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Testimony of

**Brad Setser
Fellow, Geoeconomics
Council on Foreign Relations¹**

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**“The Implications of Sovereign Wealth Fund Investments for
National Security”**

¹ The Council on Foreign Relations takes no institutional position on policy issues. All statements of fact and expressions of opinion contained in this publication are the sole responsibility of the author

I would like to thank Chairman Wortzel, Commissioner Mulloy and the members of the US-China Economic and Security Review Commission for the opportunity to testify today.

The sudden prominence of sovereign wealth funds stems from the combination of high oil prices and extensive exchange rate management in Asia – along with the adoption of investment strategies that have raised the public profile of many long-established funds.

Today's global economy is marked by large current account surpluses in the major oil-exporting regions and an equally large surplus in East Asia even though Asia is a major oil-importer (Chart 1). The simultaneous presence of large surpluses in both Asia and the oil-exporters differentiates the current era from the late 70s. These large current account surpluses financed a large buildup of the foreign assets of their respective governments, not private capital outflows. Former Assistant Secretary of the Treasury Edwin Truman noted that recent developments have “shift[ed] wealth toward countries with different conceptions of the rule of government in their economic and financial systems” than the United States.

Until recently, most of those assets have been held as central bank reserves and invested conservatively. The scale of global reserve growth is truly stunning – full data is not yet available for 2007, but the total increase in their reserves is likely to top \$1200b.² The lack of transparency from many sovereign funds makes precise accounting of their growth far harder, but it is likely that they added approximately \$200b to their assets.³ If government asset growth remains at its current pace and more of those assets are managed by sovereign wealth funds – as is now widely anticipated by many investment banks – the pace of growth of sovereigns funds will increase dramatically.

These global trends apply with particular force to China. China's government is now adding at least \$500b a year to its foreign assets, and perhaps up to \$600b (Table 1, Chart 2).⁴ Right now, China's sovereign wealth fund – the China Investment Corporation (CIC) – manages a relatively small share of the total stock of Chinese investment abroad (Chart 3). It is likely to account for a large share going forward.

My remarks are organized in two parts. The first section examines the forces that have propelled the growth of sovereign funds and the differences among sovereign funds.

² This total has been adjusted to reflect valuation gains on central bank holdings of euros, pounds and yen. It also includes funds managed by the Chinese banks as a result of the use of foreign exchange reserves to finance their recapitalization and the non-reserve assets of the Saudi Monetary Agency. The unadjusted increase reported by the IMF from the end of q3 2006 to the end of q3 2007 was \$1287b; all indications suggest that q4 was marked by strong reserve growth. Japan accounts for about \$50b of the global total; the rest comes from the emerging world.

³ This total excludes capital gains on the sovereign funds' existing holdings; it is meant to measure the impact of fiscal surpluses of commodity exporting economies and other countries' intervention in the foreign exchange market.

⁴ There is substantial uncertainty over the scale of the increase in the foreign assets of the Chinese state banks in the second half of 2007. It has been widely reported that the state banks were asked to hold foreign exchange to meet the recent series of increases in their mandatory reserves. This could potentially have led to the accumulation of roughly \$100b of foreign exchange by the large state banks.

The second section examines the particular issues raised by the China Investment Corporation, and, more generally the increase in the non-reserve foreign assets of China's government. The availability of large quantities of foreign exchange to finance the outward expansion of Chinese state firms is likely to raise far more difficult issues than the CIC.

Sovereign wealth funds

Origins of sovereign funds

Sovereign wealth funds typically originate in one of three ways:

- Fiscal surpluses from a surge in commodity export revenues. These funds are typically held in foreign currency to facilitate domestic economic management, as they are intended to buffer the domestic economy from commodity price volatility. Examples of such funds include: Abu Dhabi Investment Authority, Kuwait Investment Authority, Qatar Investment Authority, Norway's Government Fund -- Global as well as smaller funds like Kazakhstan's National Fund, Russia's new future fund (its bigger oil stabilization fund is managed as part of the central banks' reserves) and Chile's copper fund. Sub-national funds like Alberta's Heritage Fund and Alaska's Permanent Fund are in some ways similar, though they tend to have more domestic and fewer foreign assets.
- A decision to manage existing foreign exchange reserves more aggressively.⁵ Such funds are usually set up when the government's total holdings of foreign exchange reserves exceed what conceivably could be needed for prudential reasons. Examples include Singapore's Government Investment Corporation, the Korea Investment Corporation and the China Investment Corporation.
- The proceeds of the privatization or partial privatization of state-owned enterprises. Several funds have been financed by the sale of existing state assets, often to foreign investors – or by a decision to allow the manager of the state's stake in domestic firms to expand abroad. Examples include Singapore's Temasek and, to a lesser, degree, Dubai World and Dubai Holding.⁶

Government pension funds – which collect the retirement contributions of either government employees or a funded national pension system – are similar, but distinct. They are managed to deliver benefits to a defined set of beneficiaries, and typically have large domestic rather than large international portfolios. However, many government pension funds are diversifying their portfolios and adding international investments. However, the line between a pension fund and a sovereign fund is often blurred: Norway's government fund is intended to provide revenue to Norway's government once Norway's oil is exhausted, revenue that will help Norway meet its pension obligations.

