Patrick J. Schena

PhD, Adjunct Assistant Professor & Senior Fellow and Co-Head SovereigNET: The Fletcher Network for Sovereign Wealth and Global Capital, The Fletcher School, Tufts University

Neeraj Prasad

PhD Candidate, The Fletcher School, Tufts University

2014 was a year marked by considerable change in the global macro-economy with particular impact for large, public investors. SWFs, with their links directly to the fiscal programs, and so financial stability, of sponsoring governments, were hardly insulated, but rather buffeted by a host such developments - both macro-economic and geopolitical - that have strained traditional operating models and complicated the ability to effectively deploy capital in scale. Despite such pressures, our review of the direct investing activities of SWFs in 2014 suggests that traditional investments patterns generally prevailed, though distinct elements of opportunity, adaptability and change were clearly discernible at the individual fund level. Interesting too were in increasing number of inter-fund investments and joint ventures.

In 2014 SWFs participated in nearly 140 deals or confirmed rounds that raised approximately \$90 billion. Beyond the usual destinations for this capital – the US and China, real estate and natural resources, new geographies – e.g. Brazil - and sectors – e.g. agribusiness and bio/life sciences - emerged. Among inter-fund deals of note were those sponsored or received by the former Irish National Pension Reserve Fund, the Russian Direct Investment Fund (RDIF), the Fondo Strategico Italiano (FSI), and China's Silk Road Fund. Furthermore, the appeal of institutionalizing the management of state assets continued to root, as SWF assets under management expanded in 2014 to over \$7 trillion, while investor ranks grew with the introduction of new funds in Mexico, West Virginia (USA), China and France.

As 2014 unfolded the structural decline in the price of oil certainly emerged as a critical challenge to sovereign investors. This was especially the case as rapid and dramatic price drops placed strains on the fiscal positions of petroleum producers, which extended operationally to the management of petroleum-based funds. Breaking \$100 per barrel in August 2014 and ending the year at nearly \$50, this rapid fall raised the prospect of material outflows from oil-based funds and a significant slowing in both the scale and growth of future inflows. The result has been a reconsideration of well-established operating principals among such funds related to both asset allocation and risk management. In the Gulf, geopolitical disruptions owing to the advance of ISIS, al Qaeda, and other insurgent elements have further accentuated these fiscal pressures, in some cases — e.g. Iraq —threatening the very viability of investment platforms.



Currently, there are 92 active sovereign wealth funds, eight more than our 2014 Report. 55 countries have established at least one SWF. Middle East, China, Southeast Asia and Norway are the four most active centers of SWFs. Assets under management exceed 7 trillion dollars. SWFs have widely spread in recent years: since 2010, 22 new funds were established. Other 25 countries are considering establishing one. Debates over new SWFs are growing in East and South Africa and in Latin America. Thus, in 2015, there are more than 115 operating or in projected-SWFs. There are 32 funds members of the International Forum of Sovereign Wealth Funds.

