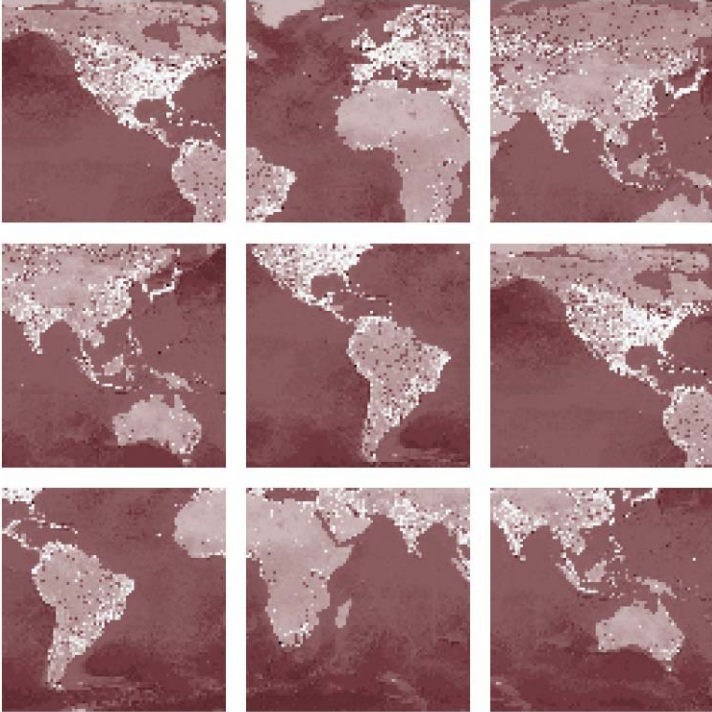


CHAPTER EIGHTEEN

SOVEREIGN WEALTH FUNDS HIGHLIGHT THE CHANGING WORLD—AND THE NEED FOR MORE

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SOVEREIGN WEALTH FUNDS HIGHLIGHT THE CHANGING WORLD—AND THE NEED FOR MORE

Recent months have seen a growing focus on so-called Sovereign Wealth Funds. The degree of focus on these entities is yet another sign of the changing nature of the world economy, and a development that is related to the emergence of the BRIC economies and their rapidly rising financial wealth. Government-controlled investment funds are hardly new, so to some extent the current commentary seems a bit misplaced. Nonetheless, the emergence of more of these funds, their scale and the diversity of their activity are attracting the attention of many financial market participants and Western policymakers. As Sovereign Wealth Funds (SWFs for the purpose of this article) become more sophisticated in their investment strategies, the attention mounts.

Here, we make the following key points:

- The sheer scale of some of these SWFs reflects the massive growth in foreign exchange reserves of many large developing economies, including some of the BRICs.
- We can broadly distinguish between two categories of SWF: those whose vast growth reflects their nation's rich commodity endowments, and those that reflect large foreign exchange intervention activities. Some fall into both categories. For those with plentiful natural resources, the ongoing rise in commodity prices has been a major financial boon. In general, their strategy can be characterised by attempts to increase the long-term returns for their nation, as well as help avoid the consequences of 'Dutch disease'. Russia and many Middle Eastern oil producers fit into this category. The second group can be characterised differently, as nations that have simply accumulated large foreign exchange reserves linked to aggressive FX intervention policies.
- There is perhaps not too much difference between developed-country Finance Ministries and central banks on the one hand, and some SWFs on the other. For both groups, given the size of national reserves, developing more sophisticated investment policies makes sense. Indeed, for many years, we have been surprised that more developed countries have not done so—in particular, Japan and the member countries of EMU.
- It makes considerable sense for these entities to invest more in equities instead of the most liquid fixed income products, as well as diversify out of the Dollar (as much anecdotal evidence suggests is occurring). Whether they are a significant influence on financial prices is more debatable, especially in a market as large as foreign exchange.
- Western policymakers may not like the emergence of SWFs, especially when they are not 'transparent'. However, as in other areas, their complaints are often not on a consistently strong footing.
- Moreover, and lastly, if Western policymakers were to think on a broader scale, the emergence of large SWFs would represent yet another reason why the current organisational structure of the G7, G8, IMF and World Bank needs an urgent overhaul. Just as with misaligned exchange rates, global current account imbalances, high commodity prices, concerns about the environment and global warming, we are highly unlikely to see significant and optimal policies until and unless the institutional structure of world policymaking is changed.

