Developing Asia's Sovereign Wealth Funds and Outward Foreign Direct Investment

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Sovereign wealth funds (SWFs) have emerged in developing Asia as a policy response to an unprecedented accumulation of foreign exchange (FX) reserves since 2000. At the same time, developing countries have become an increasingly important source of outward foreign direct investment (FDI). The central objective of this paper is to evaluate the prospects for SWFs to serve as a major conduit for the region's outward FDI. In principle, FDI represents an attractive means of earning higher returns on FX reserves than traditional reserve assets. In practice, the limited institutional capacity and the political sensitivity of state-led FDI severely constrains the ability of developing Asia's SWFs to undertake FDI on a significant scale. Therefore, the potential for developing Asia's SWFs to become major sources of outward FDI is more apparent than real. This paper also explores the implications of the Santiago Principles and the global financial crisis on outward FDI by SWFs.

I. INTRODUCTION

One of the most significant developments in the global economic landscape since the Asian crisis of 1997–1998 has been the transformation of developing Asia from a net capital importer to a net capital exporter. This development was to a large extent driven by the large and persistent current account surpluses developing Asia has run since the Asian crisis. It is important to note that before the Asian crisis, the region as a whole ran a current account deficit. Therefore, current account surpluses are a relatively new phenomenon in the region. A significant consequence of those surpluses has been an unprecedented accumulation of foreign exchange (FX) reserves by the central banks of the region. The reserves

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have grown so fast that a consensus is growing that they now exceed all plausible estimates of the amounts required for traditional liquidity purposes. The emergence of surplus reserves, in turn, has prompted widespread calls for more active management of FX reserves with a view toward maximizing risk-adjusted returns rather than preparing for shortages of international liquidity.

Sovereign wealth funds (SWFs) provide a natural blueprint for the proposed shift of surplus FX reserves from passive liquidity management to active profit-seeking investment. Unlike central banks, which traditionally manage reserves for liquidity purposes, SWFs are state-owned institutions that use reserves to pursue commercial profits. The predictable response of regional policymakers to the emergence of large and growing surplus reserves has been to set up SWFs as a means of using those resources more productively. Although SWFs have been largely under the radar until quite recently, they have been around for a long time. In fact, the commercial success of some well-established SWFs has been a major motivation behind the establishment of SWFs in developing Asia. In particular, due to their strong investment track records, Temasek Holdings and Government of Singapore Investment Corporation (GIC)—the two Singaporean SWFs—have attracted the attention of regional policymakers as a potential benchmark model. In short, Asian countries are setting up SWFs as a policy tool for coping with the relatively new phenomenon of surplus reserves.

One potential avenue for active profit-oriented foreign investment by SWFs is acquisition of ownership interests in foreign assets. To the extent that such acquisitions involve a long-term relationship and involvement in management, they are viewed as foreign direct investment (FDI). If they are devoid of such elements, they are seen as portfolio investment. The boundary between the two types of foreign investment is not always clear-cut. What is more relevant for this paper is not the distinction between FDI and portfolio investment but rather the use of reserves for profit rather than liquidity. Portfolio investment, or the purchase of corporate bonds or small equity stakes without any influence on management, is certainly one way to make money. Nevertheless, the acquisition of substantial stakes that confers some managerial control is also consistent with the pursuit of profit. This is especially true if the SWFs can improve management and thus increase the value of the firm. In fact, some SWFs such as Temasek have often acquired enough ownership to exercise some control precisely with such objectives.

Although outward FDI is one of the main potential avenues for managing surplus FX reserves more actively, developing countries have traditionally been recipients of inward FDI rather than sources of outward FDI. The flow of FDI from rich to poor countries was an integral part of the broader flow of capital from rich to poor countries. Such flows are consistent with economic intuition: they imply that capital is flowing from capital-abundant countries where marginal returns to capital are low to capital-scarce countries where marginal returns to capital are high. Since the mid-1990s, however, capital has been flowing "uphill" from developing countries to developed countries primarily as a result of global imbalances, i.e., large and persistent current account deficits of developed countries, in particular the United States (US), counterbalanced by large and persistent current account surpluses of developing countries, in particular developing Asia and oil-exporting countries. One significant consequence of the uphill flow of capital has been that many developing countries have now become significant foreign direct investors in their own right and an increasingly significant source of outward FDI. This trend reflects not only the transformation of developing countries as a whole into net capital exporters but also the broader trend of their fast-rising relative weight in the world economy due to their more rapid economic growth relative to developed countries.

The central objective of the paper is to explore the prospects for developing Asia's SWFs to serve as a major conduit for the large and growing outward FDI in the region. In principle, outward FDI represents a promising means of earning higher returns on the region's pool of surplus reserves. However, whether the SWFs are able to convert such promise into reality depends on whether they are good at adding value to the assets they acquire, which, in turn, depends on their managerial skills and know-how. It also depends on the policies of host countries toward investment by foreign state-owned institutions. The greater the managerial capacity of the SWFs and the more receptive the governments of the host countries to their investments, the more likely it is that SWFs will be able to use FDI as an avenue for profitable investments. Some additional issues explored in this paper are the implications of the Santiago Principles, a voluntary code of conduct for SWFs, as well as the global financial crisis on outward FDI by SWFs.

The rest of this paper is organized as follows. Section II provides a background for the emergence of the SWFs in developing Asia. Section III briefly examines the growth of outward FDI from developing countries. Section IV evaluates the appropriateness of SWFs as vehicles for channeling developing Asia's outward FDI. Section V concludes the paper.

II. SURPLUS FX RESERVES AND THE RISE OF SWFS IN DEVELOPING ASIA

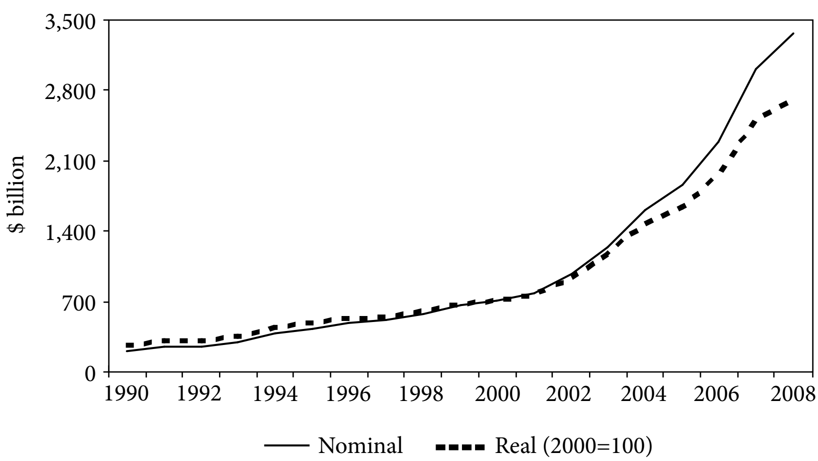
Prior to the 1997–1998 Asian financial crisis, developing Asia as a whole had run a current account deficit vis-à-vis the rest of the world but since the crisis, the region has run a large and persistent current account surplus. This reversal of the current account position explains much of the region's unprecedented accumulation of FX reserves in the post-crisis period. In some countries such as the People's Republic of China (PRC) and Republic of Korea (henceforth Korea), substantial net capital inflows have further added to the reserve buildup. There are two main explanations for the buildup: the precautionary motive and the mercantilist motive.[1] According to the precautionary explanation, in response to

[1]In their empirical analysis, Aizenman and Lee (2005) found that the precautionary motive was more important than the mercantilist motive in explaining the reserve buildup.

the economic and social devastation wrought by the 1997–1998 Asian financial crisis, Asian countries sought to protect their economies against sudden shortages of international liquidity by accumulating a large war chest of reserves. It is difficult to exaggerate the deep impact of the crisis on the collective psyche of the region. According to the mercantilist explanation, developing Asia's soaring reserves are proof of the region's overdependence on exports as an engine of growth: Asian central banks purchase foreign exchange to keep their currencies weak and thus promote exports.

