

Sovereign Wealth Funds

What they are and what's happening

Stephen Jen

A new and growing class of funds

Globalisation has not only disturbed the balance of power between the US and the rest of the world, it has also altered the balance of power between the public and the private sectors. One channel through which the public sector will gain influence over the financial markets is Sovereign Wealth Funds (SWF). A SWF is a government investment vehicle that invests in foreign currency denominated assets and whose management is distinct from that of official reserves. SWFs are already quite large in size, and will likely grow very rapidly in the coming years. How they will operate, both in terms of their portfolio allocation and the way in which the managers of these funds communicate and interact with the private sector will have great implications for the financial markets. In this note, I address some of the key features and implications of this new and growing class of fund.

Stephen Jen is a Managing Director and Chief Currency Economist at Morgan Stanley, London. The views expressed in this paper are those of the author, and do not necessarily represent those of Morgan Stanley.

What are 'SWFs'?

The concept of SWFs is not new. Many of these funds were originally established three or so decades ago as oil price (or commodity price) stabilization funds to help block out disturbances from volatile oil prices on the budget, monetary policy and economy of oil exporting countries. However, with the sharp and possibly permanent rise in oil prices in recent years, these funds have evolved from 'stabilization funds' to 'wealth accumulation' or 'wealth preservation' funds.

What is new about SWFs is that many Asian central banks, having accumulated more than enough official reserves in recent years for liquidity purposes, are contemplating investing a significant part of their foreign reserves through SWFs in assets that have higher expected returns than those on the safe sovereign bonds. In other words, the key difference between official reserves and SWFs is that the former hold mostly 'risk-less'¹ assets such as sovereign bonds, while

¹ There is still of course 'market risk' associated with every financial asset. By 'risk-free' we mean default or credit risk-free.

the latter may have equities, corporate bonds and other assets in their portfolios. The change in the currency and asset composition of the portfolios of SWFs is what makes them important for the financial markets.

Table 1 is a summary of the key SWFs that are either already in operation or are officially scheduled to be launched in the near future.²

How big are the SWFs?

According to my estimates, SWFs now total a little under US\$2.9 trillion, compared to total official reserves of some US\$6.0 trillion as of September, 2007, and some US\$1.7 trillion of assets under management by hedge funds. Funds derived from oil and commodities account for about two-thirds of the total SWFs.

There are three SWFs that are particularly important. The first is, obviously, China's SWF, which is likely to have a 'birth weight' of US\$200 billion by the time it is established, and will likely grow rapidly over time, possibly by US\$200–300 billion a year. China does not need US\$1.5 trillion dollars of reserves for liquidity purposes. While there are different perspectives on how much China needs in its 'liquidity tranche' of official reserves, my guess is that US\$800 billion or so should be adequate. As China's C/A (current

account) surplus grows, it is likely that most of the new balance of payment surpluses will eventually end up in China's SWF. In the coming years, China's SWF is likely to become the largest in the world, surpassing ADIA.

The other two SWFs I find interesting are the ones from Russia and Japan. Russia's SWF is projected to be very small in size when it is launched in February 2008.³ However, with official reserve holdings exceeding US\$400 billion—making Russia the holder of the third largest pool of reserves in the world—it is likely, in my view, that Russia will eventually expand its SWF significantly.⁴

Similarly, Japan's massive official foreign reserves significantly exceed what they need for liquidity purposes.⁵ In light of the demographic trend that will be very unfriendly for the budgetary outlook, there are compelling reasons, in my opinion, for Japan to also establish its own SWF in order to enhance the return on its investment, thereby minimising the need for additional tax rate increases. At present,

³ I am guessing that, when it is launched in February 2008, it will have a 'birth weight' of 'only' US\$32 billion. This is small, in light of the fact that Russia currently has the third largest official reserve holdings in the world, more than US\$400 billion.

⁴ We calculate that, out of US\$406 billion in official reserves, Russia may only 'need' US\$85 billion or so for liquidity purposes, suggesting 'excess reserves' of around US\$320 billion. Please see 'Excess Official Reserves' by Stephen Jen and Charles St-Arnaud (Morgan Stanley Research, July 12, 2007). When the Stabilisation Fund gains confidence in its investments, I believe Russia will raise the reserves allocated to its SWF.

⁵ As a developed country with a flexible exchange rate policy and perfect access to international markets, Japan does not really need any foreign reserve holdings, in principle. If we apply basic rules of thumbs, a very conservative estimate is that Japan only needs about US\$225 billion for liquidity purposes.