What Is a Sovereign Wealth Fund?

As the name implies, these funds invest on behalf of their nations. Some of them have existed for close to 50 years. The Kuwait Investment Authority (KIA) and the Abu Dhabi Investment Authority (ADIA) are two of the best-known, longest-existing of these funds. Interestingly, their style typifies some of the issues currently discussed about the group as a whole, even though these specific funds have existed for a long time. The 1980s saw occasional political concerns surrounding some of their stakes in Western companies. Recently we have seen considerable focus on newer (also large) SWFs ranging from the Norges Bank, which manages Norway's oil wealth, to those of China and Russia. As the table on the next page shows, the list of countries with some form of SWFs is large and diverse.

Not surprisingly, many of the largest SWFs represent countries with the largest foreign exchange reserves. But not all countries with large FX reserves have developed funds. Most strikingly, Japan's Finance Ministry still invests the vast majority of the country's huge foreign exchange reserves. Also, the central banks of most developed European countries manage their respective reserves. It is important to remember this when discussing two of the most topical issues surrounding SWFs: their size and their accountability.

The optimal size of an SWF is closely linked to the optimal level of a nation's foreign exchange reserves. We have long since believed that, in a world of floating foreign exchange rates, far too many developed and developing countries have FX reserves that are far too big. Japan and the 13 European countries that share the single currency, the Euro, do not appear to need anything like their current level of FX reserves. In some ways, therefore, some of the issues often raised about SWFs and others from the emerging world are no different to the challenges facing developed countries. It often seems to us that developing countries have been more sophisticated in shifting to a 'truer' investment philosophy for investing large parts of their foreign reserves than have the developed nations. If they are not going to sell the reserves or run them down, then why not invest them to achieve as high a return as possible?

As the Swiss have shown, you don't need to be an SWF to invest in equities and other forms of riskier and alternative assets. The Swiss National Bank has been doing this for a number of years with some success.

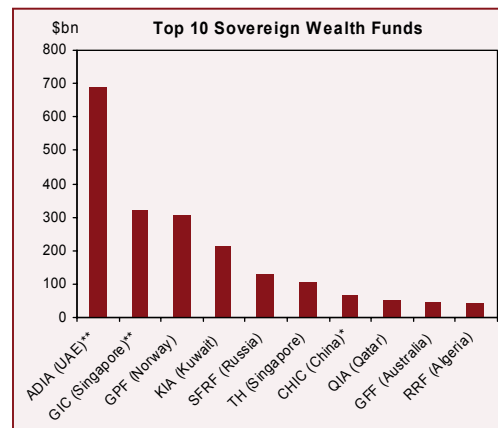
World Top 10 FX Reserves

Country	Total FX Reserves* (US\$bn)	Current Account** (% of GDP)
China	1,434	9.4
Japan	911	3.9
Russia	407	9.7
Taiwan	263	6.8
Korea	257	0.7
India	222	-1.1
Eurosystem	201	0.0
Brazil	161	1.6
Singapore	147	27.5
Hong Kong	141	10.8

