

## Philipp Hildebrand: The challenge of sovereign wealth funds

Speech by Mr Philipp Hildebrand, Vice-Chairman of the Governing Board of the Swiss National Bank, at the International Center for Monetary and Banking Studies, Geneva, 18 December 2007.

*I would like to thank Signe Krogstrup for her valuable support in drafting this speech. I also want to thank Rita Kobel, Urs W. Birchler, Daniel Heller and Bertrand Rime for helpful comments and discussions.*

\* \* \*

### 1. Introduction

I am very pleased to be in Geneva. The International Center for Monetary and Banking Studies (ICMB) provides a wonderful platform to discuss a wide range of economic and monetary policy challenges. On behalf of my ICMB Foundation Board colleagues, I would like to thank Charles Wyplosz for his successful and long-standing stewardship of the ICMB.

Tonight, I want to talk about Sovereign Wealth Funds (SWFs). Broadly defined, SWFs are government-owned investment corporations. For the most part, they invest their funds in foreign currency assets. SWFs are usually managed separately from central bank reserves. Unlike other publicly owned pools of capital, such as social security funds or public pension funds, SWFs have no explicit liabilities. As you can see in slide 1, the estimated assets currently managed by SWFs exceed the combined pool of assets managed by hedge funds and private equity firms. Total assets held by SWFs remain small, however, in comparison to the combined assets managed by pension funds and mutual funds worldwide. The rise in SWFs is closely linked to the global macroeconomic imbalances that have characterized the world economy since the mid 1990s. Since these imbalances are unlikely to unwind in the near term, SWFs are likely to keep growing disproportionately for some time.

The rapid rise of SWFs has undoubtedly brought a number of benefits. One of them has recently become particularly evident. Against the backdrop of the current market turmoil, SWFs have been a welcome source of capital, strengthening the vulnerable balance sheets of some of the world's largest financial institutions. I will return to this important point at the end of my lecture.

But the investments made by SWFs have also given rise to considerable political controversy and media coverage. Slide 2 provides a sample of some of the most pertinent recent headlines. The political controversy does not derive from the fact that SWFs are new. They are not. Political leaders are anxious because the rapid rise of SWFs and their increasing visibility as large investors in mature markets challenge some long-held assumptions about how the global economy works. In the process, the investment decisions of SWFs run the risk of triggering defensive reactions in mature countries. If left unchecked, this process could feed financial protectionism, which would clearly be to the detriment of global economic welfare.

To provide some context, I will first describe the rise of SWFs. I will then discuss in more detail what I view to be the primary challenge arising from SWFs. Finally, I will briefly touch upon a number of recent policy proposals. On the basis of these ideas, and drawing on the history of central banking, I will then offer some personal reflections on what a simple but effective policy response might look like. In closing, I will briefly comment on the Government of Singapore Investment Corporation (GIC), one of the most prominent SWFs in the world. As you know, UBS last week turned to the GIC for a substantial capital injection in connection with losses in the sub-prime credit markets.

## 2. The rise in sovereign wealth funds

I noted at the outset that the rapid growth in SWFs is largely a by-product of global macroeconomic imbalances. Slide 3 shows that the current account deficit of the US has increased every year since 1992. The deficit surpassed USD 800 billion, or 6 percent of GDP, in 2006. Such a large current account deficit is unprecedented in US history.<sup>1</sup> This rise in the US current account deficit has been mirrored almost one to one in the combined rise of surpluses in South East Asian countries and oil exporting countries. I will refer to these two country groupings as the surplus regions. By definition, the surplus regions are investing less than they are saving, and hence, both regions are accumulating net financial claims on foreigners. But the underlying reasons for the current account surpluses in the two regions are distinct.

The South East Asian countries saw an increase in savings and a fall in investment in the wake of the Asian financial crisis.<sup>2</sup> Since then, these countries have generally continued to pursue a macroeconomic policy mix in support of an export-led growth strategy which sustains these savings-investment patterns. Meanwhile, in the oil exporting countries, export revenues have been boosted by the increase in the price of oil since 2000. You can see this in slide 4. Since domestic investments in these countries have not increased at the same pace, the result has been a rise in net savings in the oil exporting countries.

The two surplus regions have one thing in common. In both cases, foreign assets are accumulated almost entirely by the official sector. In the oil exporting countries, oil revenues primarily accrue to governments. Higher oil revenues therefore translate into higher government budget surpluses. In South East Asia, where the currencies shadow the dollar, foreign assets are accumulated primarily by the central banks in the form of official foreign exchange reserve accumulation. Slide 5 shows that the global macroeconomic imbalances have led to a rapid accumulation of global official foreign exchange reserves.<sup>3</sup> Let me now leave you with five stylized facts about SWFs.