⁵ In some cases, the finance ministry rather than the central bank effectively raises the funds for intervention in the foreign exchange market, in theory reducing the central bank's need to sterilize.

⁶ Dubai World manages the assets of the government of Dubai; Dubai Holdings manages the private holdings of the ruler of Dubai.

Singapore's GIC manages money for Singapore's retirement system as well as for its central bank. Korea's KIC is seeking money from Korean pension funds.

Differences among sovereign funds

While sovereign funds all manage money for governments, the differences among sovereign funds are far more striking than their similarities. This reflects the diverse set of governments that have large funds: Norway – a transparent democracy that was already wealthy before North Sea oil – is very different from either the Gulf or China. It also reflects differences in the investment styles of different funds: some funds have conservative portfolios that resemble the portfolio of a central bank, others have portfolios that resemble the portfolio of a large American or European pension fund, and still others increasingly resemble private equity or hedge funds. Some shy away from taking large stakes in companies, seeking a high level of diversification. Others make concentrated bets on a few companies.

Recently, sovereign funds – including several that have until recently shied away from taking large, visible stakes in individual companies -- have provided large amounts of financing to troubled US banks and broker-dealers. The total capital injections into major US and European banks and broker-dealers over the past several months – roughly \$42b⁷ – now exceeds the peak annual increase in IMF lending to the emerging world during the Asian and Russian crisis of 97/98 or the Latin and Turkey crisis of 2001/2002 .

Sovereign funds can consequently be differentiated by:

Mandate and investment style. Some funds have as a goal promoting local economic development, or supporting the outward expansion of national firms. Others are purely money managers. Some seek to essentially replicate the returns on a broad index and/ or outsource the management of most of their funds; others manage more funds in house and/ or take large stakes in individual companies. Some use leverage to enhance returns; most do not – at least not directly. Many invest in hedge funds and private equity that are leveraged.

Transparency. Some funds reveal more information than a typical central bank – and far more information than a private equity and hedge funds. Other funds have refused to disclose their total size, let alone the broad contours of their portfolio (Chart 4).

Size. A \$700b fund – a reasonable estimate for Abu Dhabi Investment authority – raises different questions than a \$10b fund. A fund growing by a \$100b or more a year raises different issues than a fund looking to invest a billion dollars a year. A fund growing by \$500b a year would raise even more concerns.

Wealth of the host country. A sovereign fund from a country with a per capita GDP – at PPP exchange rates – of \$5,000 will likely be motivated far more by the desire to support national economic development than a sovereign fund from a country with a per capita GDP of \$50,000 (Chart 5).

⁷ This total excludes ICBC's investment in Standard Bank, CDB's stake in Barclays and the reciprocal Bear/ CITIC stake on the grounds that none of these deals provided capital to offset "subprime" losses.

Geopolitics. Funds from small city states allied with the United States are likely to generate fewer concerns than funds from countries with aspirations to be global or regional powers.

Not all sovereign funds raise the same concerns abroad. A transparent fund from a small country, accountable to a parliament that sets basic parameters for its investments is likely to pose few risks, particularly if it holds a portfolio that generally tracks a broad index. Norway, for example, recently decided to increase the share of its government fund that is invested in equities. Before it actually adjusted its portfolio, though, it obtained parliamentary approval – and the pace of the adjustment in its portfolio can be monitored using the data Norway releases. It is unlikely to surprise the market with a sudden move.

The activities of larger funds will raise more concerns than smaller funds, simply because their size will augment their market impact. Funds that take large financial risks – including funds that take large stakes in troubled financial institutions -- will attract more attention than funds that buy a portfolio that tracks a market index. Indeed, the citizens of the country taking on more risk to try to obtain higher returns may have more cause to worry than the citizens receiving the investment. A large fund with a mandate to support the outward expansion of national firms will raise far more concerns that its investments are motivated by non-commercial considerations than a fund that only manages an investment portfolio. Rarely though will the line between a commercial and strategic investment be clear: China's investments in state banks and the offshore IPO of China Railways have performed better than China's investment in the US private equity fund, Blackstone.

The China Investment Corporation

The China Investment Corporation (CIC) raises a particularly vexing set of issues, both for China and for the countries that will receive its investment.

While the CIC itself is still small, the overall accumulation of foreign assets by China's government is not. The increase in the foreign assets of China's government in 2007 – particularly counting the large sums of foreign exchange the state banks reportedly have been asked to hold to reduce pressure on the central bank -- could easily have topped the considerable increase in the foreign assets of all the world's oil-exporting economies combined. China's central bank, its state banks and the CIC could have combined to add as much as \$600b to their foreign portfolio (Chart 7) – with the CIC only accounting for an estimated \$17b of the increase.⁸ However, the scale of the China's overall foreign asset growth suggests that the CIC could quickly become one of the world's largest funds, if not the largest fund. The large oil exporters of the Gulf combined for perhaps \$225, Russia chipped in another \$150b, Norway \$50 and North Africa and Sub-Saharan Africa combined for another \$75-100b.