Whatever the motive behind the accumulation of reserves—and both precautionary and mercantilist motives probably played some role—what is beyond doubt is that the accumulation has been phenomenal in scope and speed. Figure 1 shows the growth in developing Asia's total FX reserves between 1990 and 2008 in both nominal and real terms. During this period, developing Asia's reserves surged from $202 billion to $3,371 billion in nominal terms, and from $267 billion to $2,697 billion in inflation-adjusted terms. Most of this growth occurred during the recent subperiod 2000–2008, with regional reserves rising from $710 billion to $3,371 billion in nominal terms, and from $710 billion to $2,697 billion in real terms. In nominal terms, the average annual growth rate of the reserves was 16.9 percent, 13.4 percent, and 21.5 percent for 1990–2008, 1990–2000, and 2000–2008, respectively. In real terms, the average annual growth rate was 13.7 percent, 10.3 percent, and 18.2 percent during the same periods. The overall picture is one of secular growth in developing Asia's reserves since 1990, punctuated by a noticeable acceleration of growth since 2000.

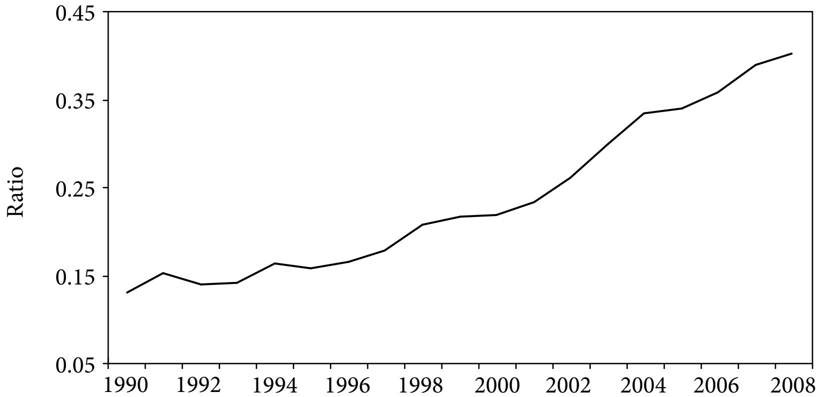
Figure 1. **Nominal and Real Foreign Exchange Reserves of Developing Asia, 1990–2008**



Source: Authors' estimates based on data from CEIC Data Company Ltd. and International Monetary Fund, *International Financial Statistics* online database, both downloaded 15 June 2009.

The growth of FX reserves in absolute terms over time partly mirrors developing Asia's economic growth over time. Therefore, to put the region's reserve buildup in better perspective, its absolute reserves are scaled by its gross domestic product (GDP). Figure 2 shows the amount of reserves relative to GDP. The reserves–GDP ratio shows a similar pattern as the amount of reserves: an uninterrupted increase. Developing Asia's reserves–GDP ratio rose from 13.1 percent in 1990 to 21.9 percent in 2000 and further to 40.2 percent in 2008.

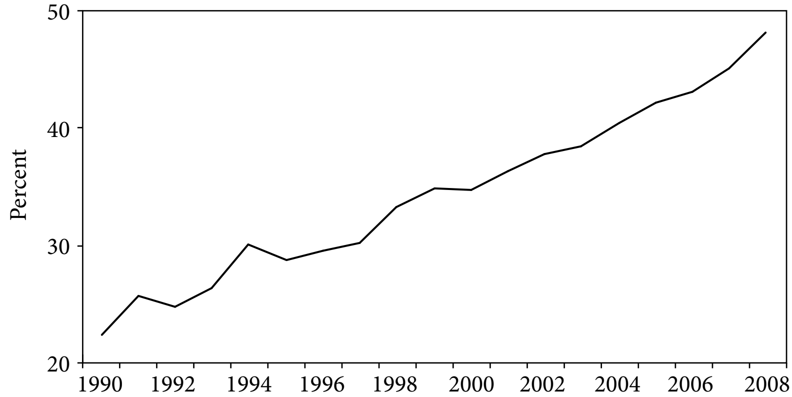
Figure 2. **Ratio of Foreign Exchange Reserves to GDP, Developing Asia, 1990–2008**



GDP = gross domestic product.
Source: Authors' estimates based on data from CEIC Data Company Ltd. and International Monetary Fund, *International Financial Statistics* online database, both downloaded 15 June 2009.

Yet another measure worth looking at to bring the region's FX reserve accumulation into sharper focus is the share of the region's reserves in total world reserves. A tangible rise in the region's share would give further credibility to the global significance of developing Asia's reserve growth. Figure 3 shows the rise in the region's share of global reserves from 22.4 percent in 1990 to 34.7 percent in 2000 and 48.1 percent in 2008. This suggests that developing Asia has indeed been accumulating reserves at a faster pace than the rest of the world, in fact more than twice as fast. However, the region's reserve accumulation is an integral part of a broader trend of accelerated reserve accumulation by developing countries, whose share of global reserves has risen from 27.7 percent in 1990 to 64.8 percent in 2008. The PRC accounted for more than 50 percent of developing Asia's total reserve growth in that period. Therefore, while the contribution of the PRC to the reserve buildup is notable, the buildup is a regionwide rather than a PRC-specific phenomenon. Table 1 lists the region's top 10 reserve holders as of the end of 2008.

Figure 3. **Developing Asia's Share of World Reserves, 1990–2008**



Sources: Authors' estimates based on data from CEIC Data Company Ltd.; International Monetary Fund (IMF), *International Financial Statistics* online database; and IMF, Currency Composition of Official Foreign Exchange Reserves, available: http://www.imf.org/external/np/sta/cofer/eng/index.htm, all downloaded 15 June 2009.

Table 1. **Developing Asia's Top 10 Reserve Holders, 31 December 2008**

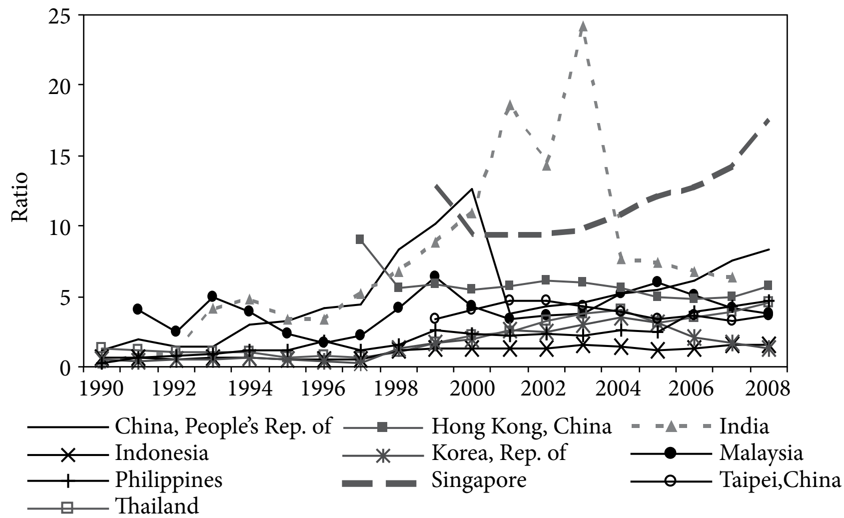
Rank	Economy	Stock of Foreign Exchange Reserves (Billions of $)
1	China, People's Rep. of	1,946
2	Taipei,China	292
3	India	247
4	Korea, Rep. of	200
5	Hong Kong, China	182
6	Singapore	174
7	Thailand	108
8	Malaysia	91
9	Indonesia	49
10	Philippines	33

Sources: CEIC Data Company Ltd. and International Monetary Fund, *International Financial Statistics* online database, both downloaded 15 June 2009.

The notion of surplus reserves is linked with the concept of optimal reserve levels. Holding reserves entails both benefits and costs, which implies that the optimal reserve level is neither zero nor infinite. The primary benefit of reserves is that they protect a country from sudden and unexpected shortages of international liquidity, and thus from financial crises such as the Asian financial crisis of 1997–1998. Reserve accumulation not only yields benefits but entails costs. One major potential cost of reserve accumulation is inflation. A central bank's issuance of domestic currency to purchase foreign currency increases the monetary base, which in turn leads to inflation, even though such inflationary impact can be sterilized through the issuance of bonds. The optimal reserve level is where the marginal benefit equals marginal cost. There is a growing consensus that developing Asia's reserves now exceed the optimal level. That is, the region now has "too much" reserve buildup and hence surplus reserves.