*As of September 2007

**As of December 2006

Source: IMF, National Sources



Sovereign Wealth Funds

Country	Name	Date established	Current size ^a (US\$bn)
United Arab Emirates	Abu Dhabi Investment Authority and Corporation	1976	500 – 900 ^e
	Mubadala Development Company	2002	500-875 ^e
	Istithmar	2003	10 ^e
	Government Pension Fund – Global	1990	4 ^e
Norway			308
Singapore	Government of Singapore Investment Corporation	1981	208 – 438 ^{er}
	Temasek Holdings ^b	1974	100 – 330 ^{er}
Kuwait	Kuwait Investment Authority	1960	108
Russia	Stabilisation Fund of the Russian Federation	2004	213
China	Central Huijin Investment Company ^b	2003	133 ^f
Qatar	Qatar Investment Authority	2005	68 ^e
Australia	Future Fund ^b	2006	50 ^e
Algeria	Revenue Regulation Fund	2000	49
United States	Alaska Permanent Fund ^b	1976	43
Brunei	Brunei Investment Agency	1983	38
Korea	Korea Investment Corporation	2005	30 ^e
Malaysia	Khazanah Nasional ^b	1993	20 ^f
Kazakhstan	National Oil Fund	2000	18
Canada	Alberta Heritage Savings Trust Fund ^b	1976	18
Venezuela			16
	National Development Fund ^c	2005	15
	Macroeconomic Stabilisation Fund	1998	1
Chile	Economic and Social Stabilisation Fund	2006	10
New Zealand	Superannuation Fund ^b	2001	10
Iran	Oil Stabilisation Fund	2000	9 ^e
Botswana	Pula Fund	1997	6
Oman	State General Reserve Fund	1980	5 ^e
Mexico	Oil Income Stabilisation Fund	200	3
Azerbaijan	State Oil Fund of the Republic of Azerbaijan	200	2
Trinidad and Tobago	Heritage and Stabilisation Fund	2007	1
Timor-Leste	Petroleum Fund	2005	1
Kiribati	Revenue Equalisation Reserve Fund	1956	<1 ^e
São Tomé and Príncipe	National Oil Account	2004	<1
Sudan	Oil Revenue Stabilisation Account	2002	<1
Total^d			2,091

e = estimate, r = some or all assets are included in reserves

a. Data are from the end of 2006 or the most recent date available.

b. A portion of the holdings is in domestic assets.

c. A portion of these holdings is intended for domestic investment.

d. Total uses the midpoint of the range of estimates.

Source: Edwin M. Truman, The Management of China's International Reserves: China and a SWF Scoreboard, Peterson Institute for International Economics, October 19, 2007.

Accountability and Transparency

A second issue that often arises relates to accountability, governance and, especially, transparency. Ted Truman of the Institute of International Economics has recently published a useful article on the topic, discussing SWFs generally while focusing on China. Of course, we would all probably prefer to live in a world of very open transparency. SWFs are not the only opaque institutions—the investment policies of many developed countries also lack transparency. Some of them have on occasion suggested that too much transparency could be harmful, not least as it might limit their ability to make timely and large allocation decisions. Why have these complaints not been aired in the past? Many developing countries have been investing in US (and other) bonds for years. This didn't seem to 'upset' Western policymakers.

As SWFs have grown in size, signs that they are searching for higher returns presents Western nations with new challenges. The often-stated concern is that Western governments do not want to see their own 'trophy' assets fall into foreign hands, especially those that are currently privately owned. But is this really a balanced judgement? Although it means that the likely 'national' cost of servicing the returns on such assets will be higher, it would appear somewhat far-fetched to assume that the ownership could result in usage that might even damage their interests.

As this relates to the energy challenges of high prices and increased production, there is a credible case to be argued that Western governments should encourage foreign state-backed entities to buy some of their energy companies (as shown in the brief discussion in the box by Jeff Currie). Having government support might lead to stronger investment and allow developing countries access to the better technology needed to address some of the growing challenges in this area.

The Rationale for State-Backed Investment Funds

Literature on the economic rationale for official investment vehicles appeared in the 1970s following the first oil price crisis and the sudden emergence of large oil revenues for many oil-producing countries. A number of countries, known as the 'low absorbers', faced a rush of revenues that could not feasibly be spent on domestic consumption, and therefore had excess savings. Not only did it make sense to invest such surpluses overseas, but that the potential rate of return on overseas investment needed to be compared with the discounted value of future energy returns to determine the optimal rate of oil production today. Such theories showed how to avoid 'Dutch disease' and ensure that countries would not see their non-energy economies damaged by their commodity wealth. These theories were behind the development of the KIA, ADIA and, to some extent, (while it is not a wealth fund as such) the Saudi Arabian Monetary Authority (SAMA) and other institutions in the Middle East.

Other sovereign-backed wealth investment funds started up in their wake. These included in Singapore's Temasek and GIC, established as a fund for future generations, in which the prosperity created by the fund's returns would be for the benefit of future citizens.