⁸ Most of its initial RMB 1.55 trillion (roughly \$205b) allocation has been used to purchase the central banks' existing stake in three large state banks and to recapitalize two other banks.

China's fund is unlikely to resemble the funds of other countries. Norway's fund is accountable to a democratically elected parliament; China's fund is accountable to China's State Council. China has been far more willing so far to take large risks – notably by investing in Blackstone and Morgan Stanley -- than Norway. China's fund is unlikely to resemble the sovereign funds of the small Gulf countries, which tend to resemble the family offices of a very wealthy family more than public pension funds. China's state council seems subject to a far broader range of social pressure than the Gulf royal families. It is unlikely to resemble Singapore's funds – even though the CIC was modeled on Singapore's GIC more than any other fund – simply because China is both a much poorer and much bigger country than Singapore.

Five characteristics combine to set the CIC apart from other funds:

- 1) The CIC is financed by the issuance of debt, not from a fiscal surplus. The CIC is structured as an asset manager for the State Council. It is financed, ultimately, through the sale of Ministry of Finance bonds. The Finance Ministry uses the proceeds to buy foreign exchange from the central bank that the CIC manages. As a result, if CIC fails to generate enough income to cover the interest payments on the bonds the Ministry of Finance has issued, the Finance Ministry will face financial losses.
- 2) The CIC is effectively required to take on an exceptional level of exchange rate risk and consequently faces a large risk of reporting local currency losses. The market currently expects the RMB to appreciate by 8% a year against both the dollar and euro. The bonds issued to finance the CIC carry a 4.5% interest rate. That implies that the CIC needs a return of around 13%, net of fees and expenses, just to break even in RMB terms. It arguably is unfair to expect the CIC to overcome the headwind created by RMB appreciation, as it was created to try to achieve a higher dollar and euro return on the dollars and euros China needs to accumulate to support its exchange rate regime. But the prospect of losses, in RMB terms, at a minimum poses a public relations challenge: as James Fallows of the Atlantic noted in a recent article, China's public has taken a strong interest in its financial performance.
- 3) The CIC has a complex mandate that extends well beyond simply increasing the returns on China's foreign assets. Prior to the formation of the CIC, different parts of China's government came forward with proposals for a more creative use of China's vast foreign exchange holdings. The CIC emerged from a synthesis of their different, and at times competing, ideas. Its mandate includes managing China's investment in its domestic state banks, supporting the outward expansion of Chinese firms and managing China's external investments in a portfolio that will include more equities than in China's reserve portfolio. Right now, though, the CIC's domestic portfolio is far larger than foreign portfolio.
- 4) China is a far poorer country than the other countries with large investment funds. The average per capita income of the countries that currently host the five largest funds is over \$50,000 (PPP); China's per capita income is still only around \$5,000 in PPP terms, and less at market exchange rates. As a result, the CIC will likely

face stronger pressure to find ways to support China's own economic development than funds from wealthier countries.

- 5) The CIC's potential size. While the CIC's foreign assets are currently quite small (\$17b at the end of 2007, a total that likely will increase to around \$67b by the end of q1 2008), it could quickly become quite large. No other government is adding over \$500b to its foreign assets a year. Indeed, if the foreign assets of the Chinese banks that the CIC owns are added to its external portfolio, the CIC already is ultimately accountable for the management of a \$300b portfolio – enough to put it among the world's largest funds.

The CIC itself is under incredible pressure. Its first high-profile international investment – Blackstone -- lost money. It faces tremendous pressure not to make similar mistakes, yet it also faces pressure to invest quickly and generate strong returns. However, it could easily fail to produce sufficient dollar and euro returns to offset RMB appreciation (dollar/ euro depreciation). While the investments of SAFE are veiled in obscurity, every CIC move is closely scrutinized at home and abroad. Its autonomy is constrained: large investments likely need the approval of the top level of China's government. Press reports – and China's decision to block the China Development Bank's investment in Citibank – suggests that China's top leadership is worried that the CIC's portfolio is too concentrated in the financial sector.

The rest of China's government is not necessarily vested in the CIC's success. The bureaucratic rivalry between China's finance ministry and central bank has spilled over into rivalry between the CIC – linked to the Finance Ministry – and China's existing foreign exchange manager – the State Administration of Foreign Exchange (SAFE). SAFE is keen to prove that it can deliver better returns than the CIC at a lower cost if it is given more freedom to take risks. Coordination is likely to be an ongoing challenge. The parts of China's government with the strongest links to China's state firms want the CIC to do more to support their outward expansion. Not supporting Chinese state firms though risks the creation of a new bureaucratic rival. Yet overtly supporting Chinese state firms would contradict the assurances the CIC has given to the US and Europe that it is motivated solely commercial considerations of risk and return.

