakes joint ventures with international companies such as GE and Finemeccanica and has bought companies such as SR Technics (aerospace) and John Buck International (property development) for specific projects.

The Qatar Investment Authority (QIA) is also an example of a hybrid model fund. While it is known or its high-profile financial investments abroad, particularly in the United Kingdom, QIA (usually through its wholly owned subsidiary Qatari Diar, a property development and investment company) has undertaken domestic investments to develop the Qatari economy; its largest and most high-profile investment is the $24.4-billion joint venture with Deutsche Bahn to develop the country's railroad system in 2009. It also invests in agricultural land abroad for food-security purposes through Hassad Food and the Al Gharrafa Investment Company.


SINGAPORE AT NIGHT

Singapore's sovereign funds were amongst the most active SWF investors in 2011.

*In 2011, SWFs completed 237 direct investments, with a total publicly reported value of $80.9 billion.*

# SWF Investment in 2011

## Activity

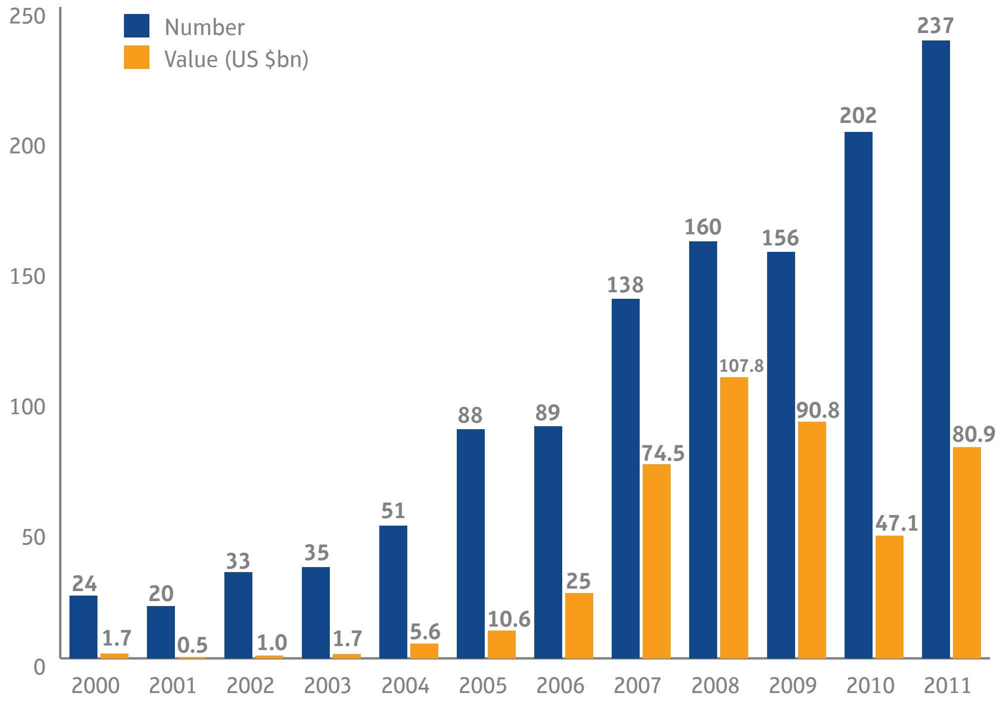
In 2011, 24 of our 31 sovereign wealth funds (SWFs) completed 237 direct investments[1], with a total publicly reported value of $80.9 billion. This is a 15 percent increase in the number of direct investments than we recorded in 2010, but a 42 percent increase in investment value from $47.1 billion in 2010. Since 2009, we have observed a marked increase in the number of investments captured on our database, which is surprising given the uncertain nature of the global economic environment in the wake of the 2008 financial crisis. Conversely, we have seen the reported value of these deals follow a more likely trend: a rise in reported value up to 2008, a fall to 2010, and an uptick in 2011.

We suspect there are a number of interlinked causes of this apparent disconnect. First, there has been a general increase in interest in and awareness of sovereign wealth funds since their ill-fated bailout of the Western banking sector in 2007-2008. Consequently, more attention is paid to their investment behaviour and thus more of their investments are widely reported. Additionally, the signing of the Santiago Principles and the formation of the International Forum of Sovereign Wealth Funds in 2008 has increased many of these funds transparency and their own reporting. This is not only evident in the transaction flow information that has been volunteered by the funds, but also in terms of portfolio, strategy and organisational information. Third, the global shortage of capital and widespread flight to safety by many institutional investors has reduced competition for deals, enabling SWFs to be successful for bids for which they might have been outcompeted during the mid-2000s bubble. Finally, during the global financial crisis, sovereign funds lost billions of dollars at the hands of asset managers. Since then, there had been a sea-change in the way that some large SWFs are managing their money, with more capital being managed in-house, which means that more transactions are observable.

As such, we would expect to be capturing more of the investments made by our SWFs since 2008, which suggests that the drop in investment value in 2009 and 2010 may be more pronounced than it may appear, and the recovery less spectacular. In short, it is worth viewing these figures with a note of caution as to the increased activity of SWFs in 2011.

1 See Table 1 on page 7

**Figure 1: Direct SWF Investments since 2000**




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

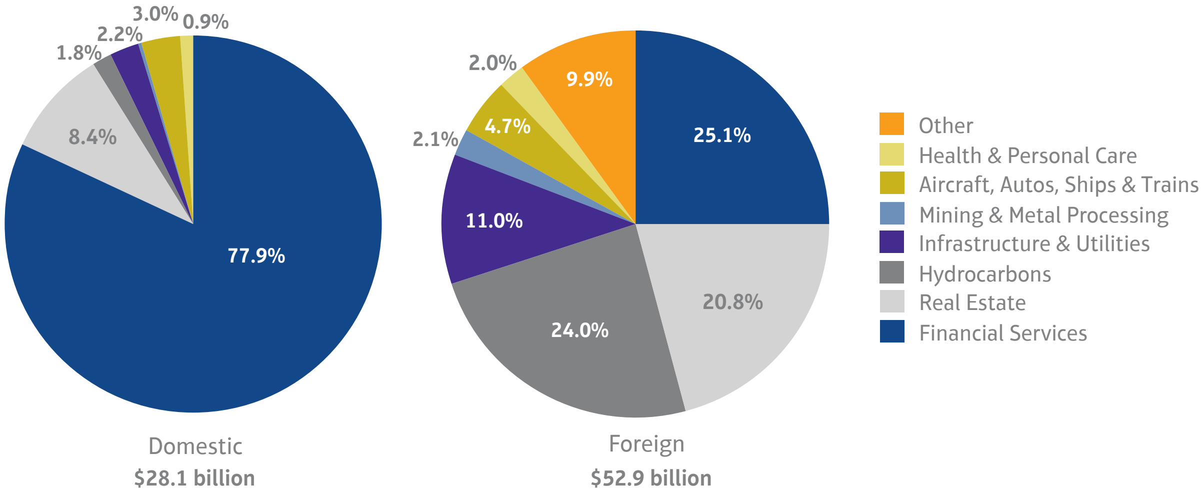
## Sectors

In 2011, financial services received more publicly reported investment from our sovereign funds than any other sector: 59 investments with a total value of $35.2 billion, 43 percent of the total direct expenditure for the year. While financial services remain an important sector for sovereign fund portfolios, this investment pattern results from continuing echoes from the 2008 financial crisis. Some sovereign funds are still being called on to inject capital into domestic banks. Ireland's National Pension Reserve Fund, the highest spending fund of the year, was required to inject $12.5 billion into Allied Irish Banks in 2011, accounting for all its direct investment activity and all domestic SWF investment in the OECD (Figure 6).

The Qatar Investment Authority also continued to be affected by the fallout from the financial crisis, spending $4.4 billion (37 percent of its total direct expenditure) in the financial services sector in 2011. $1.3 billion of this investment was due to the fulfilment of its 2008 pledges to buy more capital of four of its domestic banks – a bailout that has cost the fund over $3 billion since 2008. Its 2008 bailout of Credit Suisse also laid heavily on its balance sheet, as in February, Qatar Holding and the Olayan Group received an aggregate of approximately CHF 6 billion of Tier 1 buffer capital notes to be paid up no earlier than October 2013 for cash or in exchange for tier 1 capital notes issued in 2008.

*SWFs' investment in financial services was largely due to the recapitalisation of domestic banks.*

**Figure 2: Direct SWF Investments by Sectors in Domestic and Foreign Markets, 2011**



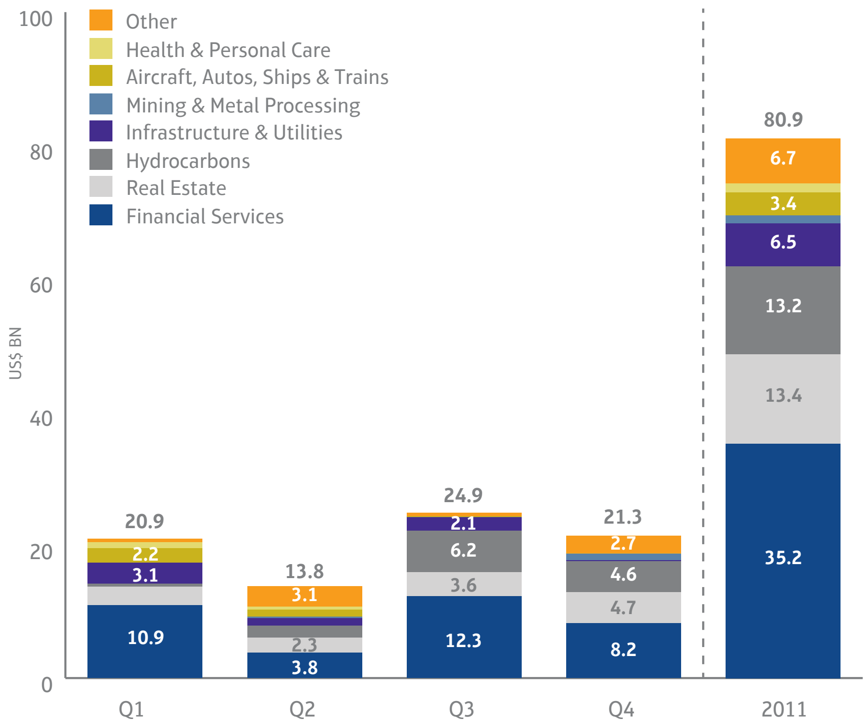

Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections.
Source: Sovereign Investment Lab, Universitá Bocconi

Such transactions serve as a reminder that investors are still contending with the consequences of the financial crisis. While some funds, notably KIA and GIC have managed to sell out of their ill-fated bailout of the Western banking system to various degrees of success, others – like Singapore's Temasek Holdings – have booked enormous losses on those investments, and further funds, like the Korea Investment Corporation are still holding stakes in banks that are worth a fraction of the purchase price.

The weight of domestic bailouts on SWFs is evident in the difference between their domestic investment behaviour and their investment patterns in foreign markets. As Figure 2 shows, in domestic markets, 80 percent of their publicly reported expenditure and 42 percent of their direct investments were in financial services. In foreign markets, while financial services were still the most significant sector for SWFs, it only accounted for 20 percent of the investments and 25 percent of the expenditure. This suggests that the overall bias towards financial services is not the result of considered strategising on the part of sovereign funds, but a domestic policy objective to recapitalise and support domestic banks in the wake of the financial crisis.

Outside of domestic bailouts, only eight out of the 23 funds that invested directly in 2011 invested in financial services. The vast majority of these investments were in emerging economies, with the two Singaporean funds focusing on China. Other SWFs' foreign investments in this sector have been spread across Asia and Africa, with the Abu Dhabi Investment Authority buying shares in India's largest gold-loan company, Muhoot Finance, and HDFC Bank, fourth largest bank in India by assets and the second largest by market capitalisation. Temasek established an investment vehicle with the Oppenheimer family to concentrate on Africa, and injected

Figure 3: Value of Direct SWF Investments by Target Sector, 2011




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

tier one capital into NIB Bank in Pakistan, of which it owns 74 percent. CIC bought a 25 percent share of South African investment group, Shanduka Group.

Another sector that has always been a mainstay for sovereign fund investment has been real estate. After several years of sovereign funds diversifying out of properties in to real estate investment trusts and other property funds, 2011 saw a return to bricks and mortar, as our SWFs looked to find inflation-proof stores of value. In particular, properties in London and New York, considered "safe havens", were popular, with KIA returning to the New York property market, and rebalancing its UK property portfolio, divesting non-core assets such as provincial shopping centres, in exchange for central London office buildings, including 1 Bunhill Row, the purchase of which was announced in December 2011. GIC has taken a slightly different route into the property market. Following a partnership with Deutsche Bank in February 2010 to provide the European property market with debt financing, GIC underwrote the junior portion of Blackstone's purchase of Chiswick Park in London in March 2011, and again financed part of Blackstone's £600 million purchase of eight Mint hotels in the United Kingdom in September.