By investing in overseas higher returning assets, not only did these nations earn higher returns, but they might encourage better performance in the economies of the West. Indeed, contrary to

the mood of many today, SWFs were earlier often regarded as a positive for the global economy. Without them, the shortage of world savings would entail a prolonged global recession.

Do Sovereign Wealth Funds Influence Asset Prices?

As can be seen in the earlier table, the size of SWFs is now significant and, in recent years, financial market participants have suggested that their activities influence asset prices. Analysts have argued for many years that the Euro, for example, has been supported by ongoing diversification out of the Dollar. Many have suggested that the bond yield ‘conundrum’ is a direct result of SWFs buying US (and other G7 countries’) bonds, and now there is growing talk that diversification from bonds to equities is inflating equity prices.

While the activities of SWFs in all financial markets does appear to be on the rise, it is far from clear that their activities influence prices. In the event of planned collusion and joint investment decision making, this would plainly be the case and, at the margin, it is feasible that in some markets any large financial decision can influence market prices. However, many of the underlying markets that SWFs engage in are rather large—usually they need to be in order to provide the liquidity and related properties that any large institutional investors desire.

According to Truman, the combined size of outstanding SWF assets is just over \$2trn (coincidentally, about the same as the estimated total assets of hedge funds).

It is hard to believe that SWF activity influences the price of major currencies. The latest BIS survey suggests that the daily turnover of the global foreign exchange market is about \$3trn. Thus the foreign exchange market turns over 50% more than the aggregate size of SWFs on a daily basis. Anecdotal evidence suggests that many SWFs have been active buyers of the Euro in recent years, but the same anecdotes suggest that some of them were also buyers when the Euro was introduced in 1999. It is worth pointing out, in this regard, that the Euro declined for the best part of its first two years in existence.

In fixed income markets, we ourselves have published research to suggest that the activities of central bank buying of US Treasuries may have depressed 10-yr US bond yields. In *Global Viewpoint 06/08*, we estimated the impact of Asian and Middle Eastern purchases of intermediate maturity government securities to be in the region of 40bp-50bp. This is the order of magnitude of the unexplained portion of 10-yr rates in the US and Germany in the average between 2004 and today, once cyclical developments are accounted for in a multi-country, multi-variate regression model such as our Sudoku framework. We are of the view that

Size of Key Financial Markets

Billion US\$	Size of SWFs ¹	Size of Daily FX Turnover ²	Size of Government Bond Market ^{***2}	Size of Equity Market ³
Global	2,091	3,210	24,809	29,285
US	—	—	6,411	13,690
Japan	—	—	6,851	2,899
Europe***	—	—	7,354	9,941

¹Daily average of total traditional (spot, forward, FX swaps) turnover in April 2007

²Domestic Debt Securities, Amount Outstanding in March 2007

³Europe includes UK

¹Source: Truman (2007); ²Source: BIS; ³Source: MSCI

Sovereign Wealth Funds Highlight the Changing World

gradually the overvaluation of bonds will diminish as sovereign pools diversify away from fixed income instruments. However, as we pointed out earlier, this activity of central bank buying of US Treasuries does not often catch the attention of policymakers in some countries.

Equity markets are not as big as foreign exchange markets, so if all SWFs are making significant asset allocation shifts into equities, then they might positively support prices to some degree. However, even here, it might be wrong to rush to such a conclusion. One highly visible example to the contrary is evident in China. Since the Chinese authorities announced that they were buying 9.9% of the (now public) private equity specialist firm Blackstone, its share price has fallen, not risen. Other cautionary tales exist. Suggestions by market commentators in 1999-2000 that the rising continental European pension funds would support global equity prices for years have also turned out to be rather incorrect.

The presence of SWFs might influence prices for some assets. However, so do those of other large participants and, as we mentioned earlier, some SWFs have been investing in this way for many years.

An Additional Need for Reform

In recent weeks, more Western policymakers have talked about the need for much greater transparency on the role of SWFs. The new head of the IMF, Dominique Strauss-Kahn, has discussed the need for more information, as have other IMF staff. Fortunately, Strauss-Kahn's reference to the need for the IMF to press ahead with reform of its own purpose makes his comments more credible than those of others.