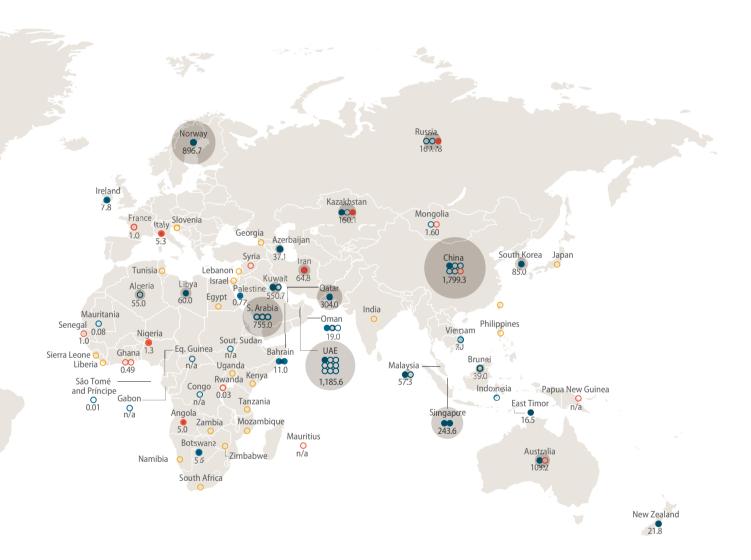


Table 1 Number of deals and average deal size (USD million) by SWF (2014

Sovereign Wealth Fund	Country	Number of deals	Average value*
Temasek Holdings	Singapore	44	170
GIC	Singapore	23	621
Government Pension Fund - Global	Norway	14	411
Qatar Investment Authority	Qatar	11	848
Kuwait Investment Authority	Kuwait	9	359
Abu Dhabi Investment Authority	UAE	9	223
Mubadala Development Company	UAE	8	1,718
China Investment Corporation	China	7	369
State General Reserve Fund	Oman	5	265
Khazanah Nasional	Malaysia	3	115
National Social Security Fund	China	1	2,100
National Pension Reserve Fund	Ireland	1	50
TOTAL		135	604

^{*} Millions of dollars

Source: Fletcher SWF Transaction Database (2015).

For Russia's sovereign entities — the Reserve Fund, the National Wealth Fund (NWF), and the RDIF — these fiscal challenges were further accentuated by the introduction of sanctions against discrete Russian interests in Spring 2014 in response to the government's actions in the Crimea and eastern Ukraine. For example, while assets of the Reserve Fund, consistent with its mandate, were used to cover fiscal shortfalls,¹ NWF assets of as much as \$7 billion (at then prevailing exchange rates) were used between August and December 2014 to recapitalize three Russian state banks — VTB, Gazprombank, and Rosselkhozbank, all of which were impacted by the sanctions regime.² Conversely, the assets of the RDIF did not directly fall under the sanctions regime³ and despite the sanctions it continued to complete new deals such as those signed with Qatar Holdings, CIC, and Bahrain's Mumtalakat amounting to over \$6B in targeted capital.

In Asia, China's launch of the Silk Road Fund, minority seeded by the CIC, and the announced Asia Infrastructure Investment Bank, raises a number of questions about the future leadership multilateral finance in Asia. This is the case not only for the much As we reflect on the broad expanse of SWF deals and direct investment patterns, we note that in 2014 direct investments were once again concentrated among the largest funds, i.e. those with long-established direct investing programs. Furthermore, despite the volatility in resources prices, except overtly in the case of sanctions, the challenges we outlined above appear on the surface to have had marginal impact on the investing activities of SWFs when viewed over the entire year. We believe this is in part a result of lags in large deal activity reacting to macro-economic changes that evolve over time, as compared to events, such as sanctions, whose impacts can be more abrupt.

discussed implications to the Bretton Woods framework, but more immediately as it will impact both the supply of and the competition for quality deal flow, particularly for infrastructure deals in the region. With relevance here as a direct SWF investment, the Silk Road Fund was reportedly capitalized at \$40 billion, with 65% of its capital originating from foreign exchange reserves, 15% each from the CIC and the Export-Import Bank of China, and 5% from the China Development Bank.⁴

¹ See "Sovereign Wealth Funds Start to Leak Oil", Financial Times, 22 March 2015.

² See "Russia's 'Anti-Crisis' National Wealth Fund: An Overview", The Moscow Times, 6 February 2015.

³ The RDIF's management company is a wholly-owned subsidiary of VEB, the Russian state development bank, whose activities were sanctioned.

^{4 &}quot;With New Funds China, Hits a Silk Road Stride", Caixin, 3 December 2014 accessed at http://english.caixin.com/2014-12-03/100758419.html

Chart 1

Deals of Sovereign Wealth Funds by country in 2014



Source: Fletcher SWF Transaction Database (2015).

