

**The Management of Capital Flows and  
Financial Vulnerability in Asia**

**YILMAZ AKYÜZ**



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# CONTENTS

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<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>2</b>	<b>RECENT CAPITAL FLOWS TO ASIAN EMERGING MARKETS</b>	<b>4</b>
<b>3</b>	<b>CREDIT, ASSET AND INVESTMENT BUBBLES</b>	<b>10</b>
<b>4</b>	<b>CURRENT ACCOUNT BALANCES, EXCHANGE RATES AND RESERVES</b>	<b>15</b>
<b>5</b>	<b>CAPITAL ACCOUNT MEASURES</b>	<b>23</b>
<b>6</b>	<b>VULNERABILITY TO SHOCKS AND CONTAGION FROM THE GLOBAL FINANCIAL CRISIS</b>	<b>27</b>
	<b>REFERENCES</b>	<b>32</b>

## NOTE

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# Chapter 1

## INTRODUCTION

IT has been more than a decade since a virulent financial crisis devastated several East and South East Asian economies with excellent track records in economic development and macroeconomic stability. The crisis was generally considered as the outcome of a combination of misguided financial and exchange rate policies with overreaction of foreign lenders and investors to temporary shortfalls in international liquidity, rather than vulnerabilities emanating from structural payments imbalances and excessive external indebtedness. There is now almost a collective determination across the region never to allow a repeat of the crisis. There is also an increased awareness that vulnerability to financial contagion and shocks depends in large part on how capital inflows are managed, since options are quite limited under conditions of sudden stops and reversals.

The recurrent currency, balance-of-payments and financial crises in emerging markets, including the 1997 Asian crisis, suggest that there are at least four areas of vulnerability associated with surges in capital flows: (i) currency and maturity mismatches in private balance sheets; (ii) credit, asset and investment bubbles; (iii) unsustainable currency appreciations and external deficits; and (iv) reliance on International Monetary Fund (IMF) help and policy advice rather than self-insurance against sudden stops and reversals of capital flows.<sup>1</sup> These lessons for crisis prevention – namely, the need

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<sup>1</sup> Not all Asian countries hit by the crisis manifested vulnerability in all these areas – see UNCTAD *TDR* (1998) and Akyüz (2000).

to prevent fragility in private balance sheets and external payments, to check financial and investment bubbles, and to build adequate self-insurance at times of surges in capital inflows – appear to be incontrovertible among the policy makers in the region, including in countries not directly hit by the 1997 crisis, but opinions and approaches differ about the ways and means of putting them into practice.

After a brief interruption, capital flows to emerging markets recovered strongly in the earlier years of this decade, growing constantly and surpassing previous peaks in recent years. Asia has been among the main recipients. These flows have been greatly influenced by the very same factors that led to a surge in speculative lending in the United States and elsewhere in the developed world – notably, ample global liquidity resulting from a policy of easy money and search for yield. With the bursting of the subprime bubble, many emerging markets now find themselves vulnerable to financial shocks and contagion in different ways and degrees.

How did Asia manage the recent surge in capital inflows and what are the financial vulnerabilities in the region? There is a widespread perception, particularly among western economists, that Asian developing countries use strict and effective measures of control over capital flows. In a few cross-country studies of capital account openness, most economies in South and South East Asia are classified as partially or largely closed. However, this is not based on robust and rigorous evidence. Indeed, while the development and industrialization experience of these countries has been extensively studied and debated, this is not the case for underlying macroeconomic and financial policies.

This paper aims at discussing the management of the recent surge in capital flows in Asia with a view to identifying financial fragilities and vulnerabilities to external financial shocks, including notably from the current turbulence triggered by the subprime crisis. Particular attention is paid to China and India since these countries together account for about four-fifths of the total output and two-thirds of the total trade of developing countries in the region. Examining the volume and composition of capital inflows and capital account regimes, the paper shows that in recent years Asian policy makers did not generally opt for tighter restrictions over capital inflows as a

means of reducing the likelihood of a repeat of the 1997 crisis. In fact Asian capital accounts are invariably more open today than they were during the 1997 crisis – with few exceptions, they are almost fully open to non-residents and have become increasingly open to residents.