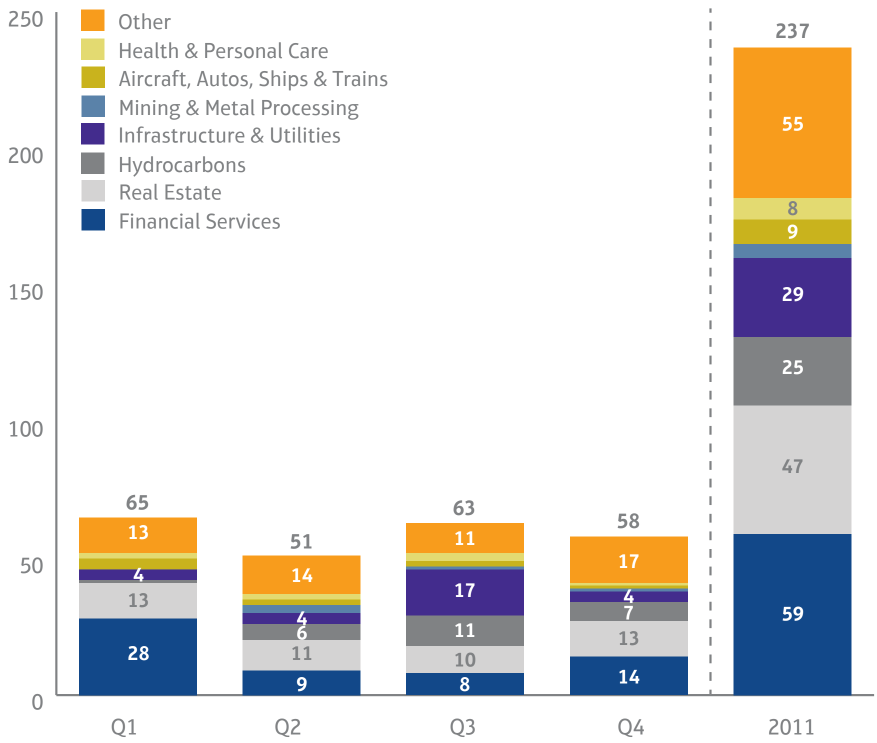
Emerging market real estate, however, has been of relatively little interest to sovereign funds. Where there has been investment, this has tended to be in

*Safe havens real estate assets were the usual SWFs' targets of choice.*

development funds, such as Morocco's Wessel Capital, which will develop sustainable tourism projects in the Kingdom, and received investment from QIA, KIA and the International Petroleum Investment Company's Aabar Investments. The exception to the rule is the Singaporean SWFs – GIC and Temasek – which have been relatively active in the Chinese property market, but again in financing new developments, rather than buying existing properties. For example, GIC Real Estate entered into a partnership with Yanlord Properties to develop a residential site in Jinnan District, Tianjin in China, in which it has invested around $240 million, while Temasek invested nearly $700 million in 65.5 percent of the Chao Tian Men development in Chongqing with CapitaLand, CapitaMalls Asia, which will which will include a shopping mall and eight towers for residential, office and hotels.

There has also been a wider interest in infrastructure, given current market volatility and a need for sovereign funds to diversify their portfolios with assets with stable, long-term income streams. Toll roads were attractive with the ADIA, China Investment Corporation, the Future Fund and New Zealand Superannuation Fund all making sizable investments in toll road operators ConnectEast and Transurban in Australia, while GIC participated in a capital increase to enable Sintonia, the Italian infrastructure holding company, to increase its share in

**Figure 4: Number of Direct SWF Investments by Target Sector, 2011**




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

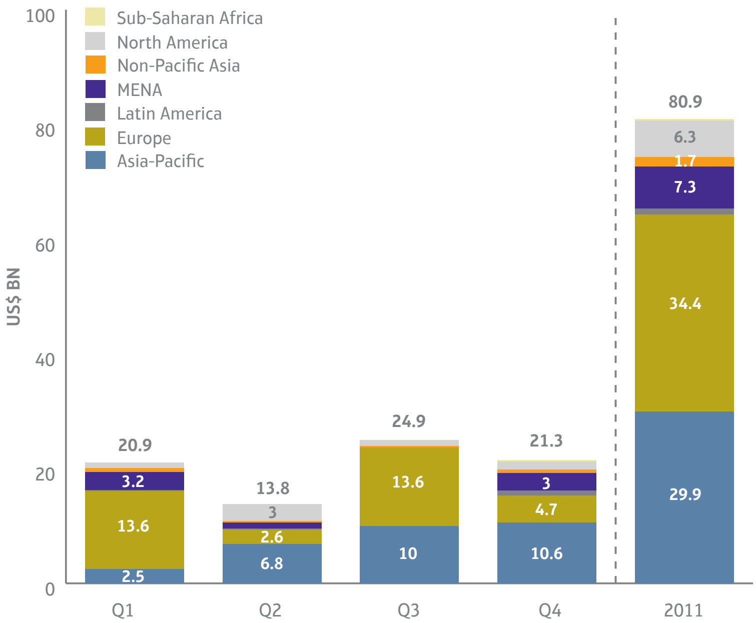
its toll-road operator, Atlantia. Utilities were also a target for sovereign funds, with power generation being a particular focus in both Europe and the United States.

For similar reasons, for many funds, particularly those from Asia whose inflows do not originate from hydrocarbon rents, commodities have become a more important part of their asset allocation strategy. Petroleum, natural gas, and coal assets have remained a focus for SWF acquisition in 2011, accounting for some of the biggest deals of the year: CIC's $4 billion investment in GDF Suez's Exploration and Production business, as well as a stake in their Trinidadian LNG Liquefaction plant; IPIC's $5 billion purchase of Spain's CEPSA; and Temasek's $1 billion investment in US shale gas producer FracTech Holdings, which it undertook in a consortium with the Korea Investment Corporation, the Canada Pension Plan Investment Board and RRJ Capital in February. In a notable change from 2010, however, mining and metals, which had been notable, appeared to be a less attractive target for direct investment. It may be that SWFs, wary of a bubble, have chosen to gain exposure in other ways that have a greater exposure to a range of commodities, rather than making substantial individual bets. Possible examples include exposure through commodity indices, or directly by taking stakes in commodity traders, such as Glencore, which floated on the London Stock Exchange in May 2011 and attracted investments from Aabar and GIC, and Hong Kong's Noble Group, in which KIC bought a 1 percent stake in April.

## Geography

Developed markets are still receiving the greatest proportion of sovereign fund investment. The OECD

**Figure 5: Value of Direct SWF Investments by Target Region, 2011**



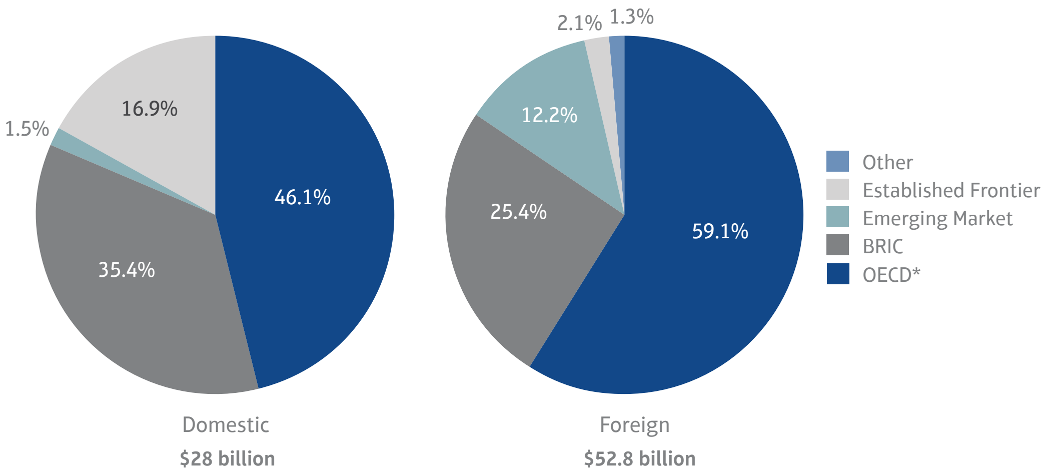

Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections.
Source: Sovereign Investment Lab, Universitá Bocconi

*SWF invested $44.2bn in OECD but that was not a vote of confidence for the developed world.*

accounted for nearly half the investments and 55 percent ($44.2 billion) of the investment value in 2011. However, while this might suggest that sovereign funds remain wary of investing in emerging markets, the headline figure obscures the fact that these investments do not represent a vote of confidence for the developed world. SWFs have invested in commodities, especially North American shale gas extraction, safe-haven assets (London and New York real estate, utilities) and looked for companies with a large presence in the emerging world. For example, QIA bought into two major Iberian utilities: Iberdrola in Spain ($2.7 billion for 6.16 percent, and a further 2.24 percent before the end of the year) and Energias de Portugal ($230 million for 0.05 percent, which brought its total holding to just over two percent). Both of these have extensive operations in Latin America, and it is likely that it was these as much as the desire for exposure to infrastructure assets or their being underpriced due to the economic environment in Spain and Portugal, that attracted Qatar to these companies. It is through this type of exposure that sovereign funds have appeared to obtain exposure to Latin America, which only accounted for $1.03 billion (1.3 percent) of the total publicly reported direct spend for the year. Indeed, Qatar Holding's investment in Iberdrola was accompanied by a memorandum of understanding to develop new business opportunities in different areas of the global power chain with a focus on high-growth and emerging markets.

Such behaviour has also been evident in QIA's bet on luxury goods retailers such as LVMH in France (1.03 percent), and Tiffany & Co. in the United States (5.02 percent), which have growing markets in China and the Middle East. In previous years, high-end manufacturing in developed markets, particularly in the automotive and aeronautics sectors, have been attractive to SWFs from the Arabian Gulf, but in 2011, little was invested in European or American manufacturing, suggesting that SWFs are not yet confident in their ability to adapt to current market

**Figure 6: Domestic and Foreign Direct SWF Investments by Target Market Type, 2011**



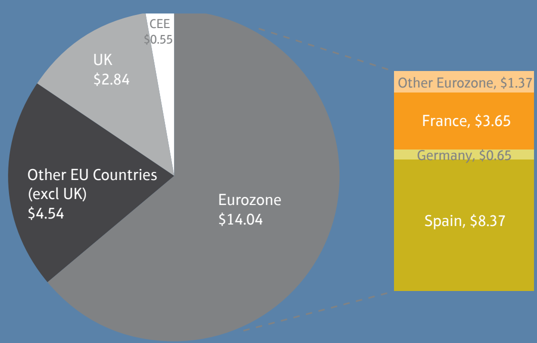

Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections.
Source: Sovereign Investment Lab, Universitá Bocconi
* Domestic OECD investments consist only of Ireland's NPRF bailout of Allied Irish Banks.

## *Quo vadis,* Europe?

SWF investments in Europe over the past two years have not been a vote of confidence for the European economy, and investment in Europe has certainly been hampered by the Eurozone's failure to come up with a credible solution to the sovereign debt crisis. SWFs have invested just under $22 billion (44 deals) in companies that extract or trade in commodities, safe-haven assets such as property in London, infrastructure (roads and water providers), and looked for European companies with a large presence in the emerging world, which provide them with emerging market exposure with the lower regulatory and political risks of the European Union. However, SWFs invested little in European manufacturing suggesting that they are not yet bullish on the region's ability to adapt to more export-orientated world and find new markets. Even high-end manufacturing, which has traditionally been a strong sector for Europe as SWFs have been seeking technology transfer to their domestic economies, received lukewarm support, with Mubadala's investment in AERnnova and Aabar's follow-on investment in Mercedes Benz Grand Prix being the only notable exceptions.

However, it may not be all doom and gloom. Several fund executives, including Scott Kalb of KIC and his successor Don Lee, as well as Jin Liqun, chairman of the Board of Supervisors of CIC, have been confident in the underlying fundamentals of the European economy, and have said they are looking at undervalued assets in the region, but emphasise the need to be cautious and to control risk amid intense market fluctuations. Moreover, in April 2012, central banks and sovereign wealth funds outside Europe which had shunned the European Financial Stability Facility credit since the end of 2011 made a strong return to the name, buying over 40 percent of the EFSF's inaugural €3 billion seven-year trade, well in excess of what they took in its five and three-year issues sold in 2012, which saw 10 percent and 18 percent go to that investor base. However, the pile-in on seven-year instruments, rather than more near-term bonds, suggests that SWFs believe that the next few years are going to be rocky ones for the Eurozone, and that the long-term prospects are more compelling than the short-to-medium term.

**Foreign SWF investment in Europe, 2011**




**Total: $21.97 billion**

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

*SWFs are increasing their exposure to emerging markets, by investing in European & US companies with large markets in Asia.*

conditions and that the quest technology transfer is becoming less important than in previous years.

Given this, SWFs appear to be more bullish on developing markets than these figures would suggest. Comparing the market allocations across direct investments from 2007 with those from 2011 shown in Table 2 below, we can see that the OECD has retained (and slightly increased) its share of investment, both in terms of number and value of investments. However, as SWF investments in 2011 have shown, there has been a change in the nature of these investments. Whereas at the height of the economic boom in 2007 SWFs were investing to take advantage of the opportunities presented by advanced economies, in 2011 SWFs were tapping returns in growth markets indirectly through developed market companies with strong demand from emerging-market consumers. This enables the funds to add companies to their portfolio that have developed market accounting and governance standards and legal protection, enabling them to take on lower corporate and legal risk, but have the yield resulting from operations and growth in emerging markets. In truth, therefore, SWFs are rebalancing their portfolios towards emerging markets more aggressively than might appear.

Gaining such exposure also enables SWFs to be more adventurous and access ostensibly higher-risk markets when they do invest directly. Table 2 also shows that, in terms of value, SWF investment within developing economies (Brazil, Russia, India and China (BRICs), emerging markets and frontier markets)[2] has become more diverse, reducing the proportion of their total investment committed to the BRICS, as the more established emerging markets (a decrease of ten percentage points), in favour of investments in other emerging markets (an increase of eight percentage points) and higher-risk frontier markets (an increase of two percentage points). This suggests

2 Emerging Markets here are those on the MSCI Emerging Markets Index, excluding Brazil, Russia, India and China. Frontier Markets are those included on the MSCI Frontier Markets Index, and Others are economies that are not included on either index and are not members of the OECD.