Sovereign Wealth Funds should now be added to the long, and rapidly growing, list of major economic policy issues supporting a view that the G7, G8, IMF and World Bank should no longer exist in their current format. It is now nearly six years since we published 'The World Needs Better Economic BRICs'. If Western policymakers want SWFs to operate in a more transparent environment; if they want to see a quicker reduction in global imbalances, a fairer value of many currencies, and some credible measures to halt the erosion of our environment; and if they want to reduce global warming—and so much more—then why not undertake some positive steps themselves in terms of the structure of the main multilateral institutions they still control. As long as China and the other BRICs cannot sit down with (some of) them at the same table, a place at that table will become increasingly less desirable.

Jim O'Neill
November 7, 2007

The Energy Problem Is Related to the Savings Problem

The sharp rise in energy prices that started at the beginning of this decade has generated what is likely the largest wealth transfer on record. We have long argued that this rise in prices is the result of inadequate investment in energy productive capacity over the last two decades, underinvestment that is now creating severe supply constraints. We estimate that since 2001, due to the surge in oil prices, energy importing countries have transferred an additional \$3 trillion to energy producers than they otherwise would have had energy investment been adequate to keep prices at \$20/bbl.

Much of this capital now resides in the foreign exchange reserves and sovereign wealth funds of the energy producers, and has been labeled 'surplus savings', which has been identified as one of the key reasons behind lower real interest rates. While this 'surplus savings' has generated a modest rise in the global net savings rate and hence a modest rise in investment, the key driver of low real interest rates has been a dearth of good investment opportunities, which has, in turn, forced capital to flow towards lower-yielding, inefficient investments.

But how can there be a dearth of good investment opportunities, particularly in energy, which has been and continues to be capacity constrained with extremely high yields? The answer lies in policy constraints, which have limited the access to higher-yielding investments and substantially increased the cost of those investments that are accessible, lowering their returns. These dynamics have forced the flow of capital from high-yielding natural resource-rich countries to freely accessible low-yielding investments in developed countries.

It is not a coincidence that the energy industry, which is the most capital-constrained and hence highest-yielding, is also the industry with the largest political constraints on the free flow of capital. Energy is not only the largest industry in the world, with an annual output in excess of \$4 trillion (making it the second-largest economy in the world), it is also the most politically sensitive industry, with consuming countries driven by security of supply concerns and producing countries driven by resource-protection issues.

In the pursuit of these political goals, each country in the world has enacted policies to protect their own interests. The energy producers are reluctant to allow foreign capital to invest in their country's resources. The energy consumers are equally protectionist. Consuming-country governments have been quick to strike down any overture from one of the energy producers to buy or make a large-scale investment in one of their energy production, transportation or even distribution companies. This creates very large constraints on the free flow of capital, labour and technology.

These political constraints are far-reaching. In the consuming countries, efficient investment in alternative energy is constrained due to bans on nuclear energy, which could be used to produce oil where energy is extremely scarce. Immigration constraints prevent the free flow of engineers on a global basis, particularly from China and India. Protectionist farm policy motivates agricultural import tariffs, which prevent the free flow of biofuels and ultimately the optimal level of investment in the extremely efficient Brazilian ethanol industry. Biofuel subsidies in the consuming countries discourage lower-cost, equally environmentally-friendly investments elsewhere in the world. In the producing countries, sharp increases in taxes and a high level of uncertainty over property rights discourage direct investment, even when it is allowed.

The Energy Problem Is Related to the Savings Problem *(continued)*

Historically, this mismatch of political aims did not create investment problems. During previous commodity investment phases in the Cold War era, when the world was 'bilateral', investment flowed more freely as political aims were more coordinated. In the wake of the Cold War, the world has become much more multilateral, with many countries pursuing their own interests, which creates a healthy level of competition in many industries. However, in energy, which is global in nature and requires coordination, such competing interests lead to an inefficient level of investment. Put another way, while commodity markets are increasingly globalised in terms of consumption, they are increasingly fragmented in terms of investment.

The world cannot solve this energy investment problem if the current policy constraints remain in place. Global coordination is the key to the long-run energy solution, and it is important to remember that no single country in the world is completely energy independent.

Jeff Currie

With special thanks to Charlie Himmelberg and Jonathan Waghorn for their input.