First, as I already pointed out, SWFs are not a new phenomenon. With its *Caisse des Dépôts et Consignations*, France set up a SWF in 1816.<sup>4</sup> Slide 6 shows the year of establishment of each of the 14 largest SWFs currently in operation. The Kuwait Investment Authority was established in 1953. Since then, SWFs have been set up essentially in two waves. The first one occurred in the second half of the 1970s. The second wave began in 1996 with the setting up of Norway's Government Pension Fund – Global. The steep increase in oil prices since 2000, the widening of global imbalances and the resulting accumulation of foreign exchange reserves suggest that other countries will follow suit. By applying a simple rule to identify which countries potentially hold excess reserves, we can readily identify the countries that are obvious candidates for future SWFs. Slide 7 shows a list of countries that meet the following two conditions.<sup>5</sup> They have no SWF at present and, judging by the Greenspan-Guidotti rule, they hold excess reserves of at least USD ten billion.<sup>6</sup>

---

<sup>1</sup> Note that according to SNB staff calculations, the US current account deficit currently absorbs about 60 percent of the world's aggregate current account surpluses. The remaining deficits are located largely in a handful of EU countries (Spain, Italy, Greece, France and the UK, 30 percent), in Central and Eastern Europe (8 percent). The final 2 percent originate in developing countries.

<sup>2</sup> The exception is China, which has attracted even more investments since the Asian crisis, while savings have also increased faster. See, for example, Genberg et. al. (2005).

<sup>3</sup> In some countries, the reserve accumulation has been further magnified by private capital inflows.

<sup>4</sup> I am grateful to Benoit Coeuré of the French Treasury for this comment (see Coeuré, 2007).

<sup>5</sup> Summers (2007) has a similar table which also includes countries that already have SWFs.

<sup>6</sup> The Greenspan-Guidotti rule is based on the definition of a sufficient level of reserves as equal to the level of short-term foreign currency debt of the country. Excess reserves are calculated as reserves in excess of this level.

Second, in terms of size, SWFs have become important financial market participants. The 14 largest SWFs are estimated to have approximately USD 2.2 trillion under management.<sup>7</sup> Some market estimates put combined assets as high as 3.5 trillion dollars.<sup>8</sup> The estimated combined assets of the world's 14 largest SWFs now constitute nearly half the size of the world's total official foreign exchange reserves.<sup>9</sup> As I pointed out at the beginning, however, the assets of the world's SWFs are still much smaller than the assets invested in mutual funds (USD 19.3 trillion) or global pension funds (USD 21.6 trillion).<sup>10</sup>

Third, SWFs are likely to grow substantially in coming years. Market forecasts, which assume that high oil prices and the large current account surpluses in South East Asia will persist, project that SWFs will increase three to fivefold in nominal dollar terms over the next five to ten years.<sup>11</sup> My own view is that such simplistic linear forecasts will likely prove to have been flawed. Nonetheless, it is difficult to argue with the basic direction of these forecasts. The fundamental dynamic behind the recent rise of SWFs will not disappear over night. As I mentioned, estimated excess reserves are very large.<sup>12</sup> In all likelihood, at least some of these excess reserves will be transferred to SWFs in coming years. Moreover, even if global imbalances were to unwind quickly, for instance in association with a sharp and protracted recession in the United States, the power of compound return will continue to be a substantial source of growth for SWFs that already exist.

Fourth, SWFs have so far been initiated predominantly in the Middle East and in Asia. Slide 8 shows that these two regions account for 77 percent of the assets of the largest SWFs. Nonetheless, we should not lose sight of the fact that 16 percent of the assets of the 14 largest SWFs are held in developed countries.<sup>13</sup>

Fifth, SWFs will increasingly attempt to diversify their holdings. They will do so gradually, given the prevailing size and liquidity constraints. Like central banks, SWFs have traditionally been investors in highly rated fixed income assets. Going forward, SWFs will increasingly look for investments in equity markets, both public and private ones. Several of these investments have recently produced headlines in the global financial press. Slide 9 depicts some of them.

### 3. The challenges

In my introductory comments, I suggested that much of the anxiety surrounding SWFs stems from the fact that their increasing presence in mature markets presents a challenge to some long-held assumptions about how the global economy works. Let me elaborate a little bit on three such assumptions. As you will see, they are very much interlinked.

---

<sup>7</sup> This is shown in table 1 in the appendix. Sources: Truman (2007a, 2007b), IMF, Morgan Stanley, FT.

<sup>8</sup> Morgan Stanley, Standard Chartered, Deutsche Bank and Merrill Lynch all recently produced estimates, ranging from USD 2.5 to 3.5 trillion.

<sup>9</sup> Global reserves amounted to USD 4.7 trillion in the second quarter of 2007, according to IMF's COFER database.

<sup>10</sup> 2006 estimate by McKinsey Global Institute. The size of pension fund assets held by OECD countries is estimated at USD 13.2 trillion by the OECD.

<sup>11</sup> The estimates of Merrill Lynch, Deutsche Bank, Morgan Stanley and Standard Chartered are, respectively, that SWFs will grow to USD 7.9 trillion by 2011, USD 9 trillion by 2015, USD 12 trillion in 2015 and USD 13.40 trillion by 2017.

<sup>12</sup> According to SNB calculations, excess reserves of developing countries according to the Greenspan-Guidotti rule reached USD 2.5 trillion in the second quarter of 2007.

<sup>13</sup> These are located in the US (Alaska Permanent Reserve Fund), Australia and Norway.