To estimate the magnitude of developing Asia's surplus reserves, some well-known measures of reserve adequacy are helpful.[2] While these measures are informal rules of thumb based on intuition rather than rigorously derived theoretical concepts, they perform well in empirical studies of reserve adequacy and thus provide useful guidance for policymakers. Many such studies find one such rule of thumb—the ratio of reserves to short-term external debt—to be a significant determinant of an economy's vulnerability to financial crisis. According to the so-called Greenspan-Guidotti rule, the critical value of this ratio is one, with a value below one signaling danger. The underlying idea is that a country that has reserves equal to or more than all external debt falling due within one year should be able to service its immediate external obligations even during a financial crisis. Figure 4 reveals that developing Asia comfortably passes the Greenspan-Guidotti test of reserve adequacy. The implication is that the region has substantial amounts of surplus reserves.

Figure 4. **Ratio of Foreign Exchange Reserves to Short-Term External Debt in Developing Asia's Top 10 Reserve Holders, 1990–2008**

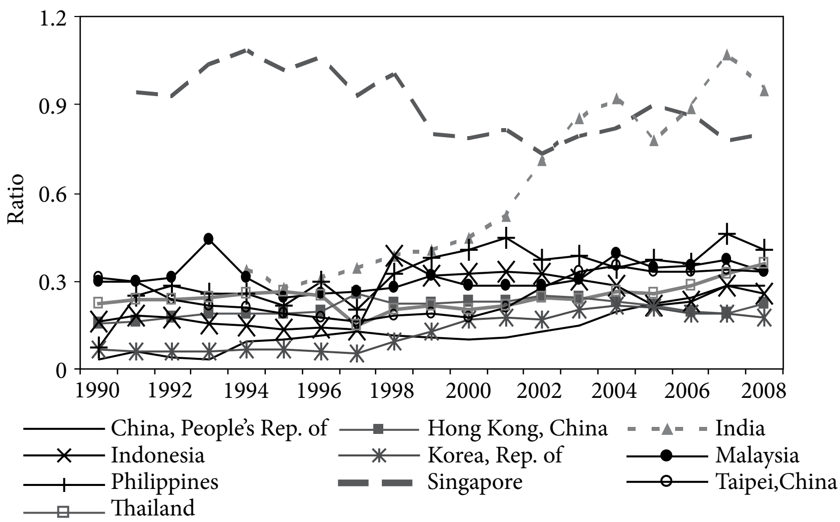


Sources: Authors' estimates based on data from CEIC Data Company Ltd.; Deutsche Bank Research, available: http://www.dbresearch.de/servlet/reweb2.ReWEB?rwsite=DBR_INTERNET_EN-PROD; International Monetary Fund, *International Financial Statistics* online database; and World Bank, *Global Development Finance Online* database, all downloaded 15 June 2009.

[2]Edison (2003), ECB (2006), and Green and Torgerson (2007) discuss the various reserve adequacy measures in detail.

Another widely used indicator of reserve adequacy is the ratio of reserves to M2 or broad money. This ratio is especially relevant for countries that are subject to a significant risk of capital flight. The underlying intuition is that the higher the ratio, the greater the confidence of the general public in the value of the local currency and hence the lower the likelihood of crisis-provoking flights into other currencies. While there is no general consensus on the critical value of the reserves–M2 ratio, which is understandable given the inherent difficulty of measuring capital flight, the suggested values range from 5 percent to 20 percent. Figure 5 shows that the reserves–M2 ratio falls comfortably within 5–20 percent for the major reserve holders of developing Asia. In fact, the ratio is above 20 percent (in some cases well above that level) for most of the economies in many years. A look at the reserves–M2 ratio indicates that developing Asia's reserve buildup may have resulted in substantial amounts of surplus reserves.[3]

Figure 5. **Ratio of Foreign Exchange Reserves to M2 in Developing Asia's Top 10 Reserve Holders, 1990–2008**



Sources: Authors' estimates based on data from CEIC Data Company Ltd.; International Monetary Fund, *International Financial Statistics* online database; and World Bank, *Global Development Finance Online* database, all downloaded 15 June 2009.

The presence of large and growing surplus reserves suggests that the region would be better off by investing those reserves more actively to maximize risk-adjusted returns. The alternative of continuing to use excess reserves to purchase

[3]Park and Estrada (2009) provide a comprehensive empirical analysis of developing Asia's reserve adequacy, and confirm the presence of substantial amounts of surplus reserves in the region.

safe and liquid but low-yielding traditional reserve assets is indeed a costly waste of valuable resources. Therefore, the notion that developing Asia should manage at least some of its growing stockpile of reserves more actively is not only politically popular but economically sound. SWFs have a long history of using publicly owned foreign exchange to pursue commercial profits. In contrast to central banks, which managed foreign exchange assets largely to protect the country from sudden shortages of international liquidity, SWFs used foreign exchange assets to maximize risk-adjusted returns. As such, the shift from passive to more active, profit-oriented management of excess reserves is analytically equivalent to a shift from central banks to SWFs. As such, SWFs provide a natural institutional model for more active, profit-oriented management of developing Asia's excess reserves. This is evident in the solid track records that a number of existing SWFs have established for consistently successful investment performance. Within the region, Singapore is widely seen as a role model in light of the extraordinary success of its two SWFs (Temasek and GIC). New SWFs are already emerging in Asia and many more are in the planning stages.[4] Korea set up the Korea Investment Corporation (KIC) in 2005 and the PRC followed suit with the China Investment Corporation (CIC) in 2007. Table 2 lists the major SWFs of developing Asia.

Table 2. **Sovereign Wealth Funds of Developing Asia**

Economy	Name of Fund	Assets ($ Bn)	Year of Inception	Type
Singapore	Government of Singapore Investment Corporation	330.00	1981	Non-commodity
China, People's Rep. of	China Investment Corporation	200.00	2007	Non-commodity
Singapore	Temasek Holdings	100.00	1974	Non-commodity
Hong Kong, China	Hong Kong Monetary Authority Investment Portfolio	100.00	1998	Non-commodity
Brunei Darussalam	Brunei Investment Agency	30.00	1983	Commodity: Oil
Korea, Rep. of	Korea Investment Corporation	20.00	2005	Non-commodity
Malaysia	Khazanah Nasional Berhad	15.00	1993	Non-commodity

Continued

[4]Park (2007) provides a comprehensive review of the emergence of SWFs in developing Asia.

Table 2—*Continued*

Economy	Name of Fund	Assets ($ Bn)	Year of Inception	Type
Kazakhstan	National Oil Fund	15.00	2000	Commodity: Oil, gas, metals
Taipei,China	National Stabilization Fund	15.00	2000	Non-commodity
Azerbaijan	State Oil Fund	1.60	1999	Commodity: Oil
Timor Leste	Petroleum Fund	1.22	2005	Commodity: Oil and gas
Uzbekistan	Fund for Reconstruction and Development	0.50	2006	Commodity and non-commodity
Kiribati	Revenue Equalization Reserve Fund	0.47	1956	Commodity: Phosphate mining
Nauru	Nauru Phosphate Royalties Trust	0.07	1968	Commodity: Phosphate mining
India	To be named	…	…	Non-commodity
Thailand	To be named	…	…	Non-commodity

… indicates data was unavailable or not applicable.

Note: A number of trust funds in the Pacific region, which have been financed by government and donor funds, are not included in the above list and have an aggregate size of about $500 million. Due to lack of official information from the funds themselves, asset sizes are largely estimates from unofficial sources such as Jen (2007).

Sources: Jen (2007), Rozanov (2005), and Setser and Ziemba (2007).

III. THE RISE OF OUTWARD FDI FROM DEVELOPING COUNTRIES

One significant symptom of the transformation of developing Asian countries into net capital exporters has been the emergence of SWFs in the region. Another significant symptom is the rapid growth of outward FDI from the region. More generally, growing outward FDI from developing Asia is a consequence of its rapid economic growth and development, which has given birth to growing numbers of companies with the capacity to acquire and manage overseas assets. The growth of outward FDI from developing Asia is part of a broader trend of outward FDI from developing countries as a whole. This trend has been an integral part of the fast-growing share of developing countries in the global economy. Developing countries as a group have been growing significantly faster than developed countries over the past few decades. Indeed, growth has been remarkably rapid in some parts of the world, especially in PRC, India, and East Asia. The upshot is that the global economic landscape today is very much different from that of 30 years ago when global economic activity was dominated by developed countries, and developing countries merely played a secondary supporting role. One interesting element of this change has been the growing importance of developing countries as a source of outward FDI.