² It may be useful to point out a fundamental difference between SWFs derived from commodity exports, such as the Norges Bank's GPF, and other funds. SWFs derived from commodity sales are pure assets. On the other hand, most of the Asian SWFs' foreign currency assets are financed by sales of domestic currency bills, i.e., these assets are balanced by liabilities. Such a distinction has implications for how they are managed.

Table 1: Sovereign Wealth Funds

Country	Fund Name	Assets (Mlns US\$)	Inception year	Source of funds
UAE	ADIA ¹	875,000	1976	Oil
Norway	Government Pension Fund – Global	380,000	1996	Oil
Singapore	GIC ¹	330,000	1981	Other
Saudi Arabia	Saudi Arabian funds of various types ¹	300,000	n/a	Oil
Kuwait	Reserve Fund for Future Generation	250,000	1953	Oil
China	State FX Investment Corp. + Huijing Co.	200,000	2007	Other
Singapore	Temasek Holdings ¹	159,210	1974	Other
Libya	Oil Reserve Fund	50,000	2005	Oil
Algeria	Fond de régulation des recettes	50,000	2000	Oil
Qatar	Qatar Investment Authority	42,600	n/a	Oil, gas
US (Alaska)	Permanent Reserve Fund	38,000	1976	Oil
Brunei	Brunei Investment Authority	30,000	1983	Oil
Malaysia	Khazanah Nasional BHD	25,700	1993	Other
Russia	Stabilisation Fund ²	24,000	2003	Oil
Korea	KIC (Korea Investment Corporation)	20,000	2006	Other
Kazakhstan	National Fund	17,600	2000	Oil, gas
Canada	Alberta Heritage TF	15,500	1976	Oil
ROC (Taiwan)	National Stabilisation Fund ³	15,000	n/a	Other
Iran	Oil Stabilisation Fund	15,000	1999	Oil
Chile	A new SWF based on the Copper Fund	14,820	1985	Copper
Nigeria	Excess Crude Account	11,000	2003	Oil
Botswana	Pula Fund	6,800	1966	Diamonds
Oman	State General RF	2,000	1980	Oil, gas
Azerbaijan	State Oil Fund	1,500	1999	Oil
Venezuela	FIEM	756	1998	Oil
Canada	Fond des générations (Québec)	560	2006	Electricity
Trinidad & Tobago	Revenue SF	460	2000	Oil
Kiribati	Revenue Equiliz. Fund	400	1956	Phosphates
Uganda	Poverty Action Fund	350	1998	Aid
Total		2,876,256		
Oil & gas-related funds		2,103,416		
Non-oil related funds		772,840		

¹ Estimates from the IMF's WEO Report.² The Fund for National Well-Being.³ My estimate of January 2008.

Source: Morgan Stanley Research.

both the BoJ and the MoF are not in favour of this idea. But I believe they will change their mind and, if I am right, Japan will have one of the largest SWFs in the world, which could possibly weigh in at US\$700 billion, if not a lot bigger, primarily because Japan's prospective SWF could also include the GPIF assets.⁶

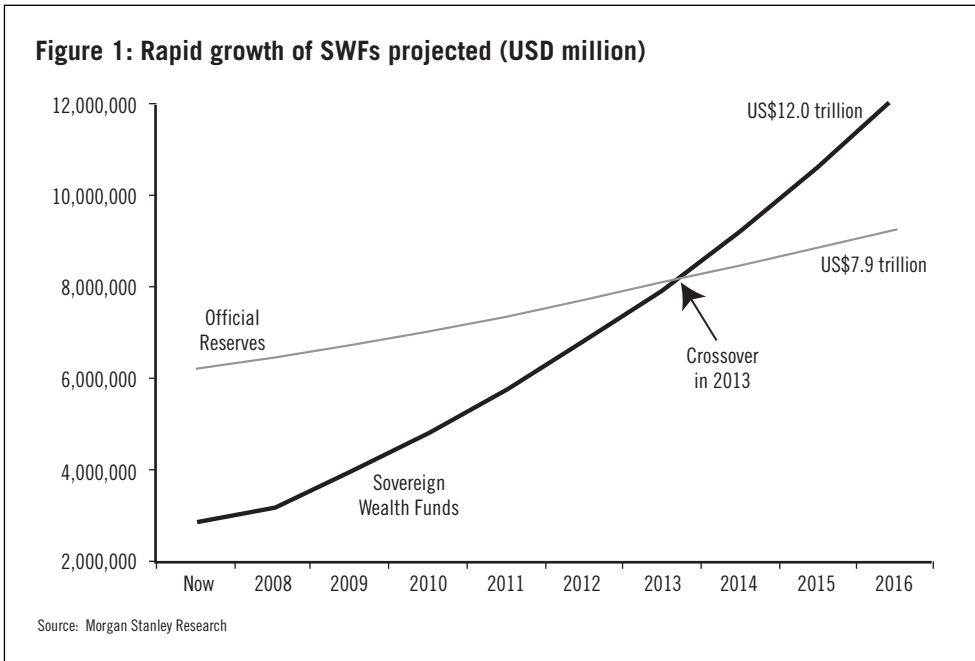
Major emerging economies also have meaningful capability to establish new SWFs. My calculations show that 7 selected large emerging economies, whose foreign reserves total US\$3.2 trillion, may have half that amount (US\$1.5 trillion) as 'excess reserves', i.e., official reserves exceeding what these countries need for liquidity purposes. In the 1970s and the 1980s, the rule-of-thumb for minimum foreign reserve requirement was 3 months' of import coverage. However, in recent years, capital flows have become much more important and the new rule-of-thumb for minimum foreign reserve holdings is full coverage of external debt falling due in the coming year—the so-called 'Greenspan–Guidotti Rule'. According to my calculations, using a stricter version of the above rules, my conservative guess puts the