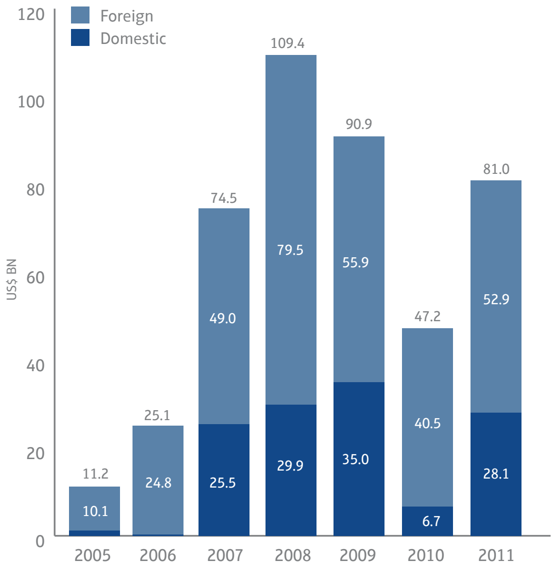
### Table 2: Direct SWF Investments by Market Type, 2007 & 2011

| | BRIC | EMERGING MARKETS | FRONTIER MARKETS | OTHERS | OECD |
|---|---|---|---|---|---|
| **Number 2007** | 28.57% | 6.43% | 12.14% | 8.57% | 44.29% |
| **2011** | 30.17% | 9.05% | 11.64% | 2.16% | 46.98% |
| | | | | | |
| **Value ($) 2007** | 39.82% | 0.22% | 3.94% | 1.21% | 54.81% |
| **2011** | 29.25% | 8.54% | 6.21% | 0.83% | 55.18% |

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

that these SWFs are seeking to access opportunities in a wider range of developing markets as they build relationships and become more accustomed to doing business there. For example, QIA's Indonesian joint venture took over 18 months to develop from the memorandum of understanding being signed to the funds being committed by Qatar Holding.

**Figure 7: SWF investment in Domestic and Foreign Markets, 2005-2011**



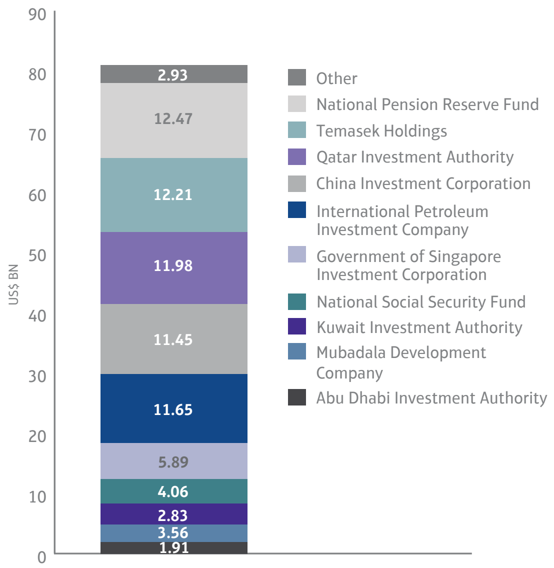

Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections.
Source: Sovereign Investment Lab, Universitá Bocconi

This trend also shows that Middle Eastern SWFs have not been immune to pressures from the unrest in the region during 2011, which have encouraged greater domestic public spending. As figure 7 shows, from 2007, the domestic spending of SWFs was around 35 percent of total investment value. In 2010, this declined dramatically to only 14 percent ($6.7 billion), as SWFs retrenched abroad, and particularly at home. However, in 2011, domestic spending by these SWFs returned to previous levels: $28 billion, 34.7 percent of their total expenditure for the year. This is partly explains the uptick in investment in frontier markets, which include Bahrain, Oman, Qatar and the UAE.

## Funds

In terms of individual funds, those that have historically undertaken much of their investment directly have continued to do so, with QIA ($11.98 billion, 26 investments), CIC ($11.65 billion, 33 investments), and the two Singaporean funds, Temasek ($12.21 billion, 38 investments) and GIC ($5.89 billion, 45 investments) being the most active. However, the usual suspects were out-gunned in spending terms, by Ireland's NPRF whose bank bailout topped the big spenders chart, and IPIC, whose $5 billion purchase of Spain's CEPSA bolstered its direct spending for the year to $11.45 billion over 13 investments.

**Figure 8: Value of Direct Investments by Top Spending SWFs, 2011**

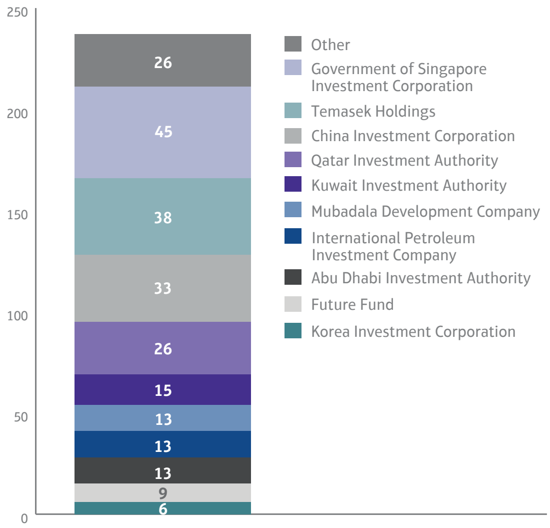



Publicly available data for direct SWF equity & real estate deals, joint ventures and capital injections.
Source: Sovereign Investment Lab, Universitá Bocconi

*Asian and Middle Eastern SWFs continue to exhibit different investment preferences.*

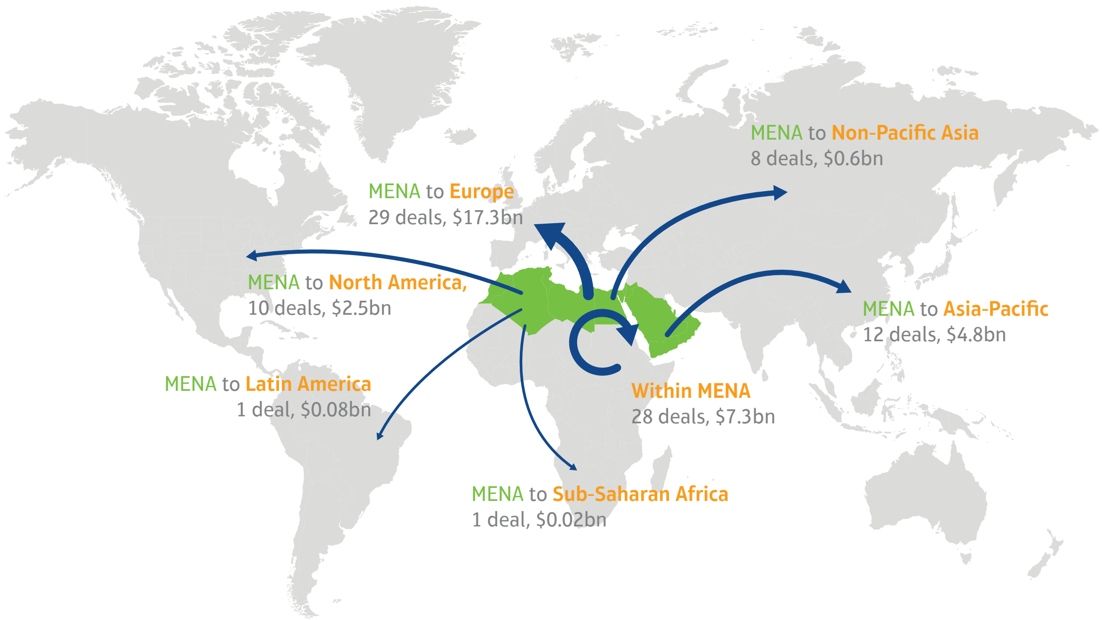
However, further towards the bottom of the charts we've seen some interesting changes in investment patterns, particularly the Abu Dhabi Investment Authority and the Kuwait Investment Authority, who have traditionally undertaken most of their investing through asset managers and thus under our radar. However, this year as both funds have looked to rebalance their portfolios and be more active in both infrastructure and real estate, both have come onto bottom of the big investors and big spenders charts. In 2011, ADIA invested directly across real estate and infrastructure sectors worldwide, investing in assets including Australian toll roads, Indian steel makers, British water utilities, a fund targeting Chinese infrastructure assets and American property. Given that these are the only areas in which the fund invests directly, increased activity in these sectors suggests that it is going overweight in these sectors in comparison to its longstanding benchmark. A similar phenomenon is apparent at KIA, which has been active in real estate both in the UK and the US, and has also been bullish on commodities, investing in Kerogen's Capital Energy Fund and the Mitsui Mining and Smelting Company. More interestingly, perhaps, through its subsidiary the National Technology Enterprises Company, it has invested in technology and healthcare companies in the United Arab Emirates and Germany, seeking to bring technology transfer to Kuwait's highly oil-dependent economy.

**Figure 9: Number of Direct Investments by Top Spending SWFs, 2011**




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

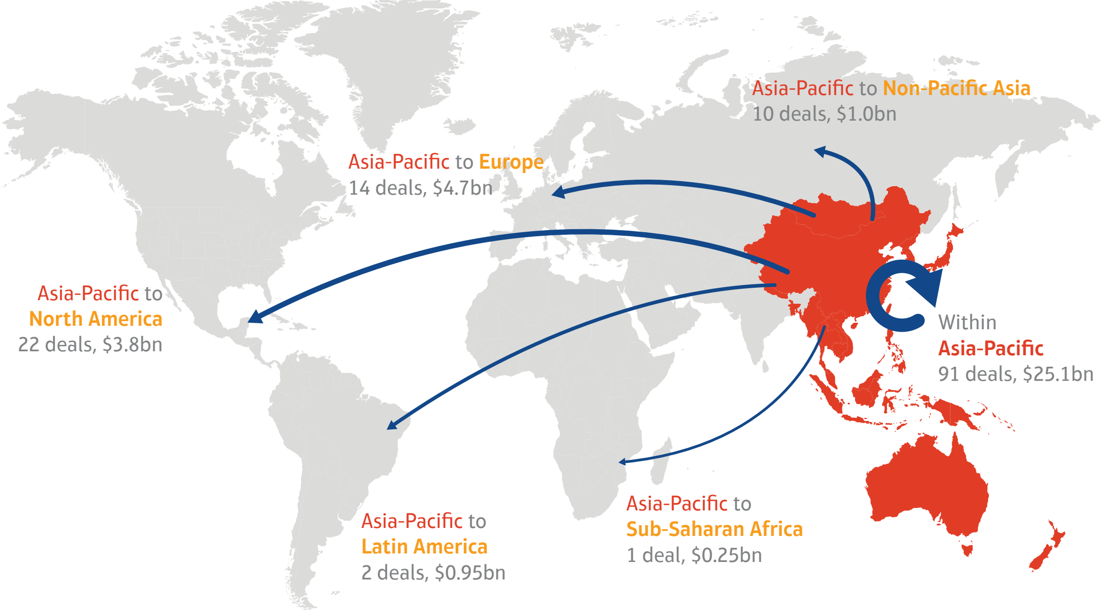
**Figure 10: Investment Flows from Middle East & North Africa SWFs 2011**




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

Continuing a theme from 2010, in 2011 there was a real division between the investment behaviour of Asian and Middle Eastern SWFs in developed markets: Asian funds favoured North America; Middle Eastern funds, Europe. This is an interesting division as it brings into sharp relief the political and historical aspects of SWF direct investment. Middle Eastern SWFs appear to be more inclined to invest in Europe for two reasons. First, it is likely that they perceive fewer political barriers to investment: the Dubai Ports World incident and the following aggressive American discourse against SWFs up to 2008 still casts a long shadow, as does residual popular anti-Muslim sentiment in the wake of the War on Terror, which makes large direct investments in the United States more difficult for them to execute. Second, many of the Middle Eastern elite are more familiar with the establishment in Europe, many having been educated in the UK or France and the older funds such as KIA and ADIA have long histories of investing in the established financial centres of the City of London and Zurich. While this last also holds true for Asian elites, they are less affected by the political barriers to investment in North America, and as they are seeking portfolio diversification in commodities, the North American shale gas story appears to be an attractive one for them.

## Figure 11: Investment Flows from Asia-Pacific SWFs 2011




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

## Table 3: Direct Sovereign Wealth Fund Investments of over $1 billion, 2011

| FUND | TARGET NAME | TARGET COUNTRY | SECTOR | VALUE |
|---|---|---|---|---|
| National Pension Reserve Fund | Allied Irish Banks PLC | Ireland | Financial Services | $7.26 bn |
| National Pension Reserve Fund | Allied Irish Banks PLC | Ireland | Financial Services | $5.21 bn |
| International Petroleum Investment Company | Compañía Española de Petróleos, S.A. (CEPSA) | Spain | Petroleum & Natural Gas | $4.96 bn |
| China Investment Corporation | GDF Suez Exploration & Production SA | France | Petroleum & Natural Gas | $3.26 bn |
| China Investment Corporation | China Export and Credit Insurance Corporation | China | Financial Services | $3.15 bn |
| Qatar Investment Authority | Credit Suisse AG | Switzerland | Financial Services | $3.1 bn |
| Temasek Holdings | China Construction Bank Ltd | China | Financial Services | $2.8 bn |
| Qatar Investment Authority | Iberdrola SA | Spain | Utilities | $2.7 bn |
| Temasek Holdings | Festival Walk Mall, Hong Kong | China | Real Estate | $2.4 bn |
| Temasek Holdings | China Construction Bank Ltd | China | Financial Services | $2.2 bn |
| International Petroleum Investment Company | RHB Capital Bhd | Malaysia | Financial Services | $1.9 bn |
| China Investment Corporation | China Construction Bank Ltd | China | Financial Services | $1.75 bn |
| International Petroleum Investment Company | Mercedes-Benz Grand Prix Ltd | UK | Automotive | $1.7 bn |


KHAN EL-KHALILI SOUK

Like this bazaar in Cairo, the financial markets are full of unseen opportunities and risks for participants.