The primary vehicle for outward FDI has been multinational corporations (MNCs) operating across borders. The majority of those firms have traditionally come from developed countries. Large and well-established MNCs such as Coca-Cola, Toyota, or Siemens almost invariably hail from US, Japan, and European Union (EU). The role of developing countries[5] in the context of MNCs has traditionally been largely limited to hosting MNCs from developed countries. Examples include US software companies setting up research facilities in India, Japanese manufacturers establishing production facilities in the PRC, and British banks acquiring financial institutions in Brazil. Until recently, this stereotype of developed countries as homes of MNCs, and developing countries as hosts of MNCs, was firmly rooted in empirical reality (Dunning 1993). Although it is true that there were MNCs from developing countries in the past, they were nowhere near as active or visible as they are today.

In line with their fast-rising relative weight in the world economy, many developing countries have become significant outward foreign direct investors in their own right (UNCTAD 2006). The emergence of MNCs from developing countries thus mirrors the rapid economic growth of those countries (Dunning and Narula 1996). The four newly industrialized economies of Hong Kong, China; Korea; Singapore; and Taipei,China have reached per capita income levels similar to developed countries. Therefore, some developing economies have become rich enough to export capital to the rest of the world. Nonetheless, the most successful developing countries are by no means the only homes of MNCs from developing countries. Countries as varied as the PRC, India, Brazil, Mexico, and South Africa have all spawned their own MNCs. The rise of such MNCs reflects the growing capacity of developing country firms to make investments abroad (Bartlett and Ghoshal 2000, Mathews 2006). Indeed some of these firms, such as Korea's Samsung; South Africa's Anglo American; India's Tata; Mexico's Cemex; Brazil's Vale; Egypt's Orascom; the PRC's Huawei; Malaysia's Sime Darby; and Taipei,China's Acer, have become global players with operations all over the world (UNCTAD 2006).

[5]UNCTAD (2006) defines "developing and transition economies" as comprising all developing countries plus countries in southeastern Europe and the Commonwealth of Independent States. Occasionally, the term "South" or "third world" is also used to denote these economies. In this paper, the terms "developing countries" and "developing economies" are more narrowly defined and refer to the major sources of FDI from the "South," including Argentina; Brazil; Chile; PRC; Columbia; Hong Kong, China; India; Korea; Malaysia; Mexico; Nigeria; Russia; Singapore; South Africa; Turkey; Taipei,China; and Venezuela, which accounted for 90 percent of FDI from developing economies in 2004.

In light of the growth of MNCs and outward FDI from developing countries, it is plausible to expect a significant increase in the share of developing countries in global outward FDI. Furthermore, in light of the massive flow of FDI into the PRC and a few other developing countries, one can reasonably expect an increase in the share of developing countries in global FDI inflows. However, contrary to such expectations, the share of developing countries in the global stock of both inward and outward FDI has remained more or less constant since 1980 (Table 3). One possible explanation is the large amount of cross-border mergers and acquisitions (M&As) FDI within the G3 (EU, Japan, and US) in the 1990s. On the other hand, one key indicator that has noticeably changed is the ratio of developing countries' outward FDI stock to their inward FDI stock. This supports the notion that the relationship between FDI flows and developing countries is increasingly a two-way traffic, with outflows growing in relative importance.

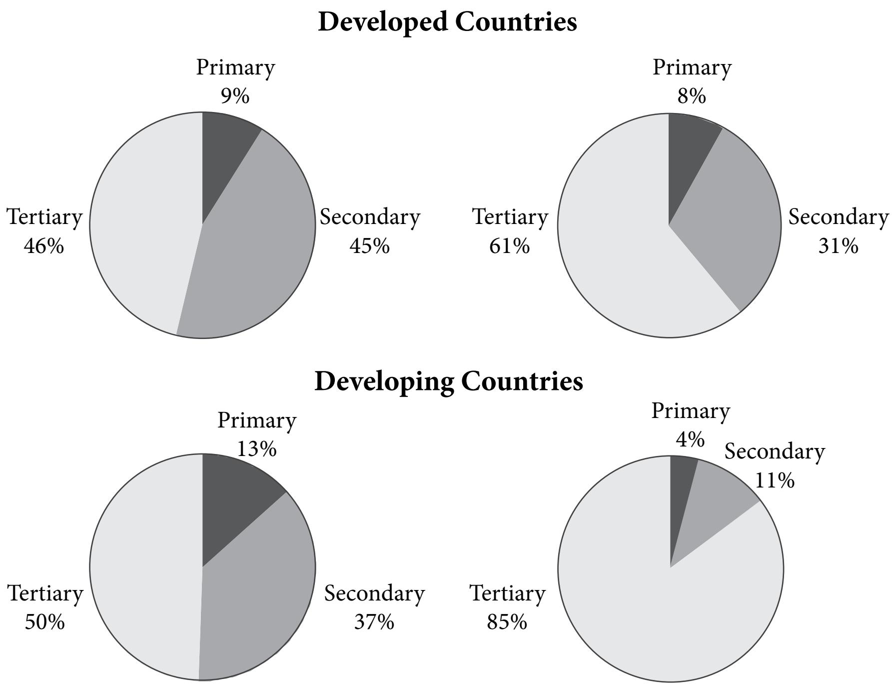
Table 3. **Inward and Outward FDI Stock in Developed and Developing Countries, 1980–2007**

	1980		1990		1995		2007	
Region	**$ Bn**	**%**	**$ Bn**	**%**	**$ Bn**	**%**	**$ Bn**	**%**
Developed countries								
Inward FDI	391	56	1,413	73	2,036	69	10,459	71
Outward FDI	499	89	1,640	92	2,583	89	13,042	85
Outward/Inward	1.28	1.59	1.16	1.26	1.27	1.29	1.25	1.20
Developing countries								
Inward FDI	302	44	529	27	917	31	4,247	29
Outward FDI	60	11	145	8	309	11	2,288	15
Outward/Inward	0.20	0.25	0.27	0.30	0.34	0.35	0.54	0.52

FDI = foreign direct investment.
Note: The percentages refer to percent of total for developed and developing countries.
Sources: UNCTAD (2004, 2008), authors' calculations.

In terms of the sectoral composition of the developing countries' outward FDI, in 2006 around 85 percent of the stock of their outward FDI was in services such as trade, finance, and business activities, compared to 50 percent in 1990, as seen in Figure 6. The corresponding shares for developed country FDI were 46 percent in 1990 and 61 percent in 2006. The share of primary and secondary sectors in developing countries' outward FDI has declined, as is the case for developed country outward FDI. The increase in the share of services in the outward FDI of developing countries mirrors the increase in the share of services in their GDPs. For example, as demand for telecommunications services in developing countries grows as a result of economic growth, developing country telecommunications firms may venture abroad. Furthermore, service-oriented developing economies such as Singapore and Hong Kong, China invest abroad primarily in services (especially offshore centers and financial services) and thus help to raise the share of services in outward FDI of developing countries as a whole.

Figure 6. **Sectoral Distribution of the Outward FDI Stock of Developed and Developing Countries, 1990 and 2006**



FDI = foreign direct investment.
Source: Authors' calculations based on data from UNCTAD (2008).

Table 4 shows the share of outward FDI stocks accounted for by different developing economies. In 1980, Latin American countries accounted for nearly four fifths of the total outward FDI from developing countries. By 2007, their share had fallen sharply to 22 percent. On the other hand, the corresponding share of Asian developing economies rose sharply from 11 percent to 75 percent. Table 4 shows that Hong Kong, China led the way with $1 trillion stock of outward FDI in 2007, a sum exceeded only by France, Germany, United Kingdom (UK), and US. Brazil; PRC; Korea; Singapore; and Taipei,China are the other main sources of outward FDI from developing economies. These five economies and Hong Kong, China jointly accounted for around 74 percent of the stock of outward FDI from developing countries in 2007 and 10 percent of the global stock of outward FDI. The corresponding figures for 1995 were 68 percent and 7 percent, respectively.