Our deals analysis includes only direct deals in operating entities, joint venture or specialized fund structures, general investment partnerships, and real estate investment trusts and so is exclusive of exchange-intermediated transactions. By fund based on confirmed closes, Temasek emerges at the top, with 44. This includes both direct transactions and those completed through various of its affiliates, such as Vertex Ventures. 5 The pace of this investment appeared about twice that of Temasek's average deal count during the previous five years. Among the most active funds, Temasek was followed in the rankings by GIC with 23 investments (approximately its previous five year average), then Norway with 14, the Qatar Investment Authority (QIA) with 11, the Abu Dhabi Investment Authority (ADIA) and Kuwait Investment Authority (KIA) each with 9, then the China Investment Corporation (CIC), and Mubadala each with 8. While most funds appeared to investment, based on their capacity, in a manner consistent with their prior direct experience and annual averages, Norway's advance into real estate guickened considerably relative to its earlier investment pace, while CIC's pace of direct investing appears to have slowed. In the case CIC, this trend may be an indication of capacity or opportunity, rather that of liquidity constraints.

With regard to average deal size, based on confirmed deals for which a SWF share was reported, Mubadala, perhaps reflective of its structure and strong development orientation, leads with capital commitments that can average over \$1billion (Table 1). As an exception, NSSF from China, was to some degree an outlier dominating by just one transaction (see Note 8 for some more clarification). By contrast, heavily investing in real estate, Norway's, average transaction size is approximately \$400 million. Temasek, which leads by deal volume, does direct deals that average approximately \$175 million, in rounds that frequently average over \$200 million, while rounds in which venture capital subsidiary Vertex participates average much lower between \$20 - 50 million.

By way of geographic segmentation (Chart 1) in 2014 over 30 SWF deals were closed in the US, followed by China (17), India (15), UK (10), Singapore and Brazil (7), and UAE (6). Temasek and GIC combined for over 20 out of the 34 investments made in US, which among which there was heavy representation in the digital and ecommerce sectors. Also heavily represented among SWF deals conducted in the US was Norway with 6 transactions all in the real estate sector. Temasek and GIC were likewise investors in over half of the investments made by SWFs in both China and India.

See our entry below on SWF participation in the digital economy for specific details concerning Temasek's investment strategy and portfolio building in that sector.

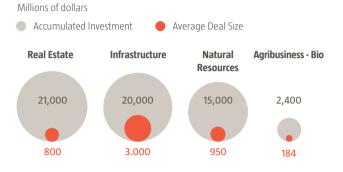
In Europe, by contrast, SWF investment was dispersed across 21 deals, including real estate transactions in Germany, investments by both CIC and the Irish Strategic Fund in the China-Ireland Technology Growth Fund, 2 deals in Italy, including a JV between the KIA and the Fondo Strategico Italiano, 7 deals in Spain among them KIA's investment in Tyba, the Madrid-based on-line recruiting platform, and Temasek's participation on the sale of the custody division of Bank Santander. We also confirmed 7 deals in the UK, among them several real estate transactions, suggesting that London maintains its appeal as a property investment destination among SWFs. Finally, we reiterate that Russia, despite the sanctions regime, was also a destination for SWF flows into the RDIF.

With respect to destination, an interesting development to note in 2014 is the concerted flow of investment into Brazil. Here we identify 7 deals in rounds valued at nearly \$2 billion undertaken among GIC, Temasek (via Vertex), ADIA, and Mubadala. The investments are across several discrete sectors and include ecommerce (Netshoes), infrastructure, insurance, and natural resources. The investment flows reflect the diversity of the Brazilian economy and the interest and commitment demonstrated by SWFs to it.

Deal partnering has been an oft-employed execution strategy among SWFs. We had previously documented a co-investment rate of nearly 50% among SWF transactions completed beginning in 2009. In 2014 interest in institutional co-investing became even more acute. Among key partnering initiatives is the establishment of the Co-Investment Roundtable of Sovereign and Pension Funds in September 2014.6 CROSAPF is structured to exploit the long-term investment horizon of public financial investors to "share investment opportunities in an active manner and to pursue "concerted" coinvestment as opposed to the passive "accidental" co-investment. The initiative notwithstanding with regard to 2014 deals, coinvestment by SWFs nonetheless remained robust in 2014, reflected in 88 investments or about 65% of our total by count. Prominent among such partnerships is that between NMIB and TIAA-CREF, who have undertaken investments in real estate through joint venture structures.