# Articles

## Long Term Tail Risks in Sovereign Wealth and Reserve Management

*Andrew Rozanov, Permal Group*[1]

Sovereign wealth and reserve managers face many of the same issues and challenges that are confronted by their private sector peers. One of the latest concerns preoccupying many asset owners around the world are the so-called "tail risks": low-probability, high-impact events that can have large detrimental effects on investment portfolios. The global economic and financial crisis of 2007-09 severely tested the naive diversification approach that many investors had taken for granted, forcing a major rethink of asset allocation and risk management practices. The exogenous shocks of 2011 – the Arab Spring, natural catastrophes in Japan, and dysfunctional politics in the US and the eurozone – provided additional ammunition to proponents of explicit left tail risk mitigation. Investment banks and hedge fund managers were quick to respond by developing and offering a wide variety of specialist tail-risk hedging solutions, which they have been marketing aggressively to asset owners, including SWFs and other long-term investors.

While some of these new products and techniques can make sense for some investors some of the time, they are certainly not a universal one-size-fits-all solution and do not take into account the unique circumstances of all institutions. This is especially true in the case of SWFs and large reserve managers: as cash-rich, unleveraged, and largely unconstrained investors with very long time horizons, these asset owners represent 'patient money' – one of their key comparative advantages is precisely their ability to weather interim shocks, heightened volatility and a lack of liquidity. These institutions are in the business of harvesting long-term risk premia by exposing their wealth to corresponding risk factors, not least the larger and more-frequent-than-expected tail risk. In fact, compared to the more capital-constrained, leveraged and short-term-oriented investment banks and hedge funds, SWFs are much better positioned to sell tail risk insurance: the difference in their counterparty credit risk alone should make them protection providers of choice for many market participants.

1 The views and opinions expressed in this paper are those of the author through 26 April 2012. They do not represent the views and opinions of Permal Group or any of its affiliates.

> *Tail risks that are long-term, uncompensated, and unhedgeable in capital markets are the greatest threat to SWF portfolios.*

However, this does not mean that long-term investors are totally immune to the dangers associated with tail-risk events. It just means that the real threat to their portfolios comes from a very different kind of tail risk – namely, tail risks that are *long-term, uncompensated,* and *unhedgeable* in traditional capital markets. In this article we discuss three of these long-term tail risks and suggest some possible ways of mitigating them.

## THE RISK OF "LOST DECADES" AHEAD

The first long-term tail risk is the non-zero probability that the world may have entered a multi-decade Japan-style deflationary environment, potentially leading to perennially slow growth, high volatility, and lower living standards.

In this scenario, traditional institutional portfolios, which are typically equity-centric and strongly biased to growth and risk assets, will be seriously challenged. An investor in the Nikkei 225 index in December 1989 would still be nursing a 75 percent nominal loss today – after more than 22 years! Similarly, it took an investor in the Dow Jones Industrial Average three decades to fully recover in real terms the losses incurred post-September 1929. Neither of these two examples bodes well for today's passive investors in equity indices: the *real* tail risk here is not portfolio exposure to heightened short-term volatility and large interim losses, but failing to accrue sufficient equity risk premia over the relevant time horizon. While in standard financial theory the *probability* of such an outcome decreases over time, the *magnitude* of potential loss increases with time – hence the low-probability, high-impact nature of the risk.

While this risk is not directly hedgeable in traditional capital markets, investors need not despair: there are several ways in which they can try to mitigate it over time. First, they can look to alternative approaches to asset allocation. For example, they can consider switching from naive asset class-based weights to risk factor-based weights, with risk parity being one of the more popular among such approaches. Alternatively, they can switch from making static, passive allocations to being much more dynamic and active in their top-down decisions, thus capitalising on the time-varying nature of various risk premia.

Secondly, investors can change the way they structure and manage their equity allocations. For example, a small number of highly sophisticated institutional investors have already started reallocating a portion of their traditional equity portfolios to short volatility programmes. Others are considering becoming much more active and value-driven in their approach, taking their cue from successful equity-centric investors like John Maynard Keynes and Warren Buffett who achieved phenomenal success in some of the most difficult times for the average equity investor.

Finally, if there is a particularly high level of uncertainty about the strategic direction of the global economy and financial markets, it may be advisable – even for long-term institutional investors – to temporarily increase their allocations to shorter term tactical trading, using some form of global macro investing to help preserve capital and add incremental return.

## THE RISK OF NEGATIVE EXTERNALITIES

The second long-term tail risk has to do with 'extra-financial' negative externalities that are increasingly aggregated under the rubric of *ESG*: environmental, social and governance risks. As large universal owners with very long investment horizons, SWFs and other long-term investors increasingly realise that their portfolios may be vulnerable to sudden shocks and discontinuities in how financial markets price such "extra-financial" risks.

The scandals at Enron, WorldCom and Parmalat showed just how dangerous it can be to ignore good corporate governance and to remain a totally passive investor. Investors with meaningful ownership stakes in public companies are increasingly aware of the risks that come from ignoring legitimate interests of other stakeholders (e.g. employees, suppliers, regulators and local communities). Developments in the tobacco and asbestos industries clearly demonstrated how a previously ignored long-term risk can come back to haunt shareholders and lead to massive financial losses.

While there is still no consensus in the industry on exactly how these long-term ESG risks should be incorporated in day-to-day investment activity, at least there is an increasing awareness of these issues among large asset owners. More and more long-term investors are beginning to practice active ownership; more and more institutions are signing up to ESG best practices, either in the form of the United Nations Global Compact or the United Nations Principles for Responsible Investment. While the ultimate solution may still be eluding them, at least asset owners are increasingly aware of the risks and are prepared to work together to address them.

One specific proposal on how SWFs could up their game in corporate governance, put forward by this author back in 2008, focused on their potential collaboration with short-term shareholder activist hedge funds. We already saw some high-profile examples of long-term investors doing precisely that: in 2011 the Ontario Teachers' Pension Plan officially teamed up with JANA, an activist hedge fund, to push for changes at McGraw-Hill, a large New York-based media firm.

## THE RISK OF MAJOR POLICY DISCONTINUITIES

The third long-term tail risk, which is particularly relevant to sovereign wealth and reserve managers, is the threat of major policy discontinuities that can arise in reserve currency countries due to strong domestic political pressures or national security and geopolitical concerns. There are two dimensions to this risk: (a) currency and (b) productive real assets. On the first dimension, SWF and central bank reserve portfolios tend to be heavily skewed towards the five main reserve currencies – USD, EUR, JPY, GBP and CHF. Of these, two currencies – EUR and GBP – have a non-zero probability of ceasing to exist in their current form in the foreseeable future: the breakup of the Eurozone and cessation of Scotland are still very low-probability, but potentially very high-impact events. JPY and CHF may not face similar existential threats, but from the point of view of a long-term investor, the balance of risks in their respective government bond markets is definitely skewed to the downside, while the ability to acquire productive real assets in local markets in meaningful size is quite limited. This leaves the USD as the only realistic reserve currency alternative, which brings us to the second dimension.

Recent efforts by SWFs and some reserve managers to diversify away from US Treasuries into equities, commodities, infrastructure and other productive real assets have on occasion met with psychological and political resistance in recipient countries. This is driven by internal political pressures as well as geopolitical and national security concerns. While negative attitudes and suspicions may have been dialled down during the recent financial crisis, they haven't gone away completely. If anything, the political and national security component of the US policy response to foreign government investors may have become stronger. Consider the following three developments.

» In February 2009, Dennis C. Blair, US Director of National Intelligence, made the following statement when he presented the Annual Threat report to the Senate Select Committee on Intelligence: *"The primary near-term security concern of the United States is the global economic crisis and its geopolitical implications."*

» In March 2009, in the top-secret Warfare Analysis Laboratory, the Pentagon organised a two-day financial war-game to simulate a concerted attack on US interests in global financial markets and to evaluate potential vulnerabilities.

» In October 2011, US Secretary of State Hillary Clinton delivered a seminal speech on 'Economic Statecraft', in which she said: *"Our great challenge is advancing our global leadership at a time when power is more often measured and exercised in economic terms... We have to position ourselves to lead in a world where security is shaped in boardrooms and on trading floors as well as on battlefields... That is why I have put what I call economic statecraft at the heart of our foreign policy agenda... We will also do more to train our diplomats to understand economics, finance, and markets... We need to be a Department where more people can read both* Foreign Affairs *and a Bloomberg Terminal."*

Of the three long-term tail risks, this particular one is the least well understood, especially by market practitioners. Yet a major policy discontinuity driven by domestic pressures and geopolitical concerns is not entirely hypothetical: in 1971 US political leadership single-handedly changed the rules of the game practically overnight by suspending dollar convertibility into gold. Perhaps in addition to their Bloomberg terminals sovereign wealth and reserve managers should consider taking out a subscription to *Foreign Affairs*.

## FINDING A SOLUTION

Finding an effective solution to mitigate this particular tail risk is not a trivial task; it will likely involve several different components. First, the SWF community can step up their efforts to develop a concerted public relations, education and lobbying campaign to help dispel myths and misconceptions about their motives and activities. The work of the International Forum of Sovereign Wealth Funds looks promising in this regard. Secondly, by finding constructive ways of opening up their own markets to foreign investment and mitigate perceived risks they can help alleviate concerns about a perceived lack of reciprocity. Russia's recent initiative to establish the Russian Direct Investment Fund (RDIF), a coinvestment vehicle to help attract more foreign direct investments into the Russian economy, may serve as a useful template. In any case, increased awareness of the risk involved and an open-minded and creative approach to mitigating them seem like the best place to start.

# Direct Investments by Sovereign Wealth Funds: A practitioner's view

*Georges Sudarskis, Sudarskis and Partners*

## INTRODUCTION

The thesis presented here can be summarised as: "direct investment by SWFs may not be the best idea". Here, direct investments are defined as direct sizeable stakes in companies, public or private. The facts and rationale for this thesis will be developed and described in this paper, but we already know the topic is eminently controversial. There is much hard-earned experience behind this thesis, but those who expect horror stories from my professional experience will be disappointed. What will be shared here is a collection of facts arising out of the various data points, and the body of academic research, as well as the behavioural reasons for supporting the thesis.

When we look at the aggregated performance of direct investments made over the last decade by SWFs, one obvious conclusion comes to mind: it has not been rewarding. Among the most puzzling and disconcerting questions are "why would that be?", and even more to the point, "why would SWFs not somehow take a cue of collective experience, and finally conclude: 'this is not for us'". *Errare humanum est, perseverare autem diabolicum:* the error is human, it is the repetition of error which is abhorrent (where we do not learn from mistakes).

We propose a few explanations as hypotheses, but, as practitioners, we prefer to focus on solutions. These solutions are informed by experience and strongly shaped by the feedback from actual performance.

## DIRECT INVESTMENTS BY SWFS

We define direct investments as "taking direct sizeable stake in a company that has publicly traded shares, or is privately owned and has shares that do not trade on a public exchange. Direct investments can be accessed either through a public offering, a structured transaction or a private placement of some kind".[2]

Direct investments are distinct from portfolio investments made in the context of security selection within the framework of a diversified portfolio: their average size is larger, and they are structured and often entail specific securities. Kalb aptly describes that SWFs have taken their fair share of co-investments as limited partners in private equity funds, but more than occasionally are autonomously taking the initiative, using their own relationships and networks.

As Figure 1 of this report illustrates, SWFs have shown a decidedly high appetite for direct investments. In the next section, we shall examine the degree of success SWFs have met in doing these direct investments.

## THE PERFORMANCE OF DIRECT INVESTMENTS

While there has been much research about the genesis, justification, investment behaviour, asset allocation, governance, dual mission, impact, and issues raised by SWF investments, little is known about the SWF performance when making direct investments.

This absence has been filled by some recent empirical research, notably those of Knill, Lee and Mauck (2009), Dewenter, Han and Malatesta (2009), Sun and Hesse (2009), Bernstein, Lerner and Schoar (2009) and of Bortolotti, Fotak and Megginson (2008 and 2010).

2 Kalb, Scott (2011), "The Growing Trend of Cooperation Among Sovereign Wealth Funds", in Park, Donghyun (ed.) Sovereign Asset Management for a Post Crisis World, Risk Books, London, UK.

*Direct investment for SWFs has not been rewarding. But why would that be?*

It is generally admitted in these studies that the stock prices of targets respond positively to announcements of an SWF investment. But the long-term performance of direct investments by SWFs tends not to be that convincing. Given the rate at which SWFs pump money into direct investments, one would assume that they have done their calculations, taken cue from each others' experience and derived satisfactory results. Yet, it might not be the case.

As noted by Professors Bortolotti and Megginson in their seminal work,[3] SWFs' direct investments do not seem to have added much value over the long term. Indeed they performed rather poorly. Below are the findings, on both a compounded and cumulative basis over the periods. The tables below report mean and median compounded and cumulative abnormal monthly returns following SWF investments, where abnormal returns are market adjusted against a local-market total return index. We focus on the long-term end (two and three years). The results are statistically significant.