Table 4. **Origin of Outward FDI Stock of Developing Economies**

Region	1980 $ Mn	1980 %	1995 $ Mn	1995 %	2007 $ Mn	2007 %
Asia	6,440	10.7	189,064	61.3	1,721,675	75.2
China, People's Rep. of	…	nil	15,802	5.1	95,799	4.2
Hong Kong, China	148	0.2	78,833	25.5	1,026,587	44.9
India	4	nil	264	0.1	29,412	1.3
Korea, Rep. of	127	0.2	10,231	3.3	66,220	2.9
Malaysia	197	0.3	11,042	3.6	58,175	2.5
Singapore	3,718	6.2	35,050	11.4	149,526	6.5
Taipei,China	97	0.2	25,144	8.1	158,361	6.9
Thailand	13	nil	2,274	0.7	7,025	0.3
Latin America	46,915	77.9	86,263	28.0	493,213	21.6
Argentina	5,997	10.0	10,696	3.5	26,873	1.2
Brazil	38,545	64.0	44,474	14.4	129,840	5.7
Chile	42	0.1	2,425	0.8	32,469	1.4
Colombia	136	0.2	1,027	0.3	10,383	0.5
Mexico	31	0.1	2,572	0.8	44,703	2.0
Others	6,884	11.4	33,297	10.8	73,185	3.2
South Africa	5,722	9.5	23,305	7.6	54,562	2.4
Total	60,239	100.0	308,624	100.0	2,288,073	100.0

Sources: UNCTAD (2004, 2008); authors' calculations.

The home economies of developing country MNCs differ widely in terms of size, income level, economic structure, natural resources, technological capabilities, trade openness, government policies, and other characteristics (Hoskisson et al. 2000). For example, the economies range from geographically small economies such as Singapore and Hong Kong, China to continental ones such as Brazil, PRC, India, and Russia. Some home economies such as PRC, India, and Korea have modest endowments of natural resources, whereas others such as Brazil, Malaysia, and Russia are blessed with abundant endowments of natural resources. East Asian economies are relatively more dependent on manufacturing and exports than other developing countries.

It is therefore not surprising that each developing country has its own particular FDI objectives, which are shown in Table 5. For example, Singapore's FDI is associated with market access and low labor costs; Korea's FDI with escaping high labor costs and difficult labor unions at home; the PRC's FDI with the search for markets and natural resources; India's FDI with new market access and escape from home country government restrictions; Brazil's FDI with substantial investment in the financial and business sectors; Mexico's FDI with access to markets and knowledge; and Russia's FDI with the energy and mining industries and privatization programs in transition economies.

Table 5. **Economy-Specific Motives for Outward FDI, Selected Developing Economies**

Country	Characteristics
Brazil	Largely regional, i.e., Latin America, but recent expansion into Canada; substantial financial investment; significant petroleum investments.
China, People's Rep. of	Largely market and natural resource seeking, but recently knowledge/brand names; considerable state support—directly or indirectly.
Hong Kong, China	Mainly in People's Rep. of China, but some in other poorer Asian and African countries, motivated both by cost reduction and market seeking in both manufacturing and service sectors.
India	Initially to penetrate new markets and escape government restrictions, but recently more focus on accessing and acquiring technology/brand names.
Korea, Rep. of	Escaping high cost and difficult labor markets at home, as well as saturated product markets; increasing asset seeking FDI in Europe and United States.
Malaysia	Importance of offshore banking, transport, and a range of diversified activities; some asset augmenting FDI in Europe and United States.
Mexico	Largely within North and South America; market access and knowledge seeking, e.g., major global MNC, Cemex.
Russia	Largely energy and mining investments; avoidance of domestic regulatory constraints.
Singapore	Market access dominates, but low-cost labor seeking also a factor; for some more technology intensive activities, following the client becomes important; exploiting its own advantages as a regional service center.
Thailand	Initially opportunistic and ill-planned, and then regional market access seeking.

FDI = foreign direct investment; MNC = multinational corporation.
Source: Dunning, Kim, and Park (2008).

IV. ARE SOVEREIGN WEALTH FUNDS AN APPROPRIATE VEHICLE FOR DEVELOPING ASIA'S OUTWARD FDI?

In Section II, it was seen that SWFs have emerged in developing Asia as a policy response to manage the region's surplus reserves more actively with a view toward pursuing commercial profit rather than managing liquidity. In Section III, it was seen that developing countries, in line with their growing weight in the world economy, are no longer just recipients of FDI inflows but also an increasingly significant source of FDI outflows. In the case of developing Asia, a further impetus for outward FDI has been its transformation into a net capital exporter. Taken together, these two trends suggest that outward FDI would be an attractive channel for pursuing the SWFs' central objective of maximizing risk-adjusted returns. Clearly, in principle, outward FDI represents one potential alternative for shifting the region's surplus reserves from low-return traditional reserves to more profitable uses. However, in practice, it will be a tough challenge for the region's SWFs to engage in outward FDI, as will be explained in greater detail in this section.

Nevertheless, SWFs are beginning to play a bigger role in FDI through their growing involvement in M&As. According to UNCTAD (2008), the investments of SWFs are increasingly directed toward FDI rather than portfolio investment. The mode of FDI by SWFs is predominantly M&A rather than greenfield investment (i.e., the establishment of new production facilities) or joint ventures with partners in host countries. However, SWFs still invest very little in the form of FDI, which accounted for only an estimated 0.2 percent of their total assets in 2007. At the same time, this form of investment has been growing noticeably in recent years. According to UNCTAD (2008), of the $39 billion of FDI made by SWFs during the period 1987–2007, as much as $31 billion or almost 80 percent was committed in 2005–2007. In addition, the number of cross-border M&As involving SWFs jumped from one in 1987 to 30 in 2007. Over the past two decades, 73 percent of FDI by SWFs has flowed into developed countries while the remaining 27 percent has flowed into developing countries. Among developing countries, developing Asia has received the bulk of FDI by SWFs with Africa and Latin America receiving only very limited amounts. The overall picture of outward FDI by SWFs is one of rapid growth from a miniscule base.

Most investments by SWFs are in services, particularly business services; finance; hotels and restaurants; and transport, storage, and communications. Outside the services sector, the chemical and chemical product sector has also captured a significant portion of SWF investments. Further, SWFs have channeled their investments primarily in Germany, UK, and US (UNCTAD 2008). Recent investments by SWFs have been largely influenced by developments in the global economic landscape, in particular the distress of Western financial institutions. Many of SWFs' major investments have been made in the financial services sector of developed countries, and have helped to bolster the capital base of distressed banks in the EU and US. Such investments have played a stabilizing role in the global financial turmoil. Apart from investments in the financial sector, SWFs have also secured large stakes in private equity funds, which have turned to SWFs as new sources of funds for private equity firms in light of their reduced access to bank credit. However, despite the growing significance of SWFs as outward investors, concerns remain about their lack of institutional capacity as well as host country doubts about their investment motives.

A. Lack of Institutional Capacity

Temasek and GIC are widely respected and admired throughout developing Asia, and have inspired the creation of SWFs in the region. Such emulation is evident in the fact that the PRC and Korea have gone so far as to name their own SWFs after GIC. These two Singaporean SWFs are interesting for the purposes of this paper because some of their foreign investments, especially in the case of Temasek, have the attributes of FDI, i.e., long-term acquisition with substantial influence on management. The major reason Temasek and GIC have attracted so much attention from the region's emerging SWFs is their exceptional investment performance. According to Temasek Holdings (2008), the total average compounded annual shareholder return was a remarkable 18 percent in terms of market value for the period 1974–2008. During the same period, the market value of Temasek's portfolio rose from \$170 million to \$134 billion. Like Temasek, GIC has established a solid track record of consistently good investment performance. According to company sources, during the period 1981–2008, the average annual return has been 5.8 percent in Singapore dollar terms. The average annual return above global inflation has been 4.5 percent. Moreover, GIC has added value in both equities and bonds against the relevant industry indices. Although both funds are believed to have suffered heavy losses during the global financial crisis and there are some doubts about the reliability of their financial statements given the lack of external verification, there is nevertheless a fairly firm consensus within financial circles that Temasek and GIC are savvy investors with superior track records.