First, since the early 1980s, we have witnessed broad-based and sustained political momentum to deregulate and liberalise economic structures, enhance the role of market forces and attempt to reduce the role of governments in the global economy. Looking back, Ronald Reagan's confrontation with the air traffic controllers union in 1981 marks the beginning of this process. Most of you in this room would probably concur with the premise that the secular trend to strengthen the role of free markets and competition as the overarching organising principles of the global economy has contributed significantly to the long period of prosperity that the world economy has enjoyed. In this context, SWFs represent a potential threat. Sizeable state-sponsored foreign investments in mature economies can be perceived to be a threat to free market forces.<sup>14</sup> Moreover, such investments run the risk of triggering protectionist reactions in the recipient countries.

Second, one of the basic premises of open global capital markets is the idea that capital flows freely worldwide in search of investment opportunities that yield optimal risk-adjusted rates of return. The fact that large and government-controlled investment companies make substantial investments in privately owned companies in other countries raises concerns about the validity of the hypothesis that capital seeks optimal risk-adjusted rates of returns. Governments of recipient countries may have doubts about the motivation behind such investments. Are SWFs in pursuit of a variant of the traditional motive to maximise returns? Or could a particular government be tempted to use its SWF as a financial instrument in pursuit of a particular political objective? The mere fact that such questions arise could serve as a trigger for protectionist policies in recipient countries, thus again undermining the proper functioning of free markets.

Third, as a general rule, capital has historically tended to flow from the core of an economic system to its periphery.<sup>15</sup> Most recently, global capital flows from the periphery to the core are clearly on the rise. SWFs play a potentially important role in what appears to be a reversal of global capital flows. The economics students here will recognise that this apparent reversal in capital flows is not really a new phenomenon, but a new and unexpected variant of the Lucas Paradox which Bob Lucas described in a seminal paper in 1990.<sup>16</sup> Nonetheless, the sense that capital increasingly flows from the periphery to the core is raising a variety of political sensitivities in the core countries. I fear that many of these sensitivities will likely be protectionist in nature.

As you can see, in all three cases, the real or perceived activities of SWFs play a role in challenging these deeply held assumptions about the world economy. In my view, the most important challenge associated with the rise of SWFs is therefore to ensure that the policy reactions in the recipient countries of potential and actual SWF investments do not degenerate into what ultimately amounts to financial protectionism.

Let me simply mention that there are other potential challenges associated with SWFs, such as concerns that SWFs could pose a risk to financial stability.<sup>17</sup> A related concern is that asset allocation changes by some of the larger SWFs could result in disorderly market price adjustments.<sup>18</sup> While it is impossible to rule out such effects, these risks are clearly not unique to SWFs. Moreover, they strike me as being second-order problems, compared to the threat of the activities of SWFs unleashing a vicious cycle of financial protectionism.

---

<sup>14</sup> SEC Chairman Christopher Cox, for example, points out possible conflicts of interest arising from foreign government ownership of businesses (Cox 2007).

<sup>15</sup> Bernanke (2006) also points out that capital as a general rule has historically been flowing from core to periphery. See, for example, Jones and Obstfeld (2000) and Obstfeld and Taylor (2003) for historical evidence.

<sup>16</sup> Lucas (1990).

<sup>17</sup> See, for example, Lowery (2007) and Johnson (2007).

<sup>18</sup> See for example IMF (2007).

#### 4. Policy response

Let me now turn to the question of how to respond to the risks associated with SWFs. As I said in my introduction, I would like to provide you with my own judgment on what kind of policy response will likely be required to address adequately the risks I have tried to outline. But before I do so, let me briefly touch upon four policy ideas that are currently being circulated.

First, a number of European politicians are calling for increased transparency requirements relating to actual portfolio positions of SWFs.<sup>19</sup> A more far-reaching development are the calls for legislation that would block SWFs from taking major stakes in companies in any strategic sectors.<sup>20</sup>

Second, a number of politicians have proposed the principle of reciprocity as a guiding principle for granting market access to SWFs.<sup>21</sup> For example, Jean-Claude Juncker, the Luxembourg Prime Minister and Euro-group president, has stated, "Countries that protect their own markets cannot expect to be allowed to make unimpeded investments in Europe."<sup>22</sup> In a strict sense, the principle of reciprocity means that SWFs are only allowed to invest in a foreign country if companies in that country are allowed to invest freely in the home country of the SWF. Since many SWFs are located in countries which are financially less open than a typical OECD country, a strict application of the reciprocity principle would place strong limitations on SWF investments.

Third, Larry Summers has suggested that if SWFs were to invest through intermediary asset managers, most risks associated with SWFs would be mitigated, if not avoided.<sup>23</sup> Incidentally, Summers argues that the added benefit of such an indirect investment philosophy is that it generates a better risk-return profile.