### Table A: Buy-and-hold abnormal returns against a local-market index

| INTERVAL | N | MEAN COMPOUNDED ABNORMAL RETURN | MEDIAN COMPOUNDED ABNORMAL RETURN | POSITIVE | NEGATIVE | BOOT-STRAPPED, SKEWNESS ADJUSTED T | GENER-ALISED SIGN Z | WILCOXON SIGNED RANK |
|---|---|---|---|---|---|---|---|---|
| 6 months | 631 | -1.36% | -3.13% | 276 | 355 | 0.20 | 0.13 | < 0.01*** |
| 1 year | 617 | -1.32% | -6.00% | 275 | 342 | 0.25 | 0.27 | < 0.01*** |
| 2 years | 366 | -4.50% | -8.51% | 153 | 213 | 0.19 | 0.11 | < 0.01*** |
| 3 years | 165 | -4.61% | -12.75% | 71 | 94 | 0.32 | 0.41 | 0.02** |

### Table B: Cumulative abnormal returns against a local-market index

| INTERVAL | N | MEAN CUMULATIVE ABNORMAL RETURN | MEDIAN CUMULATIVE ABNORMAL RETURN | CALENDAR TIME AB-NORMAL RETURN | POSI-TIVE | NEGATIVE | CDA T | WILCOXON SIGNED RANK | CALENDAR TIME T |
|---|---|---|---|---|---|---|---|---|---|
| 6 months | 570 | -7.26% | -4.72% | -11.41% | 258 | 312 | < 0.01*** | < 0.01*** | < 0.01*** |
| 1 year | 557 | -9.31% | -4.93% | -22.63% | 247 | 310 | 0.01** | < 0.01*** | < 0.01*** |
| 2 years | 337 | -18.45% | -12.18% | -34.94% | 150 | 187 | 0.02** | < 0.01*** | < 0.01*** |
| 3 years | 153 | -57.25% | -23.45% | -57.19% | 53 | 100 | < 0.01*** | < 0.01*** | < 0.01 *** |

### Table C: Buy-and-hold abnormal returns against matching firms[4]

| INTERVAL | N | MEAN COM-POUNDED ABNORMAL RETURN | MEDIAN COMPOUNDED ABNORMAL RETURN | POSITIVE | NEGATIVE | BOOT-STRAPPED, SKEWNESS ADJUSTED T | GENER-ALISED SIGN Z | WILCOXON SIGNED RANK |
|---|---|---|---|---|---|---|---|---|
| 6 months | 588 | -1.86% | -2.75% | 275 | 313 | 0.19 | 0.39 | 0.20 |
| 1 year | 574 | -3.68% | -2.02% | 281 | 293 | 0.05* | 0.84 | 0.10 |
| 2 years | 345 | -6.37% | -11.82% | 148 | 197 | 0.17 | 0.05** | <0.01*** |
| 3 years | 158 | -21.88% | -16.73% | 61 | 97 | 0.04** | 0.02** | 0.03** |

3 Bortolotti, Bernardo, Veljko Fotak, William Megginson and William Miracky, "Quiet Leviathans: Sovereign Wealth Fund Investment, Passivity and the Value of the Firm", *FEEM Note di Lavoro 22.2009*

4 This table reports mean and median compounded abnormal returns following SWF investments, where abnormal returns are computed versus matching firms, and where matches are made based on country, exchange, size and book-to-market ratios.

## QUESTIONS

The overall performance of SWFs is generally satisfactory. Depending on their typology and asset allocation, their long-term return (10 or 20 years) lies between five and eight percent per annum. Direct investments, on the other hand, do not seem to provide any value-add, as illustrated in the analysis above. If you are a rational investor, and a strategy does not seem to work, you abandon it. If that is the case, why then SWFs want to continue doing direct investments? We believe the answers lie in the layers of management and governance that traditionally make up SWF organisations and their decision-making processes.

## A CASE STUDY

A direct investment, because of its size and its negotiated features – usually embedded into the representative security of the investment – should require due diligence, investigation, discussions, and hard-nosed negotiation. This generic case study has been built using the commonalities seen in four deals.

The scenario most often seen is that of an intermediary – investment bank, broker, politician, etc. – approaching the SWF management with an investment proposal. In the best cases (for the intermediary) the "image" projected by the investment is positive – a large financial institution, a brand name manufacturer and so on.

From this point on, a team within the SWF is probably tasked with investigating the proposal. The team is essentially composed of financial analysts, who would have excellent desk experience of the relevant industry sector. Usually, the first reaction of the team is the elation and pride to be associated with such a "visible" project; the team is enthusiastic, almost bordering on being intimidated by the target's management reputation; unless there is a mental rejection arising out of the "not invented here" syndrome. In which case, the project ends.

What usually follows is a progressive, unstoppable endorsement of the investment idea by the team: the forecasts replicate the traditional growth model, the scenario analysis certainly cover a wide range of outcomes, the valuation analysis is indeed exact to the cent, the opportunity analysis is superficial, due diligence is given lip service and is just confirmatory, few tough and controversial questions are asked, the deal structure will not really be put in question or renegotiated. If advisors are retained, they will most likely be compensated upon success, that is upon actual investment by the SWF. From then on, it will take the team, or its leaders, enormous courage to say "no" to a transaction that far advanced.

Even when the final review – usually with its carefully nudged SWOT analysis - reaches the highest levels of the organisation for definitive approval, it is unlikely the course will be reversed, whatever the business or investment acumen of the Committee members. Nobody will want to be responsible for ruining the deal.

The deal then progresses towards its inevitable conclusion. The financial press is unanimous: what a smart investment! A testament to the acumen of the SWF, and to the skills of the company management!

The first months into the investment do not convey any particular disappointment. However, the operating performance reporting is lacking in detail. The management of the investee company is elusive. The investment team, after a healthy recovery from the tension of the deal, is now focused on the next deal, and nobody really looks at what is happening. Nine months into the deal, a series of disconcerting news trickle: the results are much behind projections, the planned secondary stock sale is not

> *SWFs need to have a more rigorous process put in place when they make direct investments.*

happening, the much anticipated product launch is being postponed, two senior managers have departed a couple of months back (pocketing a nice golden parachute) and it looks as if the company might breach a covenant in six months. Looking under duress at the fine print of the legal documentation, a team member reports that the re-pricing of the security is subject to certain conditions, which were not really discussed in detail before closing.

The nightmare has started, and the State Auditors are announcing their visit.

## LESSONS FROM THE GENERIC CASE STUDY

» There should have been a devil's advocate, with the investment and management experience to ask tough questions, as well as the seniority and authority to see them answered.

» There was no insightful due diligence from a cohesive, well-trained internal team, complemented by multiple service providers of expert advice.

» The deal was taken as offered, and its structure not analysed. This is another example of sell-side driven investment opportunities, which is typical of the adverse selection issue affecting investors.

» There was no competing proposal, which could have tempered the team's enthusiasm. The deal was proposed, not found by the investment team scouting for interesting investment opportunities: it was pushed, not pulled.

» There was no co-investment partner, whose aligned interest and complementary experience and resources, pre- and post-investment, would have made for a more robust investment group.

» There should have been multi-level, multi-stage decision-making (two above investment team is generally considered sufficient), with Q&A shuttled between levels. At each level, consensus decision-taking, with veto rights for committee members

» There does not seem to exist a feedback and learning process, whereby the institution's investment memory and experience gets communicated to the investment team, reinforcing its skills

» The post-investment period demonstrates absentee investment management, not allowing an early-warning system to be put in place and corrective actions to be taken when needed, that is, in advance.

## PITFALLS AND SOLUTIONS

The lessons from the case study can be summarised as five pitfalls, which must be addressed if direct investments are to be pursued.

**Adverse Selection:** Being at the receiving end of investment opportunities means one thing: the probability of getting a higher than normal share of poor deals. To avoid this issue, the only way is to develop one's own network and deal sourcing, as well as teams that can sift through these investment opportunities, and make the good calls. This is not easy to build, but the right way to go. If this not possible, then the reliance on third-party principal investment professionals (such as private equity fund managers or other similarly aligned investors), running commingled or single account investment vehicles, will fit the bill.

**Lack of Investment Project Management Skills:** Executing a direct investment requires specific professional skills and project management talent, usually honed at the strategic development unit of corporations, at hedge funds or private equity funds, but not common at SWFs. These skills consist of harnessing and combining the internal and external resources to do the deal, including the organisational capabilities and processes to constructively critique and even turn down the deal.

**Poor Incentives and Alignment of Interest (Agency Issues):** It is unlikely a SWF investment team will have its long-term reward tied to the success of the investment. It is the rare case that staff will see though the end outcome of the investment: they will have moved to another employer before. Even more importantly, it is also unlikely the team will see its financial well being affected by a failure of the investment. In other words, for its direct investments, many SWFs rely on the work and conviction of people that are not paid to have such conviction. In a similar fashion, the advisors, investment bankers, are not compensated by the final outcome of the investment, but just for the investment being closed.

**Moral Hazard:** In the case of a bad investment, who is penalised? As emphasised above, not the investment team, or the advisors, except in the case of misrepresentation or wrongful negligence. In a normal commercial context, of an asset manager for instance, the institution is accountable to the client, who may even have recourse: breach of fiduciary duty, breach of prudent man rule. The SWF is entirely left with the consequences of the bad investment.

**Lack of Post-Investment Monitoring and Actions:** When a direct investment is made, then it is incumbent upon the institution and the investment team to define (a) the return objective and path of that investment, (b) a method to measure the objective attainment, and finally (c) the kind of processes and actions that need to be put into place to ensure corrective actions if required.

One of the biggest burdens of making direct investments is monitoring the investment and taking remedial actions. This burden is usually underestimated by SWFs. It requires commitment, people and resources. Monitoring can be relatively straightforward those overseeing the process are experienced. It can take the form of simply reading and synthesising the periodic accounting and performance reports; or it can involve regular interaction with management, up to Board representation.

Remedial actions, because they encompass a wide range of measures, including those provided in the terms of the security subscribed by the SWF, are more difficult to specify and determine. They range from walking away from the investment (via a sale) to taking all actions provided for in the shareholder arrangement if any, up to and including the measures that an active shareholder would take vis-à-vis the Board and management of the investee company.

Let us just say that any government agency such as a SWF would have to tread carefully in these waters. What is possible and acceptable in the home country of the SWF has to be carefully reviewed when the measures have to be taken in a foreign country (CEO replacement, layoffs, hiving off divisions).

Because of the delicate position of SWFs, they are not able or will not take these actions, which put them at a disadvantage to active shareholders such as hedge funds or private equity funds. And this may be a reason for the relative under-performance of their direct investments.

## A SOLUTION TOOLKIT?

Here below is an action toolkit, which addresses most of the pitfalls identified in direct investment. It does not guarantee outperformance, but it surely avoids costly blunders.

This toolkit has three key components: the investment method/investment vehicles, the investment due process and governance, and impact measurement. While the right investment methods and investment process are the heart of the framework, impact measurement does provide benefits to the overall efficiency.

## CONCLUSION

SWFs should avoid making direct investments: direct investments by SWFs faces so many hurdles to performance that pursuing those should only be done with the utmost prudence, and at least with the right toolkit: it is one of the deepest of our convictions regarding the management of SWFs.


Source: Sudarkis and Partners

# Taming Leviathan: Towards a Regulatory Framework for Sovereign Wealth Funds

*Victoria Barbary, Bernardo Bortolotti, Sovereign Investment Lab, Universita Bocconi*

The effects of the global financial crisis and the assessment that the crash was, at least partially, caused by the growth of unregulated finance capital ahead of bankers' ability to manage it, has turned on its head the assumption that governments should let the free market shape economic outcomes.

Since the collapse of Lehman Brothers in September 2008 governments throughout the developed world have been forced to intervene in their domestic markets. From bailouts of UK banks and the US auto industry, quantitative easing, the EU bailouts of Ireland and Greece, and stricter regulation of banks under the Basel III regime, governments are taking a role in the global economy not seen since the rolling back of the state in the 1980s.

For emerging markets, the financial crisis has brought their economic power to the fore. During the 2000s the rapidly growing developing economies, most notably the BRIC countries but also the oil-rich states of the Middle East and North Africa (MENA), amassed great wealth. Using the markets to further their economic policies, these nations began to assert themselves on the world stage through their state-owned enterprises (most notably their national oil companies) and sovereign wealth funds (SWFs).

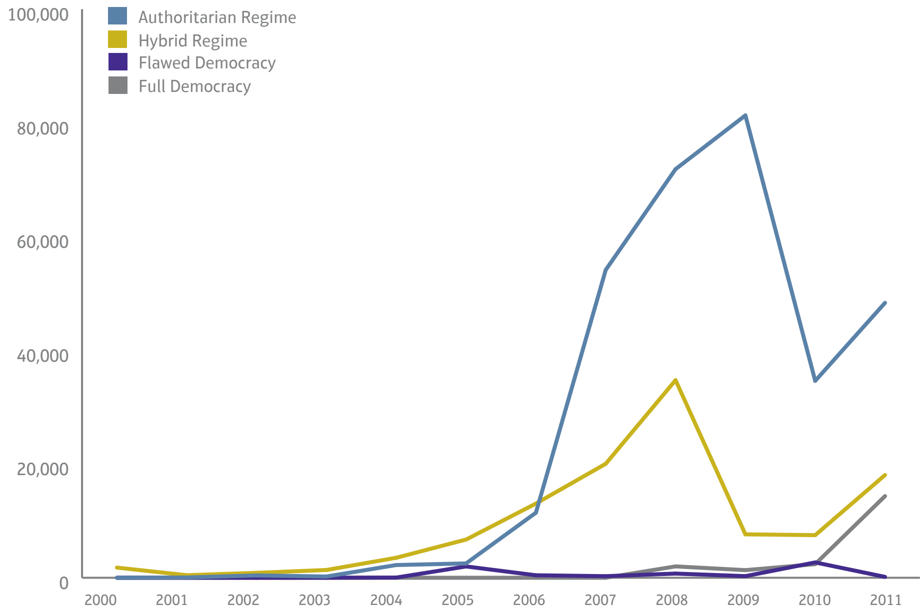
It is SWFs that perhaps most profoundly reflect this shift in state involvement in the global economy. They are key actors in the twenty-first century's global financial landscape, managing an estimated \$3-4 trillion – about double the assets of the global hedge fund industry. According to the OECD, at the peak of the global financial crisis, government-driven international acquisitions reached \$120 billion, or 20 percent of the global M&A market.

The shift away from the freewheeling Wall Street interpretation of capitalism as the dominant economic system has profound implications for the world economy and the politics of the international community. There are now new questions to be asked and new players in the game. However, the nature of these actors and the risks they pose seems to be only dimly understood by decision-makers. For the first time since the First World War, large pools of capital are held by undemocratic or authoritarian governments with poor records on human rights and the freedoms that people in much of the developed world take for granted.

The "Arab Spring" of 2011, the outbreak of civil war in Libya, and the subsequent freeze of Libyan state-owned assets (including those of Libya's SWF, the Libyan Investment Authority) raised the question of the nature and legitimacy of government ownership of SWFs, given that the proceeds from their investments could be used to oppress their citizens. This put the spotlight on the intentions and uses of SWFs and whether investments by SWFs with undemocratic government owners are beneficial for hosting countries.