Although Temasek has the luxury of adopting either long or short investment horizons, in practice, its guiding principle has been to manage for long-term value. While it might be tempting for outsiders to dismiss the commercial orientation of a government-owned institution, Temasek has been run on a purely commercial basis. In addition to its bread and butter of equity stakes in domestic and foreign companies, Temasek has invested in areas such as private equity, real estate, and venture capital. For GIC, the range of asset classes includes government and corporate bonds, equity, foreign exchange, commodities, real estate, private equity, venture capital, and infrastructure. Indeed, real estate and special investment (private equity, venture capital, and infrastructure) are significant enough to be managed as separate investment groups within GIC, alongside the main investment group for public market assets.

A feature of an SWF's investment strategy that may increase profits is to exercise hands-on control or influence on the management of the companies in which it buys equity stakes. In the case of Temasek, around 50–60 percent of its portfolio in 2006–2008 consisted of investments where the company's share of total equity exceeded 20 percent. It is not clear, however, if Temasek actually adopts a hands-on approach toward investments in which it has large equity stakes. Take the case of Bank Danamon Indonesia, the fifth largest commercial bank in Indonesia, of which Temasek owns 58 percent. Temasek manages Bank Danamon not directly, but through Fullerton Fund Management, a wholly owned subsidiary of Temasek that manages its outward FDI in financial services. Still, there is no evidence that Fullerton, which is basically an investment agency with a few staff, has sufficient control over the management of Bank Danamon or of other banks acquired by Temasek. This casts some doubt on Temasek's capacity to directly manage the firms it buys. While the managerial capacity of Temasek is subject to debate, its strong financial position throughout its long existence and its generally superior investment performance attests to its financial prudence and commitment in maximizing shareholder return, which are attributes worth emulating for newer SWFs.

The key question for this paper's purposes is the extent to which the Singaporean model of SWFs, i.e., substantial amounts of FDI and, more generally, high-risk, high-return investments, is applicable to the new SWFs of developing Asia. The simple answer is that the applicability of the Singaporean model to other Asian SWFs is low. The biggest difference between Temasek and GIC on one hand and the likes of CIC and KIC on the other hand is a huge gap in institutional capacity. It is not only unrealistic but downright dangerous for CIC, KIC, and other Asian SWFs to believe that they can earn Temasek- or GIC-types of return on their investments in the short run. It would be a serious mistake for regional policymakers to believe that it is possible to build a Temasek or a GIC overnight. That is, it takes a lot of time and effort to build up the institutional capacity, which is a precondition for taking and managing the risks required to realize high risk-adjusted returns.

Both Temasek and GIC have accumulated a large stock of institutional knowledge, experience, and capacity from their many years of operations. Furthermore, aside from Hong Kong, China, it is only Singapore that has long been a major international financial hub in developing Asia. Therefore, unlike the rest of the region, the infrastructure, human capital, and regulatory framework of a sophisticated and well-functioning financial system are all already well in place in Singapore. SWFs like CIC or KIC do not yet have the capacity to invest competently in areas like private equity, venture capital, and real estate, let alone equity stakes in start-up companies in emerging industries such as biotechnology. The practical implication is that a gradualist approach of learning by doing is preferable to an overly ambitious leap into high-stakes investment. It is better to start from less risky asset classes and build up investment management capacity before moving on to more adventurous asset classes. In addition, in the absence of adequate institutional capacity, it makes much more sense to start out as passive portfolio investors with limited equity stakes before acquiring larger stakes and exercising influence over management.

At a more fundamental level, Temasek and GIC are both cause and consequence of Singapore's unique style of capitalism in which the government plays a leading role in producing goods and services. Although labels such as Japan Inc., Korea Inc., and Asia Inc. have been widely tossed around, it is in fact Singapore that much more closely fits the notion of the state as the entrepreneur. While it might be tempting to attribute the PRC's intense interest in Temasek and GIC to the PRC's state capitalism, the private sector already accounts for a large and growing share of output in the PRC. Moreover, the PRC's state-owned firms are nowhere near as efficient or commercially successful as their Singaporean counterparts. Indeed, inefficient and loss-making state-owned enterprises are a major drag on the PRC's economic growth and a major headache for the PRC's policymakers. The broader point here is that the two Singaporean funds are essentially vehicles for managing the wealth of a commercially active and successful government. Therefore, to the extent that Singapore's SWF model reflects its unique state-led capitalism, there are clear limits to its relevance for the other SWFs of developing Asia, in particular with respect to their willingness and ability to engage in outward FDI.

B. Financial Protectionism

In addition to lack of adequate institutional capacity, another major risk to outward FDI by developing Asia's SWFs is financial protectionism. SWFs invest abroad rather than at home so their investments necessarily affect the interests of citizens and governments of the countries in which they buy real and financial assets. As Truman (2007) pointed out, the SWFs' investments must conform to the laws and regulations of the host countries. For example, US law requires any investor that holds more than 5 percent of a publicly listed stock to reveal that position, and the US Securities and Exchange Commission is concerned about how state-owned foreign companies report their investments in US-listed stocks. Large investments by foreign SWFs may affect the stability of local financial markets, the level and volatility of asset prices, and, more generally, the economy and national welfare. For example, such investments may contribute to the formation of bubbles in the local stock or property markets. Foreign investors, whether state-owned or not, have to conform to host country laws and regulations.

However, host country governments and citizens are sometimes more wary and suspicious of state-owned investors than private sector investors.

The concerns of host countries center on the investment motives of SWFs. More specifically, there are doubts about whether the investments of SWFs are motivated by purely commercial considerations. The underlying fear is that unlike the investments of their private sector counterparts, SWFs may be partly driven by ulterior political or geopolitical motives in their investment strategy. For example, the acquisition of a foreign company with sophisticated dual-use technology that can be used for either civilian or military purposes entails both economic and military benefits for the investor. To some extent financial protectionism is directed at foreign investors in general rather than solely at government-owned foreign investors. Both developed and developing countries are highly sensitive about foreign acquisitions of domestic national champions or strategically important industries, regardless of whether the investor is private or public. Nevertheless, investments by foreign state-owned companies seem to arouse especially strong opposition in the host countries, due to concerns about noncommercial objectives. An additional reason for the hostility is that SWFs are predominantly from developing countries, often with different political systems than those of the developed countries. This explains why developed countries subject investments by foreign state-owned institutions to intense scrutiny.

While there are some legitimate grounds for fears about the noncommercial orientation of SWFs from developing Asia and other developing countries, those fears tend to be exaggerated. It should be remembered that the primary impetus behind the birth of the region's SWFs was to shift reserves from passive liquidity management to active profit-seeking investment. At a purely intuitive level, it seems strange to question the commercial orientation of developing Asia's SWFs when their very purpose is to make as much money as possible subject to acceptable risk. Furthermore, the distinction between commercial and geopolitical objectives is not always clear-cut. For example, if CIC acquires oil fields in Africa, such an acquisition may make commercial sense and, at the same time, promote the PRC's geopolitical self-interest by contributing to its energy security. A more plausible ground for host country concern about SWFs is that they enjoy commercial advantages vis-à-vis private sector financial institutions when their investments go wrong due to implicit guarantees of government bailout. Such guarantees give SWFs an unfair advantage by enabling them to bid more aggressively for foreign assets than their private sector counterparts.

In a sense, the issue of whether the financial protectionism of host countries is motivated by legitimate concerns, for example, about noncommercial objectives or unfair competitive advantages arising from government ownership, or is merely a symptom of politically driven aversion to foreign acquisition of domestic industries and firms is secondary. Financial protectionism, regardless of its underlying causes, constrains how and where developing Asia's SWFs can invest, and thus imposes a significant cost. For example, when the government of a host country prevents a foreign SWF from making a commercially profitable acquisition on national security grounds, the SWF is deprived of a profit opportunity. Furthermore, to the extent that financial protectionism is directed toward state-owned foreign firms rather than foreign firms in general, it puts SWFs at a competitive disadvantage vis-à-vis private sector financial institutions. What matters is the perception of host country governments and the public toward SWF investments rather than the actual effect of those investments. As long as there is a perception that those investments are harmful to the national interest, host countries will impose regulatory restrictions that amount to a significant additional cost from the SWF's perspective. If a large number of countries impose restrictions, the investment environment of SWFs may be severely constrained.