Fourth, there is now considerable political momentum behind the idea of a code of conduct or a set of guidelines for SWFs. The idea that is emerging is that SWFs would adopt such a code on a voluntary basis in an attempt to alleviate concerns in the most important mature market. At the October 2007 IMF/World Bank Annual meetings in Washington, the finance ministers and central bankers of the G7 countries discussed the issue in a private meeting with a number of leading SWFs. They subsequently stated that they "see merit in identifying best practices for sovereign wealth funds in such areas as institutional structure, risk management, transparency and accountability."<sup>24</sup> Since then, G7 treasury officials have continued to engage with a number of leading SWFs. The US has called on the International Monetary Fund to try to identify possible best practices, noting that these should be modeled on best practices for managing international reserves.<sup>25</sup> So far, Ted Truman has developed

---

<sup>19</sup> For example, Joaquín Almunia, the EU Commissioner for Economic and Monetary Affairs summarised the general position of the European Commission as calling on SWFs operating in EU member countries to increase the transparency of their operations and investments. Interview with the *Financial Times* on 28 September 2007.

<sup>20</sup> In Germany, legislation has been drafted that would enable the German government to veto any foreign investors intending to take a stake of 25% or more in a German company that may threaten national security; *Süddeutsche Zeitung*, 30 September 2007.

<sup>21</sup> Reciprocity has also been raised by Alistair Darling in response to SWFs, see, for example, "Chancellor backs G7 move to get tough on sovereign wealth funds", *The Guardian*, 20 October 2007.

<sup>22</sup> Germany's *Handelsblatt* newspaper, 19 October 2007.

<sup>23</sup> Larry Summers on SWFs, *Financial Times*, 30 June 2007. See also Summers (2006).

<sup>24</sup> Statement by G-7 Finance Ministers and Central Bank Governors, Washington, DC. ([http://www.mof.go.jp/english/if/g7\\_071019.pdf](http://www.mof.go.jp/english/if/g7_071019.pdf))

<sup>25</sup> The US policy stance has been relayed to the public by US Undersecretary for International Affairs, David H. McCormick, in testimony before the Senate Committee on Banking, Housing and Urban Affairs on 14

the most extensive set of proposals for best practices for SWFs.<sup>26</sup> He calls it a “standard to guide the activities of SWFs”. The standard sets out norms for transparency and accountability with respect to four different aspects. They are: objectives and investment strategy, governance, actual investment portfolios and fund management behaviour.

The effort by the authorities of the largest industrialised countries and the leading SWFs to develop jointly a set of “good governance guidelines” is timely and clearly sensible. There is a risk, however, that these efforts will fail, or will prove to be counterproductive if the demands from the industrialised countries are too ambitious, or if such guidelines are ultimately motivated by the desire in mature markets to impose veiled barriers to foreign investments.

In my view, a future code of conduct or a set of guidelines must cover two central issues if they are to be effective. First, to quell the concerns of recipient countries with respect to politically motivated investments, a code of conduct must contain governance prescriptions that ensure that the investment decisions of SWFs are not driven by political objectives. I believe the institutional design of modern central banking can offer some clues as to the appropriate form of these governance prescriptions. Central banks and SWFs obviously pursue fundamentally different objectives. But, in principle, they are both at risk of being hijacked by governments for political aims. In the case of central banks, this problem has been successfully addressed by the adoption of an institutional design based on two powerful features. Central banks have a clear mandate, typically focused on or around price stability. Moreover, they have generally been given statutory independence from governments in pursuing their mandate. This simple institutional design has become best practice and has made an important contribution to keeping politics largely out of monetary policy.

Second, to preclude a resurgence of state ownership in our economies, SWF guidelines need to spell out upper limits to investment stakes in foreign private companies. It is difficult to determine what such limits should be. As I alluded earlier, it is not just a matter of preempting majority stakes of SWFs in foreign companies. “Cross-border nationalisation” of private companies is simply the most extreme version of a broader unwelcome trend.<sup>27</sup> For this reason, I believe that to alleviate fears about excessive meddling of governments in private companies, a SWF code of conduct will have to set the limit for individual stakes at a level significantly below the typical threshold of a controlling minority, let alone an absolute majority.

As long as a recipient country can be confident that a particular SWF operates in accordance with these two paramount guidelines, there is no reason to demand intricate levels of portfolio transparency from SWFs. Transparency is an attractive answer to intractable problems. But it is unlikely to solve the problems I have tried to outline here. Indeed, I fear that, in some cases, extensive transparency requirements for SWF portfolios could actually end up triggering protectionist reactions in mature markets. It is also important to remember that most stock exchanges already impose various disclosure requirements for large equity holdings in listed companies.

There are, of course, a host of reasons why SWFs should, over time, become more transparent. Many of these reasons have to do with the presumed desire of the citizens of a SWF country to demand accountability. Once again, the history of central banking may provide some valuable insights here. The more independent central banks have become, the

---

November, 2007. McCormick moreover stressed that the US remains open and welcoming to investment from Sovereign Wealth Funds.

<sup>26</sup> Truman (2007a).

<sup>27</sup> As far as I know, Larry Summers has coined this term.

more they have recognised their obligation to be accountable to the public. Typically, more accountability has meant more transparency. An independent central bank is therefore likely to be transparent about how it pursues its mandate. The same may turn out to be true for SWFs.