There is no evidence to suggest that SWFs have any intention of pursuing a political agenda abroad. Yet, it does not mean that they are dissociated from their countries' political risk. Particularly in the Middle East, but also in China, conditions are arising that increase the risk of political and social unrest and upheaval, which may change the economics of SWFs. But, perhaps more importantly, may require a reformation of the political framework that surrounds international trade.

Figure A: SWF Investment Flows 2000-2011




Source: Sovereign Investment Lab, Universita Bocconi; EIU Democracy Index 2011

## THE DOUBLE BOTTOM LINE

Using the Economist Intelligence Unit Democracy Index classification,[5] 72 percent of SWFs' $3 trillion assets under management are controlled by authoritarian governments or hybrid regimes, with only a quarter of the total being controlled by funds in democracies; 36 percent are controlled by autocratic regimes in the Middle East and 17 percent by China.

Non-democratic SWFs have also dominated the investment flows since the start of the pre-crisis boom of 2006. Whereas the funds from Singapore (a "hybrid regime", according to the EIU) dominated SWF investment until the mid-2000s – accounting for nearly 90 percent of total SWF investment in 2000 – by 2006, authoritarian funds accounted for nearly half of all investment value, and in 2007 more than three-quarters of all investments.

5 Economist Intelligence Unit (2011), *Democracy index 2011: Democracy under stress*, Economist Intelligence Unit, London.

These state-owned funds act as many long-term, institutional investors, investing to fulfil the needs of their shareholders. However, because their owners are governments, their objectives may also be extra-financial, involving pursuit of a "double bottom line". For example, a SWF may choose to increase its allocation to commodities and the companies that produce and trade in them. This is important from a strategic asset allocation perspective as commodities have recently performed strongly, have little correlation with mainstream assets such as stocks and bonds, and act as a hedge against inflation. However, a SWF may also require access to commodities such as metals, oil and gas for economic development purposes. This is a legitimate aim and underlines the fact that the investment behaviour of a SWF cannot be isolated from the broader economic policy tools of the nation from which it comes. For the same reason, the fund inherits the political risks associated with the sovereign owner.

*Just because SWFs do not appear to pursue a political agenda abroad, they are not dissociated from their home countries' political risk.*

This is concerning, not because of the politics and actions of authoritarian states may be distasteful to Western liberal democracy, but because the socio-economic indicators of most of these countries alert us about mounting tensions and likelihood of conflict which could ignite turmoil and rebellion against the incumbent rulers. In turn, this enhanced political risk could affect the risk and return properties of SWF investee companies through two main channels: upheaval risk, transforming the country's wealth management, and geopolitical risk, triggered by targeted sanctions.

Upheaval risk, as we saw in 2011, is a real issue for the Middle East region in particular. Much of the region suffers from social problems, particularly high unemployment amongst the large youth population, as well as the inherent tensions created by the lack of freedom of speech and information in an increasingly networked and interconnected world. In the event of incipient political unrest, sovereign owners of SWFs may choose to divert their surplus away from saving for future generations and asset diversification, towards "encouraging" peace and social cohesion through handouts or meeting the welfare needs of the population. Indeed, in 2011, several countries in the MENA region have launched large spending plans including unemployment benefits, affordable family housing and other forms of support to lower income earners. Saudi Arabia alone unveiled benefits worth $130 billion, and the UAE, Kuwait, Bahrain, and Oman are implementing fiscal packages totalling $8 billion. Such a shift in wealth management will obviously affect allocations to SWFs as well as their management and strategies. Even in the smaller, more urban Gulf Co-operation Council (GCC) states such as the United Arab Emirates and Qatar where the locals are generally better off than in other MENA countries and there is little manifestation of political or religious tensions, governments are still keen to demonstrate that the region's commodity wealth is being shared across its populations, and we have seen an uptick in investment in the wider MENA region – particularly in Morocco, Egypt and Algeria – from SWFs from Qatar, Kuwait and the UAE, eager to show Arab solidarity.

As to geopolitical risk, if the tensions reached a critical level igniting revolts, rebellions and civil war (as happened in Libya, Bahrain, Yemen and Syria), concerns that SWFs' financial resources could be used by the challenged authoritarian regimes to suppress the political opposition may motivate the use of targeted sanctions involving for example the freeze of a SWFs' assets, such as was imposed on the assets of the Libyan Investment Authority in March 2011.

The portfolio companies of the SWF originating from a politically unstable country are thus exposed to this upheaval and geopolitical risk, and this could increase volatility, causing higher expected returns and generally a lower cost of capital in the investee company. Obviously, the degree of exposure will depend on the size of the stake.

Although the focus here is on the political risk for those companies and nations receiving SWF investment, it is important to make a case for political risk on the other side of the equation. The potential for the imposition of sanctions and other restrictions on SWF investments has implications for their sovereign owners. Autocratic leaders often (but not always) take the opposite point of view from many recipient countries in the West on the necessity for improving the political representation of the people. There is, therefore, a risk that if a fate similar to that of Libya or Syria befalls their country and sanctions are imposed, they will not have the ability to call on the financial assets that they require to reassert their authority. Consequently, when they make an investment, SWFs should consider the political position of the recipient country, its tolerance for what could be considered "repressive action" or "human rights abuses", and the likelihood that it might impose unilateral sanctions on a regime for acting in that manner.

In broader terms, the mounting social and political instability in MENA (which could spread eastwards), is contributing to a change in the fundamental nature and behaviour of SWFs. This metamorphosis involves the partial loss of SWFs' status as patient, long-term investors, providing capital and liquidity across business cycles, and turning them into financial players with shorter-term horizons and unpredictable liquidity needs. This trend has already surfaced in China where the China Investment Corporation has reportedly been advised to improve its short-term returns. This seems to have an effect on the funds' investment strategies, with CIC looking towards "a major change to its investment practices" to focus on private equity, real estate and other alternatives, while the State Oil Fund of the Republic of Azerbaijan has also expanded its mandate to include medium-term investments and overseas property.

Mounting social and political tensions in emerging countries thus spill over in global financial markets, and a crucial link is the metamorphosis of SWFs.

## *PECUNIA NON OLET?* MARKET FAILURE CONSIDERATIONS

Now we beg a fundamental question: should the international financial and political community be concerned about the economic consequences of this potential shift in the nature and behaviour of SWFs? Are there market failure considerations at stake suggesting the desirability of some form of policy action, or can we expect that the markets will spontaneously adjust to the new risk environment and converge to a better equilibrium?

In a perfect world, companies and recipient countries would realise that SWFs carry political risk that negatively affects performance and decide to reject SWFs as sources of capital if they perceive the costs of this investment exceed the benefits. Consequently, SWF-owning governments may understand that a lack of representative government and underlying socio-political tensions contributes to raising barriers to international capital flows, and could seek to improve their political legitimacy at home to assuage protestors, financial markets and the international political community. In such a world of rational investors and far-sighted governments, democracy and global financial integration will go hand in hand and flourish in the long run.

In reality, this is unlikely to happen. Tight capital conditions in many advanced economies will continue to make SWFs attractive prospects for investment, regardless of the democratic deficit, and companies will disregard the global public good that might be arrived at by taking a moral stance against autocratic governments. Moreover, SWFs tend to originate from rapidly growing and developing economies with substantial commercial opportunities, which may be limited if SWF capital is rejected for non-commercial reasons. In the short- to medium-term this could have adverse effects for both recipient and donor countries, by limiting the opportunities available to potential recipient companies. This could stifle export growth and revenues generated abroad and create a lack of diversification and an excessive accumulation of foreign reserves in surplus countries, causing inflationary and exchange rate pressures, which may have implications for donor countries' economic development.

*A new approach to regulation around international SWF regulation needs to be sought.*

The classical coordination failure in the provision of public goods may thus provide a rationale for a specific regulatory framework of SWF investment.

## SMART REGULATION FOR SWFS

Given the potential damage that might be done to global financial markets by the billions of dollars of international investments made by a SWF if their domestic political environment deteriorates, there might be scope to create a regulatory framework for SWF investment on the basis of the negative spillovers it may generate. However, any policy-making effort here faces a fundamental problem of effectiveness and legitimacy: on one hand, it should aim to protect firms from perilous investment, but on the other, it should encourage the SWF-originating country to implement political reforms and foster economic and social progress. We thus face a problem of global governance with deep economic, financial, and political implications, to be addressed in a context where national policies interact with international legislation.

A central tenet of creating any policy framework for SWF investment must be to obtain the agreement of both recipient governments and SWFs. Imposing rules on SWFs from the outside without their involvement can only lead to an ill-fitting set of regulations based on imperfect information that may exacerbate the problem it seeks to address and create resentment amongst a significant group of institutional investors. In contrast, by collaborating in the creation of such a framework, it can be perceived to be beneficial to both investors and recipients by improving and strengthening relationships between them to allay fears and lubricate international capital flows.

However, creating a policy framework in this space clearly requires SWFs to understand that investment by some of their number does indeed carry political risk to other nations, which requires those regimes to make a sanguine assessment of their political position and a recognition of the need (economic or otherwise) to consider implementing political reform. On the recipient side, there needs to be an acceptance of the political realities surrounding authoritarian governments, and a realisation that any change in position will be evolutionary.

We do not believe that it is either necessary or desirable for recipient countries with significant potential inflows of SWF investment to adopt a restrictive approach to political risk. A preventive mechanism along the lines of the Committee on Foreign Investment in the United States, requiring a mandatory clearance of SWF acquisitions of the basis of a case by case review of countries' political outlook would create a significant barrier to SWF activity and restrict international capital flows. It would also provide incentives to regulatory arbitrage in favour of countries with a more lax regulatory framework. In the absence of any coordination mechanism, the most likely outcome is a race to the bottom by recipient countries without any significant improvements in investing countries.

A more appealing alternative may be the self-regulation of political risk at the national level by amending the code of conduct of stock exchanges, requiring listed companies themselves to disclose as a specific risk factor the presence of SWF or other state-owned investor from undemocratic countries amongst the shareholders of the firm. Disclosure of this information could become best practice in corporate reporting in annual reports and prospectuses.

It may also be appropriate that this issue be recognised within existing self-regulatory frameworks, such as the Santiago Principles established by the

International Forum of Sovereign Wealth Funds, which comprises representatives of 23 governments, the OECD, the World Bank, and the European Commission as permanent observers. These principles might be expanded to include a measure of investing with a commitment to foster economic prosperity, social progress and political progress in the investing country. Such a commitment would be a public recognition of the problem, and reputation loss, whenever major upheavals take place in a SWF country. With adherence to the principle being only voluntary, widespread free-riding would limit the practical effectiveness of these rules.

The fundamental drawback of national regulation of SWF investment (creating multiple and uncoordinated regulations that impede the flow of capital) and the lack of effectiveness of non-binding principles could be overcome by charging a recognised international organisation to set common rules and enforce them at the multilateral level. However, this comes up against several barriers that result from the perception in many emerging markets that the current multilateral agencies do not fully understand the nature or reflect the interests of the emerging world. We have already begun to see the unique position of the World Bank challenged, when a summit of the leaders of Brazil, Russia, India, China and South Africa in March 2012 proposed the formation of a shared development bank, which would more accurately support priority infrastructure projects as well as trade and investment opportunities between these countries.

Such development shows how far the world, and the broader public understanding of the fundamental change of the role of the state in international markets, has to come before an overarching framework regulating sovereign funds can be established. That said, the events of 2011 have made it clear that potential political risks must be factored into the framework and that SWF-owning countries should be incentivised to advance democracy at home, while keeping international financial markets open and competitive. Some sovereign investment will always take place away from the public gaze, but an agreement to implement a SWF regulatory framework should be self-enforcing, given the significant benefits it could provide to advanced and emerging economies and its contribution to international security and peace.

# A Brave New World For Sovereign Wealth Funds

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## THE GROWTH OF SWFS IS DRIVEN BY ECONOMIC FUNDAMENTALS

Since the start of the new millennium, economic and financial power has been draining away from mature advanced economies towards fast-growing emerging markets. A growing number of developing countries, thanks to rapid economic growth and the correlated increase in international trade and investment flows, have significantly raised their shares of global income, trade and foreign investment. Much of the growth was concentrated in manufacturing and industry as these economies moved out of traditional agriculture. As a direct consequence, there was an acceleration of growth in demand for raw materials, natural resources and commodities such as metals and energy which are inputs for manufacturing and industry. This upward shift in demand led to a surge in commodity prices, including energy and food. The two giants', China and India, combined share of global oil demand increased from nine percent in 2002 to about 15 percent in 2011. Emerging market economies (EMEs) have also become more urbanised, with young and rapidly growing populations moving to job opportunities in the cities. In turn, rapid urbanisation – as exemplified by China's massive city building – has driven increased investment on infrastructure, including on public utilities, transport, and health and educational and housing. In turn, greater infrastructure investment has increased demand for raw materials, metals and other commodities, driving up their prices. Thus, high economic growth, changing production structures and growing urbanisation in EMEs are major contributory factors to higher commodity prices, more than offsetting slower growth and the effects of the financial crisis in the United States and Western Europe. Importantly, the shift in global economic and financial geography towards EMEs and Asia is not a temporary phenomenon. EMEs are expected to grow at two to three times the rate of advanced economies over the coming decade. It is a secular trend implying a permanent shift in income and wealth in favour of EMEs, which along with high saving rates implies a growing accumulation of claims of EMEs against mature, advanced economies.