There are numerous real-world examples of financial protectionism against state-owned firms from developing countries. This suggests that financial protectionism poses real risks to outward FDI by SWFs. One widely publicized example is the unsuccessful $18.4 billion bid in 2005 by China National Offshore Oil Corporation (CNOOC) to acquire Unocal Corporation, a US oil producer and the world's ninth largest oil company. CNOOC met strong opposition from the US Congress, which expressed reservations that CNOOC was a foreign company owned by the PRC government and had the unfair advantage of financial support from the PRC government. Some US lawmakers expressed fears that a takeover of Unocal by CNOOC could threaten both national security and economic interests. Legislation was introduced in Congress to discourage CNOOC's bid. Although CNOOC initially offered a higher bid price than Chevron, which was also interested in acquiring Unocal, CNOOC was forced to withdraw its offer due to political opposition (Hufbauer, Wong, and Sheth 2006). More recently, in June 2009, Rio Tinto, which is one of the world's largest mining companies and is based in Australia and the UK, scrapped an agreement it had forged with the Aluminum Corporation of China (CHINALCO). Under that agreement, CHINALCO would have invested $19.5 billion in Rio Tinto, which would have doubled CHINALCO's stake in Rio to 18 percent and given it two seats on the board. The regulatory authorities in Australia had expressed serious misgivings about growing ownership by the PRC in one of Australia's largest companies.

Financial protectionism is not restricted to developed countries, and not only directed toward firms from the PRC. A prominent example of developing country economic nationalism hindering FDI by state-owned firms is Temasek's purchase of large stakes in Thailand's Shin Corporation from the family of Prime Minister Thaksin Shinawatra in 2006. The sale drew controversy on the grounds that Thaksin sold a major company with sizeable interests in telecommunications, satellites, media, and aviation to a foreign entity and, thus, was perceived as putting national security at risk. The controversy, which was partly motivated by the fact that the acquirer was a state-owned company from a country long identified with state capitalism, added fire to the political turmoil arising from anti-Thaksin sentiment and eventually led to the ouster of the Thaksin government. Another well-known example of politically motivated financial protectionism relates to the failure of Dubai Ports World, a state-owned company based in the United Arab Emirates, to acquire Peninsular and Oriental Steam Navigation Co., a British company managing several port facilities around the world, including six major US ports. The purchase was met with fierce resistance from US legislators on national security grounds. The huge political uproar eventually forced Dubai Ports to sell the US port facilities it acquired through Peninsular and Oriental Steam Navigation Co. to a US company.

C. Impact of Global Financial Crisis and Santiago Principles

Prior to the global financial crisis, which was rooted in the US subprime mortgage crisis and intensified after the bankruptcy of Lehman Brothers in September 2008, SWFs were viewed as one of the biggest threats to global financial stability. The sheer size of the SWFs, which now control as much as $2.5 trillion in assets, will clearly have repercussions for global financial markets in terms of relative asset prices, for example, bonds versus equity, and emerging-market assets versus developed-country assets. Furthermore, as the International Monetary Fund (IMF 2007) pointed out, their mixture of size and opacity raises concerns about systemic risks to global financial stability. Their size means that they have the power to move markets, and their opacity means that it will be difficult to track their investments. Furthermore, implicit government guarantees of their investments, in conjunction with their relative lack of expertise and experience, may induce SWFs to take on more risks than they can handle. In addition to their perceived threat to global financial stability, it was noted that out of legitimate concerns as well as economic nationalism, the investment activities of SWFs have been viewed with suspicion and hostility in host countries. In short, the pre-crisis investment climate was decidedly unfavorable for SWFs due to their negative perception in host countries, especially in the West.

The global financial crisis has brought about a sea change in the attitude of the US and other industrialized countries toward SWFs and their investments. The change was driven by economic necessity, in particular the acute shortage of capital afflicting financial institutions in the EU and the US as a result of the crisis. Whereas the SWFs had been viewed as big threats to global financial stability, they were now widely viewed as potential saviors of the global financial system, in particular as providers of much needed capital. In fact, developing Asia's SWFs have recently made a number of high-profile acquisitions of equity stakes in troubled Western financial institutions. These include CIC's investments of $3 billion in Blackstone and $5 billion in Morgan Stanley. CIC also entered into an agreement with US firm J.C. Flowers to start a $4 billion private equity fund that would focus on US financial assets, and committed $800 million to a global real estate fund to be managed by Morgan Stanley. KIC has invested $2 billion in convertible preferred Merrill Lynch securities and subsequently converted them into common shares. The more mature Singaporean SWFs, Temasek and GIC, have also made substantial investments in the global financial industry, including $10.3 billion in UBS, $4 billion in Standard Chartered, $2 billion in Barclays, $5.9 billion in Merrill Lynch, and $6.9 billion in Citigroup.

Although the fundamental shift in the attitude of host countries in the aftermath of the global financial crisis has created a far more favorable investment climate for SWFs, a number of factors have limited developing Asia's SWFs' willingness and ability to venture abroad. For one, they have suffered heavy financial losses on their investments in Western financial institutions, which experienced sharp declines in market value as the crisis intensified. For example, between December 2007, when CIC invested $5 billion in Merrill Lynch, and the end of May 2009, the company's share price plummeted from $50 to $30. The main reason that KIC converted its convertible preferred Merrill Lynch securities almost two years ahead of schedule was to cut the mounting losses on its investment. The more experienced Singaporean funds have not been spared financial losses arising from the global turmoil. Most strikingly, the share price of Citigroup has collapsed from $27 to less than $4 since the time of GIC's investment. The lesson for developing Asia's SWFs is a sobering one: navigating the turbulent waters of global financial markets is a difficult challenge even for sophisticated, well-established investors, let alone fledgling novices such as CIC or KIC.

In addition, the unwinding of global imbalances that underlie the global financial crisis implies that the US will no longer run large and persistent current account deficits as it did prior to the crisis. This means that developing Asia will experience a considerable deceleration in the speed and scale of its FX reserve accumulation relative to the pre-crisis period. Furthermore, governments around the region are likely to become more conservative in their reserve management as a result of the crisis. The devastation of the global financial industry has rekindled painful memories of the Asian financial crisis and strengthened the precautionary motive for holding reserves. In the context of reserve management, this favors the passive liquidity management of central banks over the active profit-seeking investment of SWFs. The slower pace of reserve accumulation and more conservative reserve management will reduce the amount of funds available for SWFs. To sum up, while the global financial crisis may have softened the attitude of host countries toward foreign investment, the heavy losses suffered by SWFs as a result of the crisis and the reduction of resources available to SWFs will constrain outward FDI by SWFs. On balance, the impact of the global crisis on outward FDI by SWFs is likely to be negative rather than positive.

A significant recent development that impinges upon FDI by SWFs was the establishment of the Generally Accepted Principles and Practices, better known as the Santiago Principles, a voluntary code of conduct for SWFs, in October 2008. The Santiago Principles were set up by the International Working Group (IWG) of Sovereign Wealth Funds, whose 23 members are primarily developing countries with SWFs, including PRC, Korea, and Singapore. The code includes 24 principles that cover the legal framework, objectives, coordination with macroeconomic policies, institutional framework, governance structure, and investment and risk management framework of SWFs. The principles were prepared over several months by IWG members with the assistance and coordination of the IMF. The principles are strictly voluntary and have no binding force but are nevertheless expected to be implemented by SWFs in all of the IWG member countries. The principles are largely a response of SWF home countries to the concerns of Western governments about the activities of SWFs and the growing specter of financial protectionism in host countries. They are intended to improve outsiders' understanding of SWFs as fundamentally commercial institutions so as to prevent protectionist measures targeting SWFs.