The creation of the CIC, and, more generally China's desire to shift from a portfolio concentrated in government bonds and other classic reserve assets toward a more balanced portfolio poses a host of issues for the US and Europe. So long as China manages its currency against the dollar, it is likely to face pressure to keep the majority of its foreign assets in dollars. Large scale selling of the dollar for euros would likely put pressure on the dollar/ euro exchange rate.⁹ The scale of China's foreign asset growth combined with its desire for a more diverse portfolio implies that its portfolio decisions will consequently affect the returns on a range of financial assets -- not just the Treasury and Agency market (Chart 8).

⁹ The Europeans have supposedly asked China not to diversify its reserves for precisely this reason; they do not want an even stronger euro

Some believe China's power to move markets is limited. Private investors will move to take advantage of any deviation from fair market value created by Chinese demand for some assets rather than others by selling the assets China is buying and buying the assets China is neglecting. Others worry that the market also has an incentive to bid up assets that China may want to buy – and thus that expectations of Chinese demand could push price away from their fundamental value. In either context, China's portfolio decisions will have a growing impact on the US equity market.

So long as China's government has an effective monopoly on outward Chinese investment flows, the growth of Chinese investment in the US also implies the growth of Chinese government investment in the US – and the prospect that a foreign government will own sizeable stakes in a number of US firms. This concern is not unique to China, but, as is often the case, the sheer scale of China's potential purchases means that its investment decisions could have a bigger impact than other countries. In 2006, it is possible that China could have invested as much as \$400b of its total portfolio in the US – with maybe \$10b in US equity stakes and more like \$390b of bonds.¹⁰ If the pace of Chinese foreign asset accumulation continues at its current pace and a similar portion continues to be invested in the US, China's ownership of equities could top \$1 trillion in less than three years. Such an outcome is unlikely, but it is not impossible.

The CIC's investment strategy though is not just an issue for the US. It is likely to create more acute dilemmas for other emerging Asian economies. The CIC's initial investment mandates suggest a strong interest in investing in other emerging economies – and particularly in other emerging Asian economies. Yet many other Asian currencies are already attracting more private inflows than required to finance their existing currency account deficits. They also worry that allowing their exchange rate to appreciate would allow Chinese goods to undercut their own goods – both at home and in export markets. India is a case in point: the rupee's early 2007 appreciation is one reason why Chinese exports to India have increased at a 60% annual pace. India's reserve bank is already struggling to sterilize large private inflows; the last thing it wants is to sterilize large Chinese inflows as well.

China's neighbors are unlikely to be pleased if China's portfolio decisions put pressure on their currencies to appreciate (or pressure on their central banks to intervene, and effectively buy the dollars and euros China no longer wants), allowing Chinese producers to gain at their expense. Similarly, Europe is unlikely to welcome a major shift in China's portfolio that puts additional upward pressure on European currencies. Even if the CIC refrains from making non-commercial investments in individual firms, it is hard to see how its investment choices do not generate political friction. China is so large a player that its moves will shape a broad range of market outcomes. At times markets may offset the actions of the CIC, selling any asset that China has pushed above fair market value. At other times, though, the markets may seek to buy what China is

¹⁰ The high-frequency data on foreign purchases of US bonds released by the Treasury tends to understate Chinese purchases, making a precise estimate difficult. From mid-2004 to mid-2005 and again from mid-2005 to mid-2006, data revisions added about \$90b to China's holdings. The increased pace of Chinese foreign asset growth suggests that comparable, but larger, revisions are likely.

expected to buy, and thus profit from (expected) Chinese demand and in the process reinforcing China's market impact.

In some ways, though, the CIC's portfolio investment abroad – assuming that the CIC is primarily a portfolio manager and it refrains from taking additional large stakes in U.S./ European financial institutions– is likely to produce less controversy than the outward expansion of China's cash-rich state firms. Chinalco's roughly \$12.8b investment – supplemented by \$1.2b from Alcoa -- in Rio Tinto is a case in point. Chinalco and Alcoa combined to buy 9% of all of Rio Tinto's outstanding shares, effectively either blocking BHP Billiton's takeover bid unless BHP raises its offer significantly. This investment did not draw on financing from the CIC – though the CIC is supposedly interested in a large stake in another Australian iron ore company.

The precise dividing line between the activities of the CIC and the rest of the China's state though isn't at all clear: Chinalco financed its Rio Tinto stake by borrowing from the China Development Bank (CDB). The CDB was recently recapitalized with \$20 billion from the CIC. The CIC in turn received a large equity stake in the CDB. So long as the CIC retains large stake in China's state banks, it will be hard to draw a line between the activities of China's state banks and the CIC.