There are a number of difficult questions that need to be addressed before a set of SWF guidelines can become operational. What exactly do we mean by a non-political investment mandate? How do we gauge to what extent there might or might not be political interference in the pursuit of such a mandate? Will there be a need for a referee to determine whether a SWF complies with a particular set of guidelines? What happens if a SWF initially signs up to a code of conduct but subsequently fails to comply with its guidelines? As you can see, much work remains to be done and the timeframe is tight. Ideally, a first set of guidelines will be agreed upon jointly between the G7 countries and the most prominent SWFs by the 2008 spring meetings of the IMF and the World Bank. If well designed and agreed upon, such a set of guidelines could serve as a basis for determining which SWFs will continue to enjoy full market access in mature economies.

## 5. Conclusion

Before I conclude, let me say a few words about the capital participation of the GIC in UBS that was recently announced. As you know, the GIC recently committed to subscribe to CHF 11 billion of a mandatory convertible bond which will be issued by UBS in an effort to raise capital in the aftermath of losses on large sub-prime mortgage positions. Subject to the UBS shareholders' approval, the GIC will in due time become a significant shareholder in UBS. In the process, UBS will significantly strengthen its balance sheet and thereby maintain a substantial capital cushion relative to the regulatory minimum. A strengthened capital cushion is to be welcomed. First and foremost, it serves as a confidence-building measure. Moreover, in uncertain times, a solid capital cushion provides insurance against a further potential deterioration in the global macroeconomic environment.

Who is this new Asian investor in the largest Swiss bank? The GIC was set up in May 1981 with an original seed capital of several billion dollars from the Monetary Authority of Singapore (MAS).<sup>28</sup> The central bank reserves had grown steadily throughout the 1970s as a result of public sector surpluses. The GIC's objective was to invest the portion of foreign reserves, which was surplus to the needs of the central bank for its monetary policy management, in longer-term assets. The mandate of the GIC is to preserve at a minimum the international purchasing power of its assets against inflation and global exchange rate risk. The objective of the GIC is commercial, focusing on long-term investment returns. In many ways, it is similar to the objectives of the large European public pension funds. In fact, the GIC has exceeded that mandate and has generated an average return of 9.5 per cent in US dollar terms since inception. The size of the assets managed by the GIC is not publicly known. The GIC has stated that it manages more than USD 100 billion but some estimates have put their assets under management at over USD 300 billion. The assets of the GIC are invested in ten asset classes – developed market public equities, emerging market public equities, private equity, infrastructure, nominal bonds, inflation-linked bonds, real estate, commodities, hedge funds and short-term assets including currency overlay. Geographically, its investments are concentrated in the US, Europe and Japan, but span almost 50 countries.

Based on what is known about the GIC, and judging by the reasoning I have outlined in my lecture this evening, there is little cause for concern about the UBS equity stake the GIC will likely acquire. Over the past quarter century, the GIC has gained a solid reputation as a

---

<sup>28</sup> The original idea of setting up a dedicated government investment institution separate from the MAS was conceived by the then Deputy Prime Minister Dr Goh Keng Swee and endorsed by the then Prime Minister Lee Kuan Yew, who continues to serve as the GIC's Chairman of the Board.

global investor. With regard to the specific topic of my lecture this evening, I expect the GIC to demonstrate leadership in the coming months to help shape an agreement with the governments of the most important mature countries on a set of guidelines for SWFs that will hopefully help to address the challenges I discussed this evening.

To summarise, SWFs have become an important source of capital flowing from the periphery to the core of today's global economy. As such, they can play a constructive role in mature markets. At the same time, SWFs pose a challenge to the international community. The challenge is to preclude an outcome where the activities of SWFs trigger policy responses in mature markets that ultimately lead us down the path of financial protectionism. It is in the interest of mature markets and developing countries alike to avoid such an outcome. A set of guidelines addressing the threat of politically driven investment decisions and resurging state involvement in the global economy represent the best currently available option to respond to the challenge of SWFs.

Let me close with a broader Swiss perspective. Switzerland has in absolute terms the sixth largest current account surplus in the world. Last year, foreign investments by Swiss companies and Swiss individuals generated net income receipts equivalent to 12 per cent of our GDP, or approximately CHF 60 billion. In other words, we are experts at making profitable cross-border investments. This means that we have as strong an incentive as virtually any country in keeping global financial markets open.

## References

Bernanke, Benjamin S. 2006, "Global Economic Integration: What's New and What's Not?", Speech held at the Federal Reserve Bank of Kansas City's Thirtieth Annual Economic Symposium, Jackson Hole, Wyoming, August.

Coeuré, Benoit, 2007, "Faut-il Avoir Peur Des Fonds Souverains?", forthcoming, Les Cahiers, Le Cercle des économistes.

Cox, Christopher, 2007, "The Role of Governments in Markets". Speech at Harvard on 24th October 2007 (<http://www.sec.gov/news/speech/2007/spch102407cc.htm>).

Genberg, H., McCauley, R., Park, Y. and Persaud, A. 2005, Official Reserves and Currency Management in Asia: Myth, Reality and the Future. London, Centre for Economic Policy Research.

Gourinchas, Pierre-Olivier and Olivier Jeanne, 2007, Capital Flows to Developing Countries: The Allocation Puzzle, CEPR Discussion Paper No. 6561.

Hildebrand, Philipp M., 2007, Hedge Funds and Prime Broker Dealers: Steps towards a best practice proposal, in: Banque de France, Financial Stability Review – Special issue on Hedge Funds," No. 10, April.