## COMMODITY-BASED SWFS ARE DOMINANT AND SWFS ARE HERE TO STAY

In turn, the strong rise in the prices of commodities led to large surpluses in the current accounts of commodity exporters leading to an accumulation of international reserves. The financial resources available to commodity-based sovereign wealth funds (SWFs) boomed. Assets managed by SWFs (broadly defined) grew from about \$1.2 trillion in 2002 to \$4.8 trillion at end-2011, and are projected to be some \$5.4 trillion by end-2012, with commodity-based SWFs representing some 58 percent of the total. Note that the share of commodity-based SWFs has declined from 77 percent of the total in 2002, largely on account of China's strong accumulation of foreign assets and creation of the China Investment Corporation in 2007. According to a 2012 Preqin analysis,[1] almost three quarters of all SWFs are based in either Middle Eastern or Asian countries and they are mostly funded by natural resources, in particular oil and gas. But a growing number of EME governments have been establishing SWFs funded by strong market fundamentals for commodities and associated surplus revenues, with some 60 percent of SWFs being established since

1 Preqin (2012), *Sovereign Wealth Fund Review*, Preqin, London

> *SWFs are rebalancing the portfolios towards emerging markets, and alternative investments.*

2000, and 30 being established between 2006 and 2010. For example, Nigeria, Africa's top oil producer, established a SWF in 2011 with an initial capital of $1 billion to help the country save for the future, invest in strategic infrastructure projects in Africa's most populous nation and act as a "buffer" against volatile oil prices. Given the economic fundamentals favouring EMEs we can expect SWFs and related public investment funds to play a growing role in a changed global financial architecture. Already, as at end-2011 SWF assets under management at $4.8 trillion exceeds the combined total managed by private equity and hedge funds of $4.4 trillion.

## GREAT FINANCIAL CRISIS AND GREAT CONTRACTION HAVE CHANGED SWF INVESTMENT STRATEGIES

The great financial crisis starting in 2008 and the ensuing "great contraction" have led to three shifts in the investment strategies of most SWFs. First, SWFs are moving away from investment in mature advanced economies towards the better prospects of EMEs. A corollary is that SWFs are eschewing exclusive reliance on the services of asset managers in traditional centres like New York and London and building their own investment management capacity, a move justified by the growth in their assets. Second, SWFs are playing a growing role in financing economic development in their domestic and linked economies. This is a move away from traditional portfolio investment for risk diversification purposes. This is particularly true in the GCC countries and other oil exporters where governments have sought to allay the perceived threats and vulnerabilities of the "Arab Spring" by using the resources of their SWFs. Finally, SWFs are diversifying investments away from traditional market securities towards direct investment and alternative assets including renewable energy, land, real estate and other investments. Consequently, SWFs are increasingly undertaking more active management of their assets.

SWFs played a major stabilising role in the great financial crisis contributing to the bailout of American and European financial institutions during the financial tsunami of 2007-08 and the bailout of their domestic banking sectors in early 2009. Indeed, over the period 2008-2010 SWFs invested some $112 billion in financial services.[2] However, the great financial crisis has led to a reassessment of the risks and returns to investment in advanced economies. A combination of capital losses on investments, higher perceived risks, including unexpected governance and regulatory risks, of investments in advanced economy financial markets and the prospect of low returns on financial asset investments and specifically government securities – a favourite asset of SWFs – resulting from historically unprecedented loose monetary policies implemented in Western economies, led to a re-evaluation of traditional SWF investment strategies.

## SWFS PORTFOLIOS ARE SHIFTING TO EMES, REAL ESTATE AND ALTERNATIVE INVESTMENTS

The investment portfolios of SWFs are being rebalanced from advanced economies in favour of the higher expected return investments of EMEs, as well as into alternative asset classes. There is also a trend shift away from portfolio to direct investment strategies, including private equity and real assets. A growing number of SWFs are investing in private equity (about 55 percent) and in real estate (51 percent) a favoured asset of Middle East investors, infrastructure (47 percent) and hedge funds (37 percent).[3] Moreover governments and SWFs are also investing in agricultural land, both as a real hedge and as security for the long-term, strategic supply of food. Indeed, a near universal "land grab" is currently underway driven by demographics. Absent major catastrophes or radical policies (such as China's one child policy), the global population is expected to

2 The CityUK (2012), *Sovereign Wealth Funds*, CityUK, London.
3 Preqin, *Sovereign Wealth Fund Review*

double by 2050, potentially outpacing the growth of exploitable, arable land.[4] The population to land ratio is rising. Growing EME populations, increased urbanisation, growing middle classes with changing consumption patterns, climate change, and the demand for biofuels and rising input costs are putting pressure on limited land resources. By contrast, it is more uncertain whether the countervailing factors of technological innovation, bio-genetics, and the emergence of new frontiers (new Northern lands resulting from climate change, sea-based agriculture) will mitigate or offset the risks and consequences of higher population density.

These economic and ecological fundamentals are driving SWFs, pension funds and other long-term institutional and "patient investors" towards the energy sector, land, commodities, and associated processing industries and economies. Indeed, the investment drive into Africa is based on these fundamentals.

But the energy rush is not all about hydrocarbons; the focus is increasingly on renewable energy sources. A number of SWFs now incorporate environmental, corporate social responsibility and corporate governance (ESG) criteria in designing their investment strategies and in the choice of securities and investments. SWFs from both Asia and the Middle East have recently invested over $2 billion into non-hydrocarbon energy sources. Singapore's Temasek Holdings has invested $47.8 million in biofuels; Abu Dhabi's Mubadala Development Company is investing some $360 million in the Shams Solar energy plant, while the Norwegian Government Pension Fund–Global increased the size of its environmental investments to $4.7 billion. The bulk of these investments are in EMEs.

This wider diversification in investment portfolios is made possible by the growing ability of EMEs to acquire and host new technologies and innovate. For SWFs, it means new opportunities to diversify portfolios beyond advanced economy securities.

4 Arezki, Rabah; Klaus, Deininger; and Harris, Selod (2012), "Global Land Rush", *Finance & Development*, 49 (1).

Even though SWFs' initial forays into the renewable energy sector are currently fragmented, they could become more systemically important and game changers in since they benefit from long investment horizons. They are in a position to accept lower short- and medium-term returns for strategic gains later. Investment in clean technology would also allow developing economies, many of them owners of SWFs, to facilitate the transfer of technology and know-how needed to build the advanced infrastructure of the twenty-first century, rather than follow unsustainable growth and consumption patterns based on hydrocarbon intensive consumption and production. Investing in clean energy and technology is a long-term business, and SWFs have a comparative advantage to invest in this sector, as they are intrinsically "patient investors". After all, a major objective of SWFs is to manage and preserve resources for future generations.

## SWFS ARE LIKELY TO CHANGE MARKET RISK-RETURN OUTLOOKS

As the world's economic and financial geography increasingly shift towards EMEs, they will become the dominant savers and investors. Increasingly, given current governance structures in EMEs, capital flows and investments will be directed, allocated and managed by EME state-owned enterprises and SWFs with their idiosyncratic investment strategies, attitudes to risk and investment horizons. Intriguingly, we may be heading for a world dominated by a new class of investors with a longer-term view of return and risk, which may contribute to reducing volatility in financial markets and a focus on the role of the banking and financial markets in financing infrastructure and economic and social development. This would be a major transformation from the current pattern of investment short-termism and an orientation towards financial sector securities and investments that have become increasingly divorced from real economic activity.

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# Appendix

## Spotlight on Research

**VELJKO FOTAK, SOVEREIGN INVESTMENT LAB AND OKLAHOMA UNIVERSITY**

The literature on sovereign wealth funds continued to expand during 2011, with numerous new contributions published. The wealth and breadth of publications on SWFs, both in the form of journal articles and books, is testament to the growing interest by policymakers, practitioners, and academics on the topic. The aim of our spotlight is to provide a roadmap for current publications by identifying topics and trends in the evolving literature and to point curious readers towards the most original and influential material. Our review is thus restricted to what we consider the items with the most valuable contributions to the growing debate on SWFs published in 2011 and early 2012. After briefly describing the major trends in the literature, we list the full references for the articles and books we discuss, including the author-supplied abstracts.

The literature on the performance of SWF investment targets has expanded with contributions, in the form of academic articles, by Kotter and Lel (2011), Knill, Lee, and Mauck (2012b), Sojli and Tham (2011), and Tao and Hesse (2011). Kotter and Lel (2011) first offer an overview of SWF investment strategy, finding that SWFs prefer investments in large and poorly performing firms facing financial difficulties. But the focus is on the stock price performance of investment targets – and their findings confirm, in line with previous analysis, that target firms experience a positive stock price reaction at the announcement of SWF investments. This effect is stronger for more transparent funds. On the other hand, the authors find that firms experience no substantial effect on stock price performance or changes in governance quality over the long run. Knill, Lee, and Mauck (2012a) also analyse the performance of investment targets, but reach very different conclusions. Their findings indicate that target firm returns decline following SWF investments, but also that firm idiosyncratic risk declines as well. Overall, the decline in performance results into lower compensation of risk. They conclude that SWFs do not provide the monitoring benefits generally associated with institutional investors. Sojli and Tham (2011) focus specifically on SWF investments in the United States. They find benefits associated with SWFs both at the short and long time horizons. Over the short term, the stock price of target firms appreciates. In the long run, they find that target firms increase their degree of internationalisation and benefit from a higher Tobin's q. Interestingly, the authors also find a relation between the increase in Tobin's q and the number of government-related contracts granted by SWF countries. A different perspective is taken by Tao and Hesse (2011), who analyse the short-term market reaction to SWF investments to investigate the implications of SWFs for financial stability. The study documents no significant destabilising effects of SWF investments on equity markets.

A second stream of literature that has been evolving focuses on the investment decisions, and asset allocations, of SWFs. Recently published academic studies include Boubakri, Cosset and Samir (2011), Knill, Lee and Mauck (2012a), Rolando and Santiso (2011), and Balding and Yao (2011). Boubakri, Cosset and Samir (2011) compare investments by SWFs with investments by mutual funds. The focus is on the determinants of SWF investment decisions. The authors find that, compared to mutual funds, SWFs prefer to acquire larger, less liquid companies which are financially distressed, but which have more growth opportunities. They further find that SWFs prefer firms which are less innovative and with more concentrated ownership. Further, they find that SWF investments focus on less developed, but geographically close, countries. Knill, Lee, and Mauck (2012a) discuss instead the role of political relations in shaping SWF investment decisions. They find that SWFs tend to invest in nations that have weak political relations with their home countries. They interpret this evidence as indicating that SWFs are guided by non-commercial goals. A similar question is explored by Rolando and Santiso (2011), but the results are quite different. The authors compare SWF investment patterns, on a geographical and industrial-sector basis, with those of mutual funds to analyse whether political regimes have a role in determining the allocation of assets. They find that asset allocations of SWFs are not significantly different from those of mutual funds and that political regimes in recipient countries play no role in explaining the allocation of SWF investments, in contrast with the findings by Knill, Lee, and Mauck (2012a). Balding and Yao (2011) study the portfolio allocations and risk management of SWFs aimed at diversifying national wealth linked to natural resources. They find that, to reduce the level of volatility of national wealth, SWF should allocate a higher proportion of their portfolio to high-quality fixed income and low-risk equities.

A stream of literature focusing on individual funds, or groups of funds, is also developing, in recognition of the heterogeneity of the funds. Clark and Knight (2011) examine the Australian Future Fund, with a focus on how SWFs can be used as instruments for intergenerational wealth transfer. Heaney, Li, and Valencia (2011) assess the asset allocation of Temasek Holdings over the period spanning 2000 to 2004. The authors find that Temasek has a tendency to invest in large firms with few director block holders, and with low systematic risk. Singapore is also the focus of Yeung (2011), who analyses the experience of both Temasek Holdings and the Government of Singapore Investment Corporation. The author interprets the two SWFs as vital instruments for the development of the economic future of Singapore, at the same time dismissing the idea that the funds are strategic devices with geopolitical roles. A new book, Shemirani (2011), focuses on four SWFs – the Government Pension Fund-Global of Norway, the Abu Dhabi Investment Authority, Temasek Holdings, and the National Wealth Fund of the Russian Federation. The main emphasis is on providing a systematic methodology to study SWFs, with a focus on the internal functioning and investment strategies. Truman (2011) focuses on a broader subset by discussing Asian SWFs and how those differ in size and source of funding from other SWFs. The author predicts that those differences will lead to Asian SWFs being held to a higher standard of accountability and transparency. Blanchard (2011) focuses on China's SWF and its role on Chinese geopolitical strategy, in particular as part of China's management of the value of the Renminbi and growing foreign currency reserves. The article is related to the thesis by Knill, Lee and Mauck (2012a), as it interprets SWFs as mainly political, rather than economic, entities, yet the discussion is mostly geopolitical in nature. Triki and Faye (2011) discuss the potential role of SWFs in enhancing the development of African economies. They find that African SWFs are small, suffer from poor governance and act mainly to offer stability to domestic economies. While this indicates a limited role in fostering growth, they find that foreign funds are playing a growing role in supporting the continent's development.

SWFs have traditionally attracted a high level of interest by not only economists, but also by legal scholars. A new book by Bassan (2011) focuses on the legal side of SWF investments and structure. The main focus of the book is on the legal relation between SWFs and foreign governments hosting their investments. The author discusses rules and regulations and arbitration by supranational agencies in case of legal dispute across borders. Gelpern (2011) discusses how the emergence of SWFs is leading to innovations in international law-making and regulation, at the same time revealing how current regulatory framework require further development and harmonisation.

Various broad-spectrum books have also been published over the past year. Amongst those, Bolton, Samama, and Stiglitz (2011) offer a collection of essays presented at a conference on SWFs held at Columbia University in 2010. The main topics of the collection are SWF objectives, performance, and the broad impact on sustainable development and global financial stability. In contrast, Balding (2012) has a strong emphasis on the history of SWFs, as it focuses on the origins and development of SWFs. It explains the economics behind SWFs as a result of oil-driven surpluses and large inflationary pressures in countries with weak domestic investment options. Castelli and Scacciavillani (2012) offer a comprehensive discussion of SWFs aimed particularly at western investors. Topics range from a description of the development and operations of the funds to a discussion of regulatory frameworks. Strong emphasis is given to changing asset allocations, as SWFs shift their focus from the developed to the developing world, and their likely impact on commodity prices and macroeconomic imbalances.