Conclusion

In his testimony before the Senate Banking Committee, former Treasury Assistant Secretary Edwin Truman noted that the “dramatic increase in the role of governments in the ownership and management of international assets” was “disquieting” to the US, as “it calls into question our most basic assumptions about the structure and functioning of economies and the international financial system We presume that most cross-border trade and financial transactions will involve the private sector on both ends of the transaction. Unfortunately, our orientation is not congruent with certain facts, and we are being called upon to recalibrate our understanding of the world.”

Dr. Truman's observation applies with force to China. China's economic success is often attributed to its embrace of the market. Directionally, that is no doubt true. However, the structure of its economy remains quite different from the structure of the US and European economies. Chinese state-owned enterprises and state-owned banks still have a far larger role in the Chinese economy than state-owned enterprises and state-owned banks have in the U.S. economy. Moreover, China's exchange rate regime has effectively given the China's state – in all of its forms – a monopoly on the outward flow of funds from China. Private investors would prefer to invest in China and benefit from the expected appreciation of the RMB.

China's government is almost certainly already the largest single foreign investor – in both stock and flow terms – in the US – though given difficulties measuring China's rapidly growing claims on the US in real time, this is hard to confirm. So long as China confined its investment to bonds, though, the US did not have to worry about China's potential to exert direct control over US assets. The sheer scale of Chinese bond

purchases already give China's government the capacity to move markets. Few though have complained that non-commercial demand for U.S. government bonds from China's government helped lower US long-term interest rates.¹¹ However, China's government has made a strategic decision to encourage outward investment by Chinese firms, and to reorient the composition of the portfolio of China's central government toward equities. It no longer is content just to buy bonds.

China notes that its current equity investment abroad is small relative to other countries' equity investments in China. Total Chinese direct investment abroad at the end of 2006 totaled \$82.4b, while foreign direct investment in China totaled \$544.2b. The roughly \$30b in outward direct investment by Chinese firms in 2007 is still significantly smaller than the \$80b plus in inward direct investment by foreign firms in China – or for that matter the \$280b US firms have invested abroad over the last four quarters. Foreign portfolio equity investment in China was \$106.5b at the end of 2006 while Chinese portfolio equity investment abroad was \$1.5b.¹² The market value of the stakes of Goldman Sachs and Bank of America in two Chinese state banks tops the market value of China's investment in Morgan Stanley and Blackstone. Foreign holdings of Chinese debt, though, only totaled \$14b, while Chinese holdings of foreign debt – counting Chinese reserve holdings, totaled close to \$1300b. That total likely increased to around \$1800b by the end of 2007.

China's desire to diversify the composition of its portfolio though runs squarely into the United States' historic aversion to government ownership of private firms. The most obvious ways of minimizing the associated friction – for example, Chinese investment in index funds rather than individual companies – run directly into China's strong desire, also rooted in its historical experience, not to compromise its sovereignty. It also runs against the self-interest of cash-strapped U.S. firms – whether capital-short broker-dealers or U.S. metals companies -- who are increasingly seeking to do deals with China's government. China is, so to speak, where the money is.

Recently, the U.S. has relied heavily on financing from other governments to sustain its large external deficit, as private demand for U.S. financial assets, relative to U.S. demand for assets abroad, has fallen. Such financing has prevented the subprime crisis from triggering an even greater level of market volatility. But ongoing reliance on governments for financing also implies a rising level of government participation in U.S. financial markets and, as governments shift from a bond heavy portfolio to a more

¹¹ The difficulties measuring China's purchases in real time complicate efforts to assess how its purchases impact the market. On the assumption that Chinese U.S. bond purchases are now close to \$350b – the amount required to keep the dollar share of China's reserves roughly constant – China alone would be having an impact on the U.S. market comparable to the impact all Asian central banks together had back in early 2004. Francis Warnock has estimated that such demand lowered U.S. long-term rates by more than 100 basis points. Consequently it is not unreasonable to think Chinese demand is reducing U.S. interest rates by 50 to 100 basis points. Such an assessment though requires combining two controversial estimates, as there is debate over both the scale of Chinese purchases and the market impact of central bank purchases.

¹² The stock of U.S. FDI abroad – valued at current cost – was \$2855.6 billion at the end of 2006, far larger, relative to U.S. GDP, than Chinese FDI abroad. U.S. portfolio equity holdings totaled \$4251b.

balanced portfolio – rising government ownership of U.S. companies. The investment of so much of China’s savings – Chinese claims on the U.S. are probably equal to about a third of China’s GDP – raises equally profound questions for China, not the least because such investment is unlikely to generate strong financial returns in the RMB terms. In the long-term, I believe that both the U.S. and China would both benefit from a set of policy changes that reduced China’s surplus and the United States need for Chinese financing. In the short-run, though, the challenges associated with United States financial interdependence on a country with a very different political and economic system look set to rise.