Turning to a sector analysis, real estate again was among the lead targets for SWF investment in 2014, numbering nearly 27 deals, with NBIM continuing to build out its allocation by itself completing 12 deals valued at nearly \$5B. Investments in e-commerce and IT/Telecom combined to number 28 deals — 10 in the latter and 18 in the former. Elsewhere in this volume we present a detailed

Chart 2 Deals of Sovereign Wealth Funds by sector in 2014



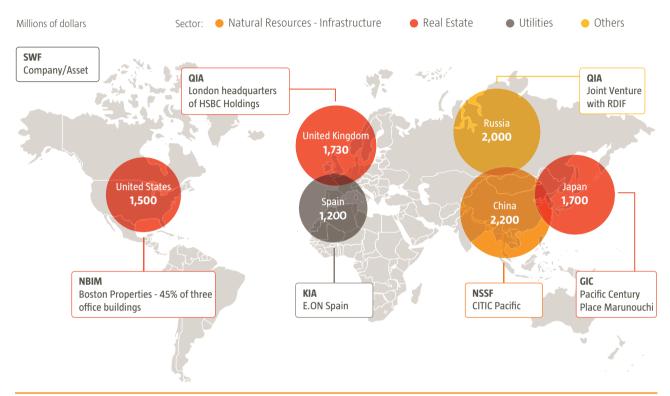
Source: Fletcher SWF Transaction Database (2015).

analysis of SWF investment in digital assets, including e-commerce. We suffice here to note that investment interest in the sector in 2014 represented a considerable increase from prior years and was dominated by both GIC and Temasek, the latter investing directly and through its venture capital subsidiary, Vertex. In natural resources and financial services, two sectors that typically garner sizable SWF flows, we identified 15 deals and 8 deals respectively. It is interesting to note among the latter that, despite - or perhaps due to - the decline oil prices, 7 deals were in the oil and gas sector. Among the financial sector transactions, 6 were direct investments in banks (not including the capitalizations of the 3 Russian banks by the NWF noted earlier) and 2 were in insurance companies. Finally, we identified 9 infrastructure transactions across a range of subsectors, including utilities, power generation, ports, and transport.

By deal size (Chart 2), real estate led with an aggregate deal value of slightly over \$21 billion, followed closely by infrastructure (\$20 billion), then natural resources (\$15 billion). None of these is especially surprising in light of the capital commitments required in each sector. When measure by average deal size understandably infrastructure dominates at almost \$3 billion per transaction, followed by utilities (here separated out from infrastructure) at \$1.7 billion per deal. By contrast, average natural resource transactions average \$950 million, real estate \$800 million, while e-commerce, IT/Telecom, and bio range between \$200-300 million. Agribusiness deals averaged considerably smaller at approximately \$80 million.

⁶ See http://www.ifswf.org/pst/6thamiwswf/crosapf.pdf





Source: Fletcher SWF Transaction Database (2015).

With final reference to sector we call out another interesting development, which emerged more robustly in 2014: Investment volume directed to each agribusiness and bio/life sciences. We identified 13 transactions across both sectors in 2014 at a combined deal value of nearly \$2.4 billion. This represents about one third of the deals we confirmed in both sectors since 2011 and is a significant increase over 2013 (8 deals at \$1.2 billion). Temasek dominated SWF investment in both sectors (7 transactions and total deal size of almost \$1.5 billion) echoing its focus on secular trends to exploit shifting demographic and income dynamics.

Directionally, SWF investment again was primarily outbound with the vast majority of capital invested as outward foreign direct investment. We identified 16 transactions that constituted a domestic investment on the part of the investing fund, again excluding the NWF's three bank capitalizations. Excluding several deals by Vertex in Singapore, which we acknowledge as consistent

with its mandate from Temasek to invest in early stage technology firms in Singapore, the majority of the balance of the deals appeared to represent investments in strategic transactions by the likes of Mubadala, Oman, the QIA, KIA, and the restructuring Irish fund.