total size of potential new SWFs from 7 of these emerging economies to be US\$350 billion, potentially boosting the total size of SWFs in the world from US\$2.54 trillion to close to US\$2.9 trillion.⁷

Collectively, SWFs are expected to grow rapidly in the coming years. While, in the first years, many central banks are likely to transfer big portions of official reserves into SWFs (e.g., China and Japan), over time, compounded investment returns are likely to help the SWFs grow rapidly. According to my calculations, SWFs could become absolutely massive in size in the not-too-distant future. Specifically, my calculations show that the total size of SWFs could reach US\$12 trillion by 2015, and surpass the size of the world's total official reserves within five years (before 2011). Figure 1 shows the trajectories of the world's official reserves and SWFs in one particular scenario. Most of the growth in the SWFs will come from Asian exporters, rather than oil exporters. In fact, the composition of SWFs is projected to shift from two-thirds oil money, one-third Asian exports to half-and-half by 2015.⁸

⁶ In 'Why Japan Should Have its Own Sovereign Wealth Fund,' (Morgan Stanley Research, July 5, 2007), I calculate that Japan 'needs' only US\$200 billion or so for liquidity purposes, leaving US\$700 billion to be invested through a SWF. On July 10, 2007, T. Ito, a senior advisor to the Prime Minister, made a very similar suggestion, that US\$700 billion be invested through a SWF. The Government Pension Investment Fund (GPIF), which now has around US\$1.4 trillion in assets, may also be managed by this SWF entity. Furthermore, there is discussion that some of the Government's real estate holdings—the Japanese Government owns about a quarter of all the land in Japan—may be securitised and "liquified" and the proceeds be invested through the SWF.

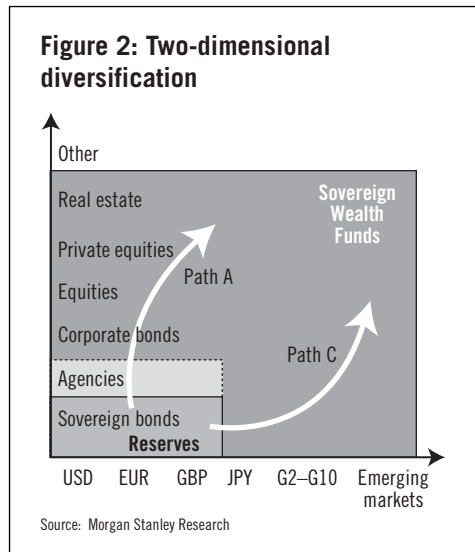
⁷ 'Excess Official Reserves,' (Morgan Stanley Research, July 12, 2007) by Stephen L. Jen and Charles St-Arnaud. These 7 countries include India, Korea, Malaysia, Taiwan, Brazil, Turkey, and Russia. ⁸ 'How Big Could Sovereign Wealth Funds Be by 2015?' by Stephen L. Jen, Morgan Stanley Research, May 3, 2007. One important caveat is that continued investment in SWFs depends on there not being large drawdowns. SWFs' risk-taking appetite will, I suspect, be highly sensitive to its performance. Particularly in the initial years, the tolerance for investment losses may be low, and funds could easily be kept in the form of official reserves if the SWFs are discouraged by losses.



What will the SWF's investment strategy be like?

Relative to the benchmark portfolio for official reserves, I believe the SWFs will diversify across assets and countries. Figure 2 shows what I have in mind. At present, 95% of the official reserves in the world are invested in sovereign bonds and agencies denominated in USDs, EURs and GBP. Across assets, SWFs will diversify into corporate bonds, equities, private equities, real estate and other assets. Across currencies, I believe SWFs will be much more active in the G4-G10 space, and in emerging markets.