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Appendix

Chart 1: China's current account surplus matches that of the major oil exporters

Current account surplus: China, Russia and GCC

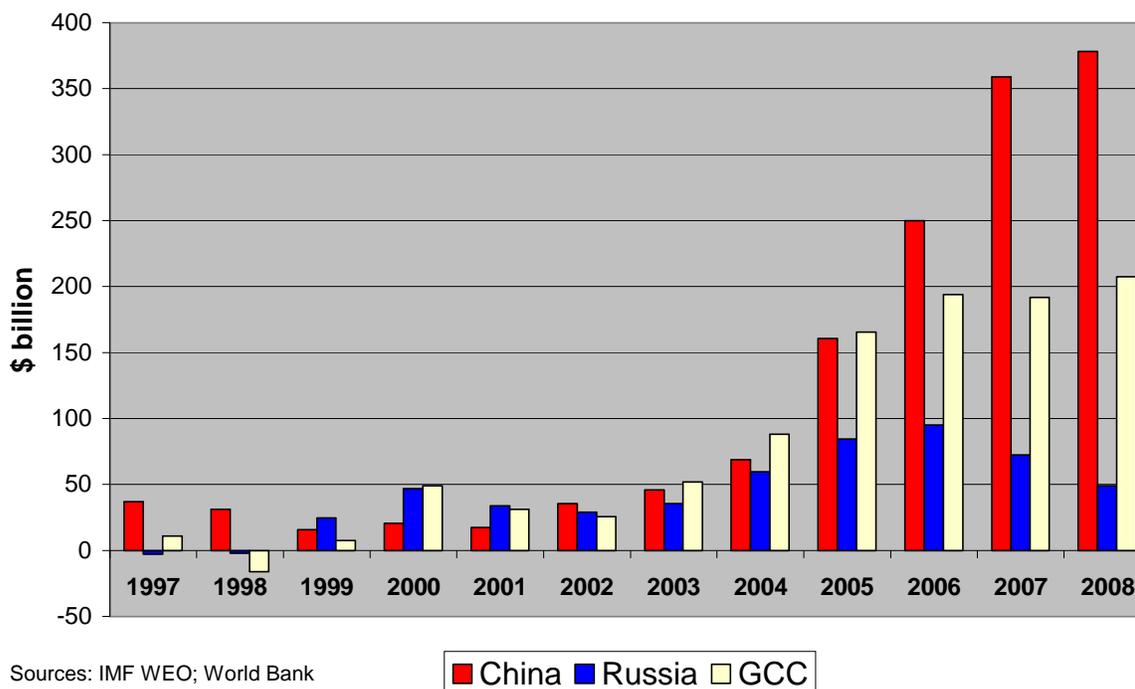


Table 1: Foreign assets of China's government

	Total foreign assets	2007 increase
Identified assets of China's government		
State administration of foreign exchange (SAFE)	\$1,528b	\$427b
China Investment Corporation (CIC), estimated foreign assets	\$17b	\$17b
State banks estimated fx liabilities to the central government – recapitalization/swaps ¹³	\$221b	\$60b
Subtotal (identified assets)	\$1776b	\$504
Possible additional foreign exchange holdings		
Banks' required reserves (held in dollars)	\$108b	\$108b

¹³ The foreign assets of the banks have been estimated from their estimated foreign currency liabilities to the Chinese government. The banks recorded portfolio investment abroad is somewhat smaller: \$166b at the end of November, 2007 -- down from \$180b at the end of December 2006.

Foreign assets of state enterprises	?	?
Total (high-end estimate)	\$1884b	\$612

Chart 2: Foreign exchange reserve growth still accounts for most of the increase in China's foreign assets

China: Reserve growth, \$ billion (rolling 12m sum, valuation adjusted)