Finally, we turn our focus to a review of several of the largest transactions of 2014 (Chart 3). We consider transactions both in terms of total deal size and also based upon the SWF share in any deal. The former provides a useful gauge of the overall deal size preference of individual funds, while the latter informs of the actual commitment of discrete investments. It is important to note as reference that the very process of data aggregation is challenged by the lack of disclosed deal size information. Thus, any exercise to estimate the dollar volume of SWF investments will necessarily exhibit an inherent and unintended selection bias. Accordingly we take care to report both total round size, as well as SWF

participation, when available. Expected large deals tend to cluster in sectors that typically require scale. In 2014 these included a buyout funded in part by the China's NSSF, several infrastructure transactions, one of the several investments in the RDIF noted earlier, and, consistent with our sector analysis, three real estate transactions.

By deal size, we believe that the largest transaction in which a SWF participated in 2014 involved Queensland Motorway, centered on a toll-road network in Brisbane, Australia. The deal was for a reported \$6.6 billion through a consortium that was led by Transurban Group, who manage and develop urban toll road networks in the US and Australia. In addition to Transurban, the consortium included a local pension fund - Australian Super Pty - and the Abu Dhabi Investment Authority. ADIA's interest was reported at 12.5% implying a capital commitment of \$825 million.

Following on Queensland is a deal involving China's National Social Security Fund's⁷ totaling \$5.1 billion that permitted CITIC Pacific Ltd to purchase \$36 billion in assets from its state-owned parent. China's NSSF is the largest investor, having agreed to buy HK\$16.8B (\$2.2 billion) of shares. Insurer AIA Group Ltd acquired \$300 million, while Qatar Holding and Singapore's Temasek Holdings invest \$200 million and \$100 million respectively.⁸

Third in our roster is the sale by German power utility E.ON of its Spanish assets to Australia's Macquarie Group and the KIA in a transaction valued at €2.5 billion (\$3.1 billion). As reported, the deal terms indicated that post-money Macquarie would hold 60% of the equity of the assets, while Wren House Infrastructure Management, a unit of the Kuwait Investment Authority, would hold the balance of 40%, implying a capital commitment of approximately \$1.24 billion.⁹

At \$2 billion Qatar's investment via joint venture with Russia's state-backed private equity fund RDIF also makes our list of large deals 2014. The \$10 billion RDIF, investing alongside foreign partners, had previously concluded partnerships with a number of SWFs - the Kuwait Investment Authority, and Abu Dhabi's Mubadala — as well as the Abu Dhabi Department of Finance.

In addition to participating in the CITIC Pacific and RDIF deals, Qatar Holdings also completed the purchase of the London headquarters of HSBC Holdings PLC, in a transaction that was the U.K.'s largestever real-estate deal. The investment gives Qatar a sizable presence in Canary Wharf office space. The acquisition - 8 Canada Square in the Canary Wharf business district — was London's largest office building at more than a million square feet. According to a statement from J.P. Morgan Asset Management, who advised on the deal, the counterparty was the National Pension Service of Korea. The sale price was reported to have been approximately GBP 1.1 billion or \$1.73 billion. This transaction was closely followed by a second large real estate deal — GIC Singapore's acquisition of Pacific Century Place Marunouchi, Tokyo. Deal value was a reported as \$ 1.7 billion. Finally, a third real estate transaction completes out our review of large deals 2014. This was the \$1.5 billion purchase by NBIM of three office buildings from Boston Properties. The deal represented a 45 percent stake in three buildings, including two in Boston.

For clarity, with respect to earlier reported average deal size by SWFs, given the magnitude of this deal and that in our view it represented outlier to the deal activity by NSSF, we elected to highlight it here rather than as it impacted the NSSF's average deal size.

⁸ See "Transurban Group Buys Queensland Motorways for A\$7.1 Billion", Bloomberg, 24 April 2014 accessed at http://www.bloomberg.com/news/articles/2014-04-23/transurban-led-group-buysqueensland-motorways-for-a-7-1-billion

⁹ See "Macquarie Group, Kuwait's Sovereign-Wealth Fund to Buy E.On's Spanish Assets", The Wall Street Journal, 27 November, 2014 access at http://www.wsj.com/articles/e-on-to-sell-spanish-assets-1417107498