Whether the SWFs diversify more across assets or currencies matters a lot for the dollar and the US Treasuries. My own guess is that the SWFs are likely to operate only in markets that



are very liquid, and will only diversify across assets provided they can stay in liquid markets. The US still offers the most liquid markets in the world. In terms of the world's total market cap

of outstanding (tradable) sovereign bonds, excluding JGBs, the US accounts for 48% of the world's market. Similarly, the US accounts for 49% of the world's corporate bond market, and 40% of the equity markets in the world. For comparison, Germany accounts for 3.8% of the world's equity markets, in terms of market cap.

Therefore, in terms of Figure 2, Path A seems more likely than Path C. In other words, as SWFs become fully operational, it is likely to diversify across assets in the US faster than cross-currency diversification, I suspect, and the impact on asset prices may be greater than that on exchange rates. Assuming that SWFs could, collectively, adopt a 25:45:30 portfolio (in bonds, equities, and alternative investments, respectively), there would be large net sales of USDs and EURs, but purchases of JPY, EM currencies, and a little GBP.⁹

Possible impact on the financial markets

Though risky assets prices will not unconditionally rise, without limit, if a group of investors decide to start to release a significant part of the US\$5.6 trillion worth of assets currently invested primarily in sovereign bonds issued by the US, European countries and the UK, and instead invest in equities, corporate bonds, private equities, commodities and real estate in a wider range of economies, the balance between sovereign bonds and

risky assets must change. In other words, risky assets will likely trade higher than suggested by the economic fundamentals.

We calculate that, *ceteris paribus*, such a shift from official reserves to SWFs could imply a rise of 35 bp in long bond yields in the US. In addition, all else equal this could lift the global P/E ratio by up to 10%.¹⁰ These guesstimates may seem modest. However, since funds under management total some US\$60 trillion, in addition to the direct, 'mechanical', effects from SWFs, long bonds could be further undermined by private funds trying to 'front run' what they suspect the SWFs may or may not do. This psychological effect could potentially be much larger than the direct effect, in my view.

Financial protectionism the next risk

The emergence of the SWFs will not only fundamentally alter how risky assets trade, but will also raise important questions, particularly concerning financial protectionism, which, I suspect, will become more serious than trade protectionism. The complications of CNOOC and Dubai Port could become recurring events in many countries, now that a good part of the official reserves are made available for equity acquisitions. The transformation of these foreign central banks from *creditors* to *owners* could lead to political reactions not just in

⁹ See 'Portfolio Allocation for Sovereign Wealth Funds' (Morgan Stanley Research, 21 Nov 2007) by Stephen L. Jen.

¹⁰ 'Sovereign Wealth Funds and Bond and Equity Prices,' Morgan Stanley Research, May 31, 2007, David Miles and Stephen L. Jen.

the US, but also in other countries (such as resources rich countries like Canada and Australia or European countries with good banks and financial institutions) offering assets that foreign reserve-rich nations find desirable.

We have already witnessed a divergence in opinions regarding investments by SWFs. To generalize, Anglo-Saxon countries such as the US, UK and Australia seem more inclined to continue to welcome inflows of this type of capital, while European countries, particularly Germany, are starting to express more concerns about these funds. If financial protectionism is not universal, then SWF capital could be deflected to countries with more open capital accounts, benefiting their currencies and asset prices in general.

Transparency

With the exception of the Norges Bank, most of the SWFs are not transparent, in that they do not reveal either (1) their investment objectives and strategies or (2) their activities and performance.

The most important determinant of the level of transparency a SWF chooses to have may be their obligations to the ultimate 'shareholders,' i.e., the public. In a democratic society such as Norway, accountability and transparency are closely intertwined, and the Norges Bank does not have options other than to be ultra-transparent, at

the expense of some side effects of being very transparent. However, the situation may be quite different in other countries. Without the pressure from the populace to be transparent, the side-effects of being transparent could discourage many of the SWFs from being overly transparent.

Having said this, there are two other arguments in favour of greater transparency. First, transparency could help deal with corruption. Second, greater transparency could help recipient countries accept capital inflows and refrain from imposing barriers to investment. The key here is for the recipient countries to feel equally comfortable with foreign state or private funds. Most countries don't have major issues with foreign investment, but many are sensitive to foreign *state* investment. Being as transparent as private funds could help the market access of SWFs.

There may be a role for the IMF, in helping to guide the SWFs through a set of recommended 'best practices'. This could help the SWFs being welcomed as a new class of investors.

Bottom line

SWFs are big and are growing fast, and their investments will have significant implications for financial asset prices around the world. Greater transparency by the SWFs could help restrain the rise of financial protectionism.