The Santiago Principles cover three general areas: (i) principles 1–5 cover the legal framework, objectives, and coordination with macroeconomic policies; (ii) principles 6–17 cover the institutional framework and governance structure; and (iii) principles 18–23 cover the investment and risk management framework. The last principle calls for a process of regular review of the implementation of the principles. Underlying the Santiago Principles are four guiding objectives for the conduct of SWFs: (i) to help support a stable global financial system and free flow of capital and investment; (ii) to comply with regulatory and disclosure requirements in the countries in which they invest; (iii) to invest on the basis of economic and financial risk and return-related considerations; and (iv) to erect and maintain a transparent and sound governance structure that provides for adequate operational control, risk management, and accountability.

The Santiago Principles will help to mitigate the concerns and fears of host countries about SWFs to the extent that the code explicitly formalizes and standardizes the commitment of SWFs to comply with the rules and regulations of host countries and, more generally, to refrain from engaging in activities detrimental to the interests and welfare of host countries. In this sense, the principles will lessen the pressures for financial protectionism and create a more favorable climate for outward FDI by SWFs. However, there are some doubts as to whether the Santiago Principles are necessary given that the practices they recommend are in the best interest of SWFs to implement. For example, the Santiago Principles recommend that SWFs operate on a purely commercial basis without any political or strategic objectives. This is redundant for developing Asia's SWFs, which are commercial entities with the overriding objective of earning the highest possible risk-adjusted returns.

The broader point here is that although the primary purpose of the Santiago Principles is to fend off protectionism, the profit motive suggests that SWFs are unlikely to engage in activities that should invite protectionism in the first place. The reason is that, as discussed earlier, protectionism constrains the type of investments SWFs can pursue and thus represents a substantial cost of doing business. Nevertheless, adherence to the Santiago Principles sends a signal about SWFs' commitment to address the host countries' concerns, just as membership in the World Trade Organization signals a commitment to free trade. The primary value of the Santiago Principles is not so much in their impact on actual behavior but in their role as a signal of goodwill and an absence of noncommercial ulterior motives. Given that the investments of SWFs necessarily affect the interests and welfare of both investor and host countries, what is urgently needed is a rational and sober dialogue about SWFs between investors in the two groups of countries. Such a dialogue will eventually have to take place within a multilateral framework due to the global nature of SWFs and their activities, and will be beneficial for both investor countries and host countries. Most crucially, it will help to push back the specter of financial protectionism and protect global financial integration, which ultimately benefits all countries. The Santiago Principles mark an important first step in the dialogue, but a code of conduct for host countries will also be required for a more comprehensive and balanced dialogue.

V. CONCLUDING OBSERVATIONS

While FDI inflows have made important contributions to the rapid industrialization and growth of developing Asia in the past, the region itself has now become an increasingly significant source of FDI. Part of this transformation has to do with the growing relative weight of the region in the global economy and the emergence of globally competitive companies with the willingness and capacity to venture abroad. Developing Asia is no longer merely the recipient of investments from internationally active multinationals but the home region of a rising number of companies with operations all over the world. Another major reason behind the growth of outward FDI from the region has been its transformation from a net importer of capital to a net exporter of capital since the Asian crisis of 1997–1998. Prior to that crisis, developing Asia was a capital-scarce region that relied on FDI and other external inflows to fuel its rapid growth. For the most part, the intermediation of developing Asia's surplus savings was performed by the public sector rather than the private sector. In particular, the region's central banks accumulated FX reserves on an unprecedented scale and speed following the crisis, and invested them mostly in safe and liquid but low-yield assets (i.e., traditional reserve assets) such as US government bonds. Therefore, although the region's outward FDI has grown rapidly, it remains small relative to its large and growing amounts of total capital outflows.

There is a consensus that the region now has substantially more FX reserves than all plausible estimates of what it needs for liquidity purposes. SWFs have emerged in developing Asia as a policy response to political pressures for more active management of surplus reserves, with a view toward maximizing risk-adjusted returns. Therefore, notwithstanding the concerns of host countries about noncommercial ulterior motives, SWFs are fundamentally commercial institutions created with the very purpose of making as much money as possible for their owners—the government—subject to tolerable risk. FDI is one mode of investment available for earning higher returns than can be earned from traditional reserve assets. Some older well-established SWFs, most notably Temasek but also others such as Norway's Government Pension Fund, have achieved superior investment performance partly by undertaking active hands-on investments in which they seek to exercise some control over the management of companies in which they invest. This suggests that FDI is a viable investment option for SWFs seeking more profitable uses of surplus reserves.

The analysis in this paper has shown that the potential for developing Asia's SWFs to engage in successful FDI and, more generally, pursue profit-oriented commercial investments, is quite limited. The major constraints are inadequate institutional capacity on the part of SWFs, which are a relatively new phenomenon in the region, and political sensitivity toward state-led FDI on the part of host country governments. Until the SWFs build up their institutional capacity to a level that enables them to effectively handle the substantial risks associated with foreign investment, a process that inevitably will take some time, developing Asia's SWFs are unlikely to become major sources of outward FDI. The threat of financial protectionism is an additional cause for pessimism about the prospects for outward FDI by the region's SWFs. A number of high-profile attempts by state-owned firms from developing countries to purchase foreign assets have been aborted due to politically motivated opposition from host countries. Financial protectionism has eased as a result of the global financial crisis but the crisis has also served as a sobering reminder to SWFs about the high risks involved in investing abroad. The Santiago Principles will further blunt financial protectionism by signaling the commitment of SWFs to comply with the rules and regulations of the host countries.

One additional factor that casts a cloud over the SWFs' ambition to become major sources of outward FDI is a growing backlash against FDI in both developed and developing countries. This backlash is part of financial protectionism but is targeted more specifically toward inward FDI. It is true that, in the past few decades, countries around the world have adopted a much more receptive stance toward FDI, which has come to be seen as a source of investment, know-how, technology, jobs, and growth. In particular, due to its greater stability and longer time horizon, FDI has generally been viewed much more favorably than portfolio inflows or "hot money," which has sometimes been volatile and disruptive.

However, as Sauvant (2006) pointed out, the pendulum may be swinging toward a more hostile environment for FDI, especially FDI that takes the form of cross-border M&A. Such hostility tends to be more pronounced when the cross-border M&A targets domestic firms that are regarded by the host country government and public as national champions. The underlying concern relates to national security, cultural identity, or economic development in the case of industries that are considered the "commanding heights" of an economy. This deterioration of the investment climate for M&A FDI is especially relevant for SWFs, since M&A FDI is, as noted earlier, their preferred mode of FDI.

Due to a number of factors, the potential for developing Asia's SWFs to become major conduits for the region's growing outward FDI is limited at best. This explains why outward FDI still accounts for only around 0.2 percent of all assets held by SWFs. Nevertheless, there are a number of ways in which SWFs can increase their outward FDI. In the short run, one major promising option for SWFs to become better at identifying and taking advantage of profitable FDI opportunities is to form strategic partnerships with other domestic companies from industries in which the SWF is investing. For example, an SWF may partner with a domestic clothing and textiles company to make investments in foreign cotton fields. Or, an SWF may partner with a domestic technology company to purchase a foreign technology company with access to superior technology. Such strategic partnerships are potentially win-win alliances in which the SWF can provide the capital and the partner firm can provide industry-specific knowledge and experience. Strategic partnerships that combine capital and industry-specific knowledge also increase the scope for M&A FDI by increasing the market value of the acquired foreign firm and hence the chances of successful, profitable FDI.

In the longer run, it is unclear why the public sector should be in charge of intermediating developing Asia's surplus savings. Aside from the issue of whether running large current account surpluses (i.e., surplus savings) is in the region's best interest, there is no obvious reason why the public sector should be better than the private sector at intermediating the region's capital exports. On the contrary, because the private sector tends to be better than the public sector at seeking out and realizing profit opportunities, including those in foreign countries, it is desirable to allocate a greater role to the private sector in the intermediation of the region's surplus savings. Encouraging the region's private sector to invest abroad, including undertaking FDI, will not only lighten the burden on the region's public sector to make foreign investments for which it is ill prepared, but it will reduce the amount of surplus reserves, which subtract from rather than add to national welfare. To help encourage foreign investment by the private sector, the government may provide tax breaks and other fiscal incentives. Measures to stimulate outward FDI will be an integral part of a broader effort to stimulate all types of foreign investment by domestic residents.

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