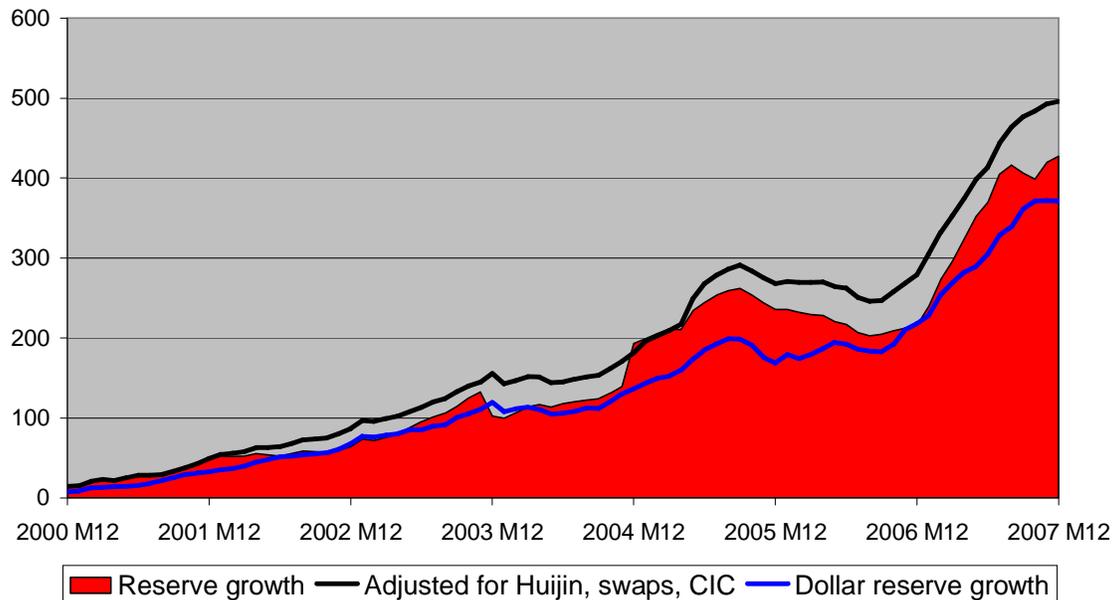


Chart 3: The CIC accounts for a small share of China's total assets

China's identified foreign assets, \$ billion

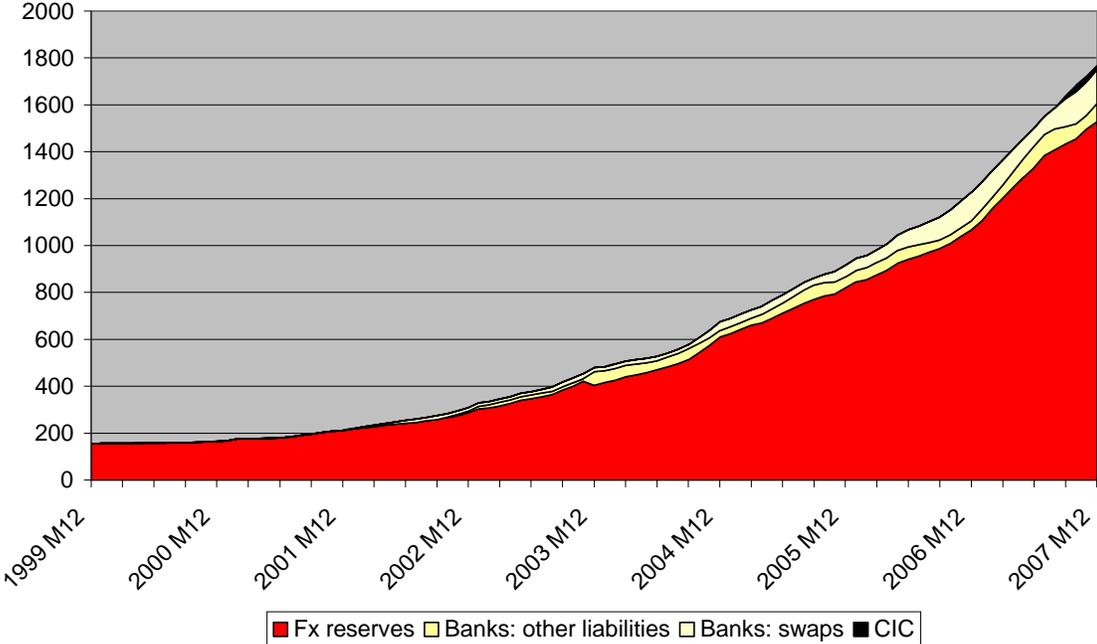


Chart 4: Democracy correlates with Sovereign Wealth Fund Transparency
Note Transparency rankings come from Truman (2007)