International Monetary Fund, 2007, Global Financial Stability Report. Washington D.C. September.

Johnson, Simon, 2007, "The Rise of Sovereign Wealth Funds, Finance and Development, September 2007, Volume 44, Number 3, International Monetary Fund.

Jones, Matthew T. and Maurice Obstfeld, 2000, "Saving, Investment, and Gold: A Reassessment of Historical Current Account Data", in Calvo, Guillermo A., Rudiger Dornbusch, and Maurice Obstfeld, eds., Money, Capital Mobility, and Trade: Essays in Honor of Robert A. Mundell, Cambridge: MIT Press, 2000.

Lowery, Clay, 2007, "Remarks by Acting Under Secretary for International Affairs Clay Lowery on Sovereign Wealth Funds and the International Financial System", June 21st, San Francisco.

Lucas, Jr., Robert E., 1990, Why Doesn't Capital Flow from Rich to Poor Countries? The American Economic Review, Vol. 80, No. 2, Papers and Proceedings of the Hundred and Second Annual Meeting of the American Economic Association. (May, 1990), pp. 92-96.

Obstfeld, Maurice and Alan M. Taylor, 2003, "Globalization and Capital Markets". In Michael Bordo, Alan M. Taylor and Jeffrey G. Williamson, Globalization in Historical Perspective, Chicago, The University of Chicago Press.

Summers, Lawrence, 2006, Reflections on Global Account Imbalances and Emerging Market Reserve Accumulation, Speech delivered at the Reserve Bank of India, March 24, 2007.

Summers, Lawrence, 2007, Opportunities in a era of large and growing official wealth, in Johnston-Calari, Jennifer and Malan Riedveld (eds.), Sovereign Wealth Management, Blackrock and Central Banking Publications, London.

Truman, Edwin M. 2007a, Sovereign Wealth Funds: The Need for Greater Transparency and Accountability, Peterson Institute for International Economics, Policy Brief 07-6.

Truman, Edwin M., 2007b, The Management of China's International Reserves: China and a SWF Scoreboard, Paper prepared for the Conference on China's Exchange Rate Policy, Peterson Institute for International Economics, October 19th, 2007.

## Appendix

**Table 1. Sovereign Wealth Funds with assets estimated above 20 billion US dollars**

| Region                 | Country              | Name  | Year of Establishment and Estimated Size |                        |
|------------------------|----------------------|---|--|------------------------|
|                        |                      |   | Year                                     | Size, bn USD, 2007.    |
| Asia                   | Singapore            | Temasek   | 1974 <sup>c</sup>                        | 100 <sup>b</sup>       |
|                        | Singapore            | GIC   | 1981 <sup>c</sup>                        | 100-330 <sup>b,c</sup> |
|                        | China                | China Investment Co.  | 2007                                     | 200 <sup>b</sup>       |
|                        | Brunei               | Brunei Investment Authority                                   | 1983 <sup>c</sup>                        | 30 <sup>b</sup>        |
|                        | Japan                | Announced intension to create one                             | n.a.                                     | n.a.                   |
|                        | South Korea          | Korea Investment Corporation                                  | 2006 <sup>c</sup>                        | 20 <sup>b</sup>        |
| Middle East and Africa | UAE                  | ADIA (Abu Dhabi)  | 1976 <sup>c</sup>                        | 250-875 <sup>b</sup>   |
|                        | Saudi Arabia         | Various   | n.a.                                     | 250+ <sup>b</sup>      |
|                        | Kuwait               | Kuwait Investment Authority (KIA) and Futures Generation Fund | 1953 <sup>c</sup>                        | 160-250 <sup>b</sup>   |
|                        | Algeria              | Revenue Regulation Fund                                       | 2000 <sup>c</sup>                        | 43 <sup>c</sup>        |
|                        | Libya                | Libya Investment Authority                                    | 2007 <sup>a</sup>                        | 40 <sup>a</sup>        |
|                        | Qatar                | Qatar Investment Authority                                    | 2005 <sup>c</sup>                        | 50 <sup>c</sup>        |
| Other Emerging Markets | Russia               | Stabilization Fund  | 2003 <sup>c</sup>                        | 127 <sup>b</sup>       |
| Developed Countries    | Norway               | Government Pension Fund - Global                              | 1996 <sup>c</sup>                        | 308 <sup>b</sup>       |
|                        | US (state of Alaska) | Alaska Permanent Reserve Fund                                 | 1976 <sup>c</sup>                        | 35 <sup>b</sup>        |
|                        | Australia            | Australian Future Fund  | 2004 <sup>c</sup>                        | 42 <sup>b</sup>        |
| Total <sup>d</sup> :   |                      |   |  | <b>2227.5</b>          |