## Academic Articles

### CLARK, GORDON L. AND ERIC R. W. KNIGHT (2011)

**"Temptation and the Virtues of Long-Term Commitment: The Governance of Sovereign Wealth Fund Investment"**

*Asian Journal of International Law* 1 (02): 321-348.

In this article we look at the governance of SWFs from the perspective of the competing political interests embedded in the sponsor – the domestic political claims on funds and the principles and practice of governance used to discipline those interests in favour of a long-term perspective that emphasises the conservation of wealth and the intergenerational transfer of benefits. Using the case-study of the Australian SWF known as the Future Fund, we argue that SWFs can be used as legal instruments to promote the interests of future generations. In this way, it puts into action the principle of intergenerational equity which has been hereto notoriously difficult to substantively apply in international law. By invoking the intergenerational principle, we argue that the Australian government not only responded to the legal challenges of implementing intergenerational equity but also contributed to its currency as a customary norm.

### GELPERN, ANNA (2011)

**"Sovereignty, Accountability, and the Wealth Fund Governance Conundrum"**

*Asian Journal of International Law* 1 (02): 289-320.

Sovereign wealth funds – state-controlled transnational portfolio investment vehicles – began as an externally imposed category in search of a definition.

SWFs from different countries had little in common and no desire to collaborate. This article elaborates the implications of diverse public, private, domestic, and external demands on SWFs, and describes how their apparently artificial grouping became a site for innovation in international law-making.

### HEANEY, RICHARD, LARRY LI, AND VICAR VALENCIA (2011)

### "Sovereign wealth fund investment decisions: Temasek Holdings"

*Australian Journal of Management* 36 (1): 109-120.

Sovereign wealth funds are investment portfolios and savings funds that are controlled and actively managed by a sovereign government. In this paper, we document the investment behaviour of a specific fund, Temasek Holdings, which is the Singapore government's SWF. Using a sample dataset of 150 publicly listed Singapore firms over the period 2000-2004, we find evidence suggesting that Temasek has a predisposition to invest in firms that are relatively large and have few director block holders. The incentive to invest also increases in firms with lower systematic risk and with compensation schemes that provide the board of directors with stocks and options.

### KNILL, APRIL M., BONG-SOO LEE, AND NATHAN MAUCK (2012A)

### "Bilateral political relations and sovereign wealth fund investment"

*Journal of Corporate Finance* 18 (1): 108-123.

We examine the role of bilateral political relations in sovereign wealth fund (SWF) investment decisions. Our empirical results suggest that political relations play a role in SWF decision making. Contrary to predictions based on the FDI and political relations literature, we find that relative to nations in which they do not invest, SWFs prefer to invest in nations with which they have weaker political relations. Using a two-stage Cragg model, we find that political relations are an important factor in where SWFs invest but matter less in determining how much to invest. Inconsistent with the FDI and political relations literature, these results suggest that SWFs behave differently than rational investors who maximise return while minimising risk. Consistent with the trade and political relations literature, we find that SWF investment has a positive (negative) impact for relatively closed (open) countries. Our results suggest that SWFs use – at least partially – non-financial motives in investment decisions.

### KNILL, APRIL M., BONG-SOO LEE, AND NATHAN MAUCK (2012B)

### "Sovereign wealth fund investment and the return-to-risk performance of target firms"

*Journal of Financial Intermediation* 21 (2): 315-340.

This paper investigates the relationship between sovereign wealth fund (SWF) investment and the return-to-risk performance of target firms. Specifically, we find that target firm raw returns decline following SWF investment. Though risk also declines following SWF investment, we find that SWF investment is associated with a reduction in the compensation of risk over the years following acquisition. Firm volatility decomposition suggests that idiosyncratic risk is what mainly drives these impacts toward decline. Employing a multinomial logit framework wherein combinations of target returns and risk movements are categorised, we see that, in cases of foreign investment, SWFs' target firm performance most closely resembles that of other government-owned firms. The observed results are inconsistent with predictions of higher volatility and improved returns due to monitoring firm activities from the institutional investor literature. This suggests that SWFs may not provide some of the benefits that are offered by other institutional investors.

### KOTTER, JASON AND UGUR LEL (2011)
### "Friends or foes? Target selection decisions of sovereign wealth funds and their consequences"

*Journal of Financial Economics* 101 (2): 360-381.

This paper examines investment strategies of sovereign wealth funds (SWFs), their effect on target firm valuation, and how both of these are related to SWF transparency. We find that SWFs prefer large and poorly performing firms facing financial difficulties. Their investments have a positive effect on target firms' stock prices around the announcement date but no substantial effect on firm performance and governance in the long run. We also find that transparent SWFs are more likely to invest in financially constrained firms and have a greater impact on target firm value than opaque SWFs. Overall, SWFs are similar to passive institutional investors in their preference for target characteristics and in their effect on target performance, and SWF transparency influences SWFs' investment activities and their impact on target firm value.

### TRUMAN, EDWIN M. (2011)
### "Are Asian Sovereign Wealth Funds Different?"

*Asian Economic Policy Review* 6 (2): 249-268.

Sovereign wealth funds have become a prominent feature of the international financial landscape. However, legitimate concerns have been raised about these funds. Many of those concerns can be addressed via increased accountability and transparency by the funds. The Santiago Principles are a good start in doing so. My sovereign wealth funds scoreboard points to areas where these Principles can be improved. At the same time, the OECD effort to address concerns from the host-country side has not resulted in the erection of new barriers to that form of cross-border investment, but the OECD failed to reverse the creeping financial protectionism of the past decade. Because of their size and the source of their funding, some Asian funds stand out. As a result, those funds will be held to a higher standard of accountability and transparency.

### YEUNG, H. WEI-CHUNG (2011)
### "From national development to economic diplomacy? Governing Singapore's sovereign wealth funds"

*The Pacific Review* 24 (5): 625-652.

This paper examines the changing role and governance of Singapore's two sovereign wealth funds (SWFs) over the past three decades, from their earlier participation in domestic national development to their more active involvement in Singapore's economic diplomacy. Based on a variety of sources and data, I argue that these two SWFs, Temasek Holdings and the Government of Singapore Investment Corporation, are state-sanctioned means to secure the economic future of Singapore; they are not strategic devices developed by the Singapore government to pose geopolitical or economic threats on other states. Over time, their economic functions and strategic orientations have evolved with the city-state's dynamic developmental trajectories in the global economy. In the post-Cold War era of global finance, these state-controlled and professionally managed financial investment vehicles are more visible and active in their global expansion and acquisition trails. There are thus significant challenges to their strategic governance and international legitimacy in this new world order. This paper considers some of these challenges in light of recent development in the two SWFs and assesses their organisational and institutional responses to such challenges in today's competitive global economy. This case study of Singapore's SWFs illustrates the critical importance for understanding the rise of SWFs from small states in the evolving global system.

## Books

### BALDING, CHRISTOPHER (2012)
### Sovereign Wealth Funds: The New Intersection of Money and Politics

*Oxford University Press USA, New York City, New York*

Sovereign wealth funds are a growing and dynamic force in international finance. Shifting international economic relations from capital-rich states gives them new power in influencing the global agenda. Despite controlling trillions of dollars in the biggest companies in the world, little is known about the opaque funds of oil rich and non-democratic governments. This is the first book to compile a history of sovereign wealth funds recounting the Abu Dhabi Investment Authority's involvement with the scandal-plagued BCCI bank and Chinese arms exports to Iran. By constructing a history within the proper context of oil driven surpluses and large inflationary pressures with no international investment framework, this book explains the development and growth of sovereign wealth funds. The economics of capital surplus countries and investment strategies are examined in order to better understand sovereign wealth fund creation and growth. In a straightforward and accessible style, the author examines the complex and amazing growth of an unknown group of investors controlling trillions of dollars worldwide.

### BASSAN, FABIO (2011)
### The Law of Sovereign Wealth Funds

*Edward Elgar, Cheltenham, UK*

This book provides a definition and classification for Sovereign Wealth Funds (SWFs) and discusses its phenomenon within the law context.

It identifies the rules applicable to SWFs and to states hosting SWF investments. In eight extensive chapters, Fabio Bassan considers whether SWFs may enjoy immunity with respect to host state measures, and whether SWFs can use alternative forms of protection in bilateral investment treaties.

Written from an international law perspective, The Law of Sovereign Wealth Funds will appeal to students of international business, international organisations, banks and governments.

### BOLTON, PATRICK, FREDERIC SAMAMA, AND JOSEPH E. STIGLITZ, EDS. (2011)
### Sovereign Wealth Funds and Long-Term Investing

*Columbia University Press, New York City, New York*

Sovereign Wealth Funds (SWFs) are state-owned investment funds with combined asset holdings that are fast approaching four trillion dollars. Recently emerging as a major force in global financial markets, SWFs have other distinctive features besides their state-owned status: they are mainly located in developing countries and are intimately tied to energy and commodities exports, and they carry virtually no liabilities and have little redemption risk, which allows them to take a longer-term investment outlook than most other institutional investors.

Edited by a Nobel Laureate, a respected academic at the Columbia Business School, and a long-time international banker and asset manager, this volume examines the specificities of SWFs in greater detail and discusses the implications of their growing presence for the world economy. Based on essays delivered in 2010 at a major conference on SWFs held at Columbia University, this volume discusses the objectives and performance of SWFs, as well as their benchmarks and governance. What are the opportunities for SWFs as long-term investments? How do they fulfil their socially responsible mission? And what role can SWFs play in fostering sustainable development and greater global financial stability? These are some of the crucial questions addressed in this one-of-a-kind volume.

### NARJESS BOUBAKRI, JEAN-CLAUDE COSSET (EDS.)
### Institutional Investors in Global Capital Markets (International Finance Review, Volume 12),

*Emerald Group Publishing, London, UK*

This edited volume seeks to address the role and effects of a broad range of institutional investors in the world's capital markets, through a series of essays from a range of contributors from the academic world and international institutions. The final two sections address the benefits of sovereign wealth fund investments and whether sovereign funds' investments are driven by political objectives.

The first of these sections contains three essays. "What do Sovereign Wealth Funds Imply for Financial Stability?" by Tao Sun and Heiko Hesse of the International Monetary Fund find that SWFs have no major destabilising effect on markets, and conclude that SWFs could promote financial stability and should be given more development space. The second paper, "Africa's Quest for Development: Can Sovereign Wealth Funds Help?" by Thouraya Triki and Issa Faye of the African Development Bank shows that African SWFs are small, suffer from poor governance, and are mainly focused on stabilising local economies. Consequently, their potential role as long-term institutional investors to foster economic growth is limited if current practices are maintained. That said, foreign SWFs are increasingly interested in Africa and are poised to play a bigger role in supporting the continent's growth if the right strategies are implemented. Finally, Elvira Sojli and Wing W. Tham's "The Impact of Foreign Government Investments: Sovereign Wealth Fund Investments in the United States" finds that SWFs bring both short- and long-term advantages to American firms by increasing internationalisation and the company's Tobin's q, which is directly related to the number of government-related contracts granted by SWF countries.

In the final section of the book, Christopher Balding and Yao Yao from the HSBC School of Business at Peking University study the investment and risk management approach of SWFs when national wealth including natural resources is accounted for rather than just financial assets. Their analysis shows that by excluding a state's natural resource wealth from the portfolio, SWFs are overlooking a major source of volatility. To reduce volatility and maximise risk-adjusted returns, SWFs should allocate a higher percentage of fixed assets to high-quality fixed income and low-risk equities. In their paper "Are Sovereign Wealth Funds Politically Biased", Rolando Avendaño (OECD Development Centre) and Javier Santiso (ESADE Business School), use mutual funds' investments as a benchmark for SWF investment allocations and compare these target investments with those of SWFs by looking at the political regime in the sending and recipient country, using different political indicators. However, they find that SWF investment decisions do not differ greatly from those of other wealth managers in this regard. Lastly, the editors' contribution "Sovereign Wealth Fund Acquisitions: A Comparative Analysis with Mutual Funds" challenges the thesis put forward by Avendaño and Santiso, suggesting that in their transaction sample, SWFs did demonstrate a different preference from mutual funds, preferring to acquire stakes in larger, less liquid companies which are financially distressed but which also have a higher level of growth opportunities. They also prefer less innovative firms with more concentrated ownership, which are located in less developed but geographically closer countries with whom they do not necessarily share cultural and religious backgrounds.

### CASTELLI, MASSIMILIANO AND FABIO SCACCIAVILLANI (2012)

**The New Economics of Sovereign Wealth Funds**

*John Wiley & Sons, Chichester, UK.*

Sovereign wealth funds (SWFs) aren't new, but they are often misunderstood. As they've attracted more attention over the last decade and grown greatly in size, the need for a new and thorough resource on SWFs has never been greater. These funds will only grow more important over the coming years. In this book, expert authors who work in the industry present a comprehensive look at SWFs from the perspective of western investors.

**SHEMIRANI, MANDA (2011)**
**Sovereign Wealth Funds and International Political Economy**
*Ashgate Publishing, Farnham, UK.*

For the first time, Shemirani provides a systematic methodology for the study of Sovereign Wealth Funds (SWFs) over their life span and emphasises the need for a paradigm shift in our approach towards the study of state capitalism. Applied in this book to the world's four largest SWFs Government Pension Fund-Global of Norway, Abu Dhabi Investment Authority, Temasek Holdings of Singapore, and the National Wealth Fund of the Russian Federation, this methodology can also be applied to other funds or form a basis for further analytical studies of SWFs. In addition to its first hand approach, this book addresses concerns about the lack of transparency by offering insights into the functioning and investment strategies of the selected SWFs. Academics and students in international political economy, international finance and international business as well as financiers, business leaders, and policy makers, will find the subject and the approach of this book highly useful.

## 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, SDC Platinum, 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 financers 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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