SWF: Relationship between government and transparency

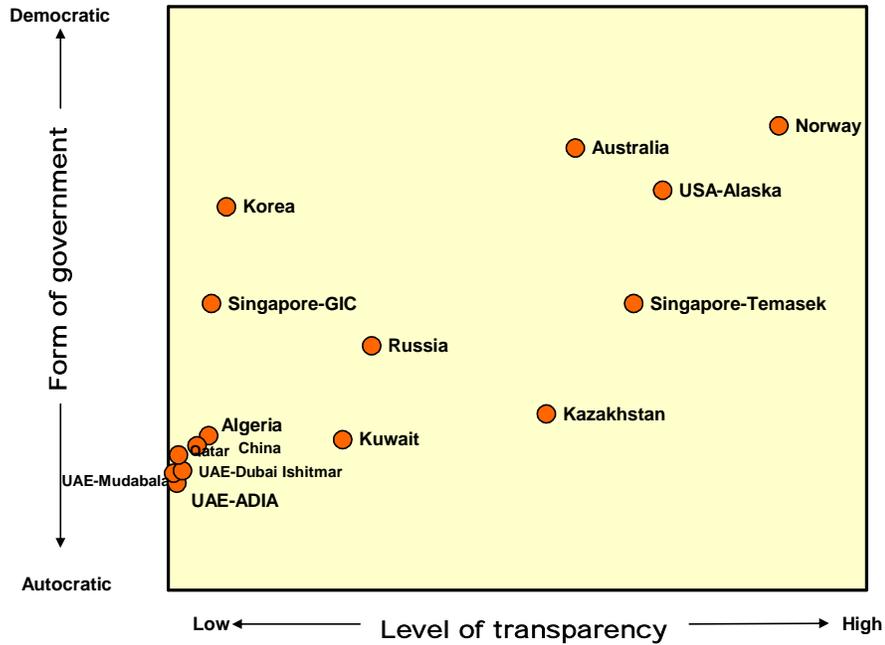
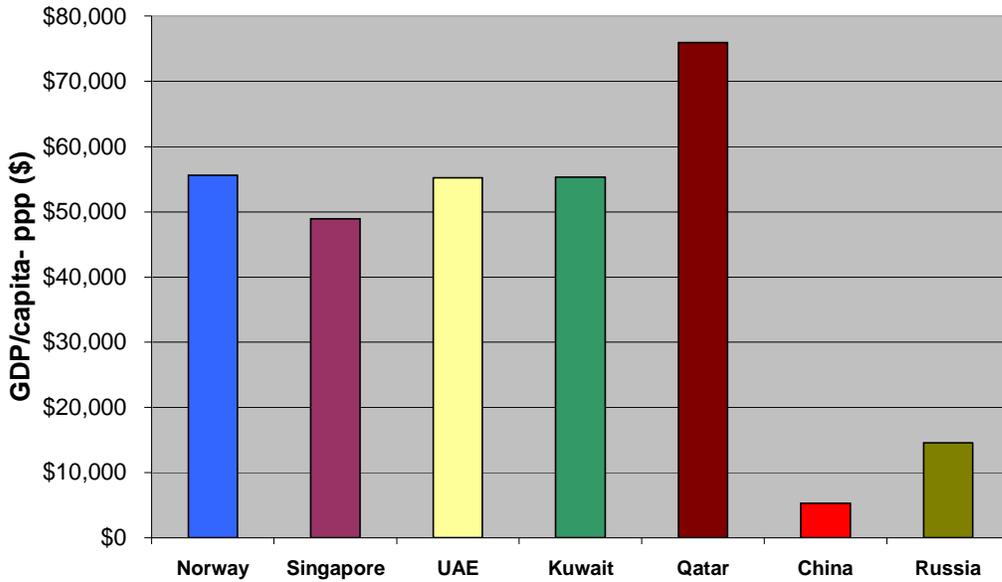


Chart 5: Per capita GDP of SWF host countries

Chart 6: foreign asset growth, accounting for potentially large increase in assets of the state banks

PPP per capita GDP for home countries of large SWFs



Source: CIA World Fact Book 2007

Chinese foreign asset growth (high estimate) Rolling 12m sum

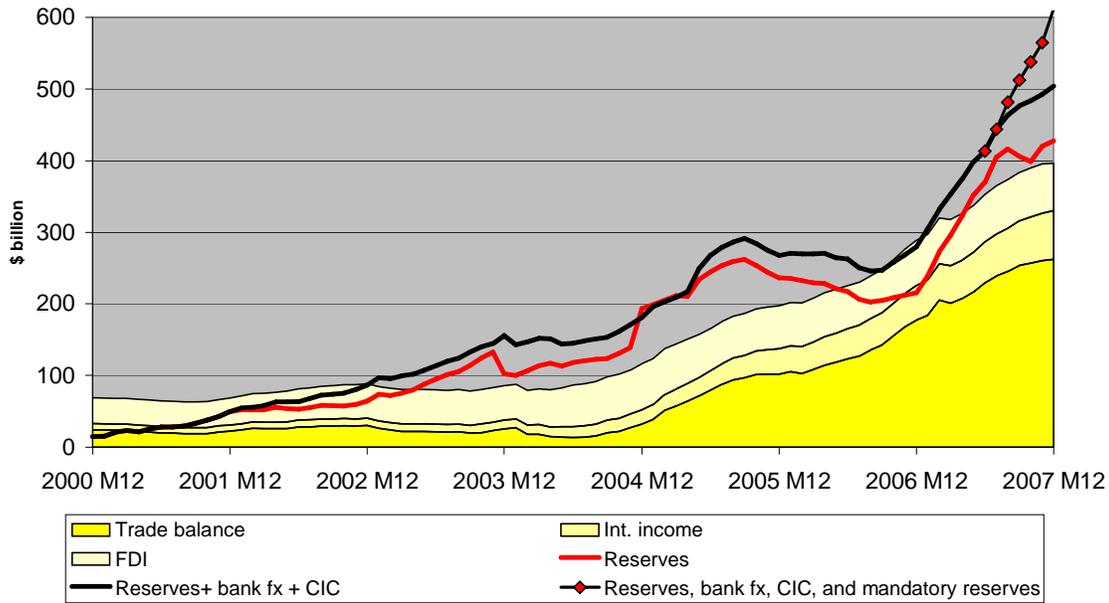


Chart 7: Identified Chinese holdings of US assets

Adjusted reserves v known US holdings

(adjustments: "other fx liabilities," "fx purchases and sales," and CIC)