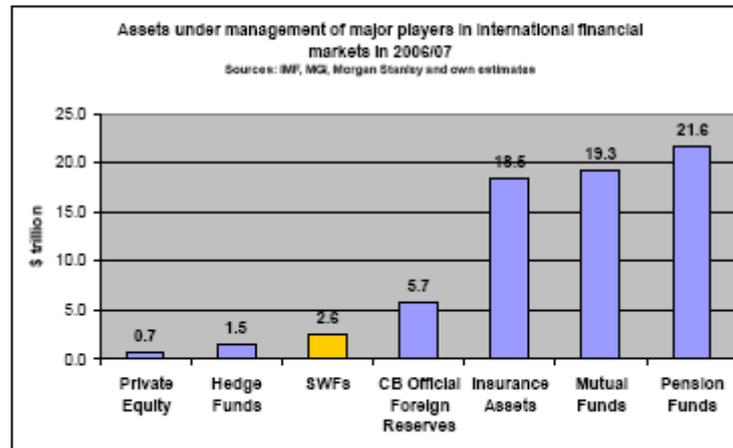
a) Source: Financial Times on 18th October 2007, interview with the executive director of the Libya Investment Authority.

b) Source: IMF, Global Financial Stability Report, September 2007

c) Source: Truman, Edwin, 2007, "Sovereign Wealth Funds: The Need for Greater Transparency and Accountability", Policy Brief 07-6, Peterson Institute for International Economics.

d) Sum of assets of SWFs above an estimated USD 20 billion in size (for GIC, ADIA and Kuwait's funds, where a range is estimated, the mid-range size of assets is used for computing the sum. For Saudi Arabia, the lower limit of USD 250 billion is used).

## Slide 1: The Relative Size of SWFs



## Slide 2: Wide Media Coverage



**COMMENT: Sovereign funds shake the logic of capitalism**  
By Lawrence Summers  
Financial Times, Jul 30, 2007

**Superfunds to the rescue**  
Philip Coggan  
From The World in 2008 print edition

Or are sovereign wealth funds a threat?

We've decided not to let ourselves be sold down the river by speculative funds, by unscrupulous attitudes which do not meet the transparency criteria one is entitled to expect in a civilised world (see *Sovereign Wealth Funds in Washington*, October, 2007 (<http://www.guardian.co.uk/print/0,,205022426-11140500304>)).

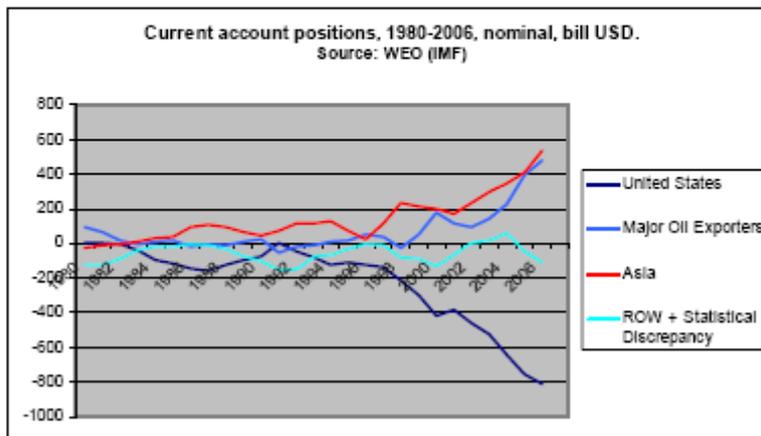


**Asian and Mideast Sovereign Funds Increase Their Clout**

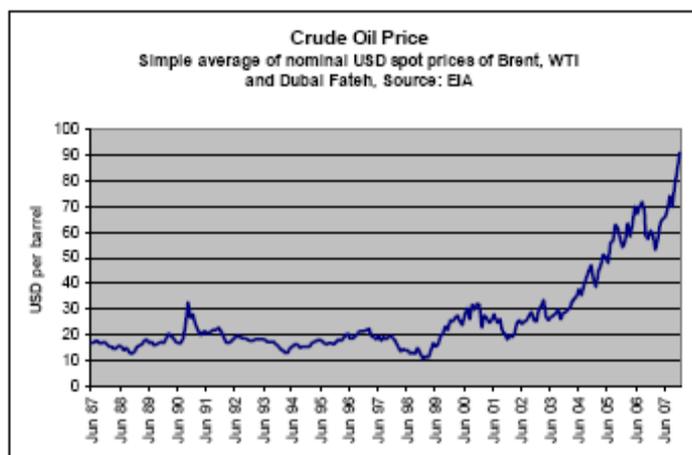
Finance & Economics

**Sovereign-wealth funds  
Dishdashing to the rescue**  
Nov 29th 2007

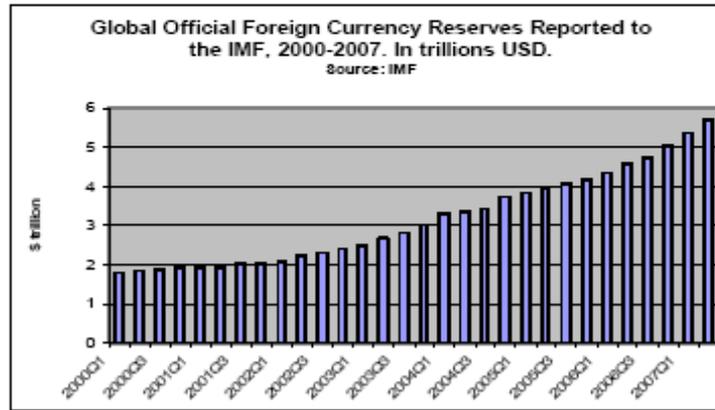
### Slide 3: Global Imbalances



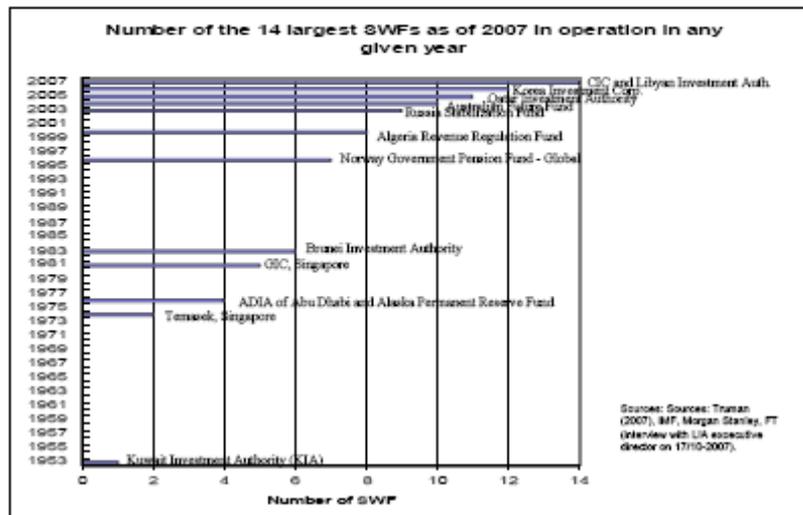
### Slide 4: Crude Oil Price



## Slide 5: Global Reserve Accumulation on the Rise



## Slide 6: SWFs are not new



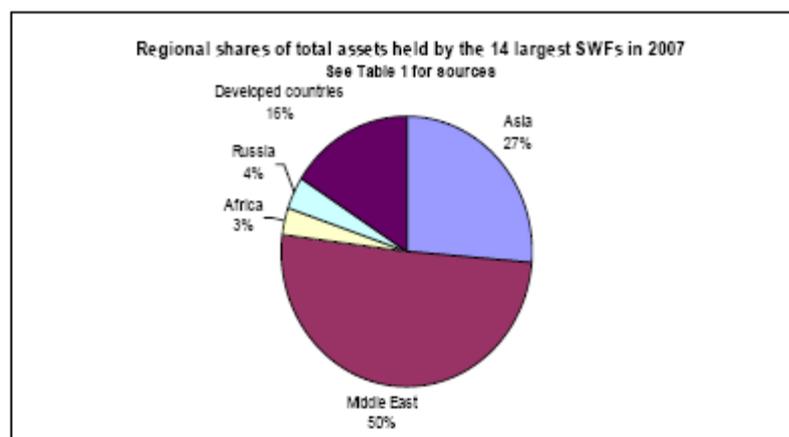
## Slide 7: Countries with Excess Reserves

### Excess reserves according to the Greenspan-Guidotti Rule, 2Q 2007

|                       |       |
|-----------------------|-------|
| Japan                 | 582.3 |
| Taiwan Prov. Of China | 121.4 |
| India                 | 80.0  |
| Brazil                | 36.7  |
| Thailand              | 34.9  |
| Nigeria               | 24.3  |
| Morrocco              | 12.8  |
| Poland                | 10.7  |

Table excludes countries which already have established SWFs and countries for which data on reserves are not available or reliable. Sources: Own calculations based on data from IMF and short term external debt from creditor sources from the Joint External Debt Hub

## Slide 8: SWFs are concentrated in the Middle East and in Asia



## Slide 9: Headlines Covering SWFs Investments



Monday, 21 May 2007, 14:17 GMT 15:17 UK

WSJ Digital Network As of Friday, September 21, 2007

### China buys \$3bn Blackstone stake

PAGE ONE

### As Oil Hits High, Mideast Buyers Go on a Spree

Yesterday saw a burst of activity involving Mideast governments, including a battle between two Persian Gulf emirates over stakes in the [London Stock Exchange](#) and a bid by one of them for a stake in [Nasdaq Stock Market Inc.](#) A third emirate announced an investment in Carlyle Group, a Washington-based private-equity firm known for ties to political heavy hitters such as former President Bush.



HOME UK  
UK

FT Home - UK

### The Risks of Sovereign Funds

BY DAVID WESSEL

Word Count: 783 | Companies Featured in This Article: Citigroup, UBS, Merrill Lynch

Abu Dhabi's sovereign-wealth fund invests \$7.5 billion in Citigroup, the largest U.S. bank. Singapore's sinks \$9.72 billion into UBS, the big Swiss bank. China puts \$3 billion into U.S. private-equity giant Blackstone Group.



### UBS turns to Singapore fund for new capital

By Halg Simonian in Zurich and Chris Hughes in London  
Published: December 11 2007 02:00 | Last updated: December 11 2007 02:00

### WORLD NEWS - OIL'S TROUBLED WATERS: Sovereign wealth funds move into commodity investment

By Javier Blas in Riyadh  
Financial Times, Nov 13, 2007