Rather than applying tighter countercyclical restrictions over capital inflows, most countries in Asia have chosen to relax restrictions over resident outflows and to absorb excess supply of foreign exchange by intervention and reserve accumulation. In this way most of them have successfully avoided unsustainable currency appreciations and payments positions, and accumulated more than adequate international reserves to counter any potential current and capital account shocks without recourse to the IMF. However, they have not always been able to prevent capital inflows from generating asset, credit and investment bubbles or to improve the resilience of domestic financial markets to adverse spillovers and contagion from financial instability abroad. As discussed in the concluding chapter, these policies are now exposing them to certain risks, but not necessarily of the kind that hit the region in the 1990s.

## Chapter 2

# RECENT CAPITAL FLOWS TO ASIAN EMERGING MARKETS

FROM the early years of the decade the world economy went through a period of easy money as policy interest rates in major industrial countries, notably the United States and Japan, were brought down to historically low levels and international liquidity expanded rapidly.<sup>2</sup> These, together with stagnant equity prices in most mature markets, led to a search for yield by creditors and investors. In the United States ample liquidity and low interest rates, together with regulatory shortcomings, resulted in a rapid growth of speculative lending and a bubble in the property markets, providing a major stimulus to growth, but also sowing the seeds of current difficulties. Low interest rates in some other advanced countries, notably in Japan, encouraged cross-currency flows towards countries with higher interest rates, including in the form of highly leveraged carry trades.

These factors played a major role in the strong recovery of capital flows to emerging markets. After falling to some \$100 billion at the beginning of the millennium, private flows picked up rapidly, reaching an estimated level

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<sup>2</sup> See IMF (2007c) for the notion of global liquidity and the role of monetary policy in advanced economies and financial innovation in global liquidity expansion and risk appetite. See also BIS (2007: 8-10) for a similar discussion.

of \$620 billion in 2007 (Table 1).<sup>3</sup> This has been accompanied by a rapid narrowing of spreads on emerging-market debt. The average spread, which had reached 1400 basis points after the Russian crisis and fluctuated between 600 and 1000 basis points during the early years of the millennium, fell constantly from mid-2002 onwards, reaching 200 basis points in the first half of 2007 before starting to edge up with the deepening of the subprime crisis (World Bank 2007; IMF 2007a). That improvements in underlying economic fundamentals in the recipient countries are not always the main reason for this unprecedented decline in spreads is also recognized by the IMF:

Very recent empirical work, including some undertaken by IMF staff for this report, appears to reinforce the widespread market view that liquidity and an increase in risk appetite have become relatively more significant influences on spreads than fundamentals in the emerging market debt rally that began in late 2002. Models based purely on fundamentals have found that recent emerging market bond spreads are generally tighter than can be justified by the models (IMF 2004: 66).

Because of strong and favourable global push factors concerning liquidity and risk, recovery in capital flows has been broad-based, widely shared by all regions. But country-specific conditions (the pull factors) explain why inflows have been stronger in certain parts of the developing world

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<sup>3</sup> The underlying figures in Table 1 are on net-net basis for equity flows and gross basis for debt flows; that is, net outflows of foreign direct investment (FDI) and portfolio equity by residents are deducted from net inflows by non-residents. Thus, the current account balance plus private capital flows minus net lending by residents (and errors and omissions) would give changes in reserves – see IIF (October 2007: Box 3). The countries included are China, India, Indonesia, Malaysia, Philippines, South Korea and Thailand in Asia; Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru, Uruguay and Venezuela in Latin America; Bulgaria, Czech Republic, Hungary, Poland, Romania, Russian Federation, Slovakia, Turkey and Ukraine in Europe; and Algeria, Egypt, Morocco, South Africa and Tunisia in Africa/Middle East.

**Table 1: Private capital flows, current account balances and changes in reserves in emerging markets**  
(billions of US dollars)

	Private Capital Flows			Current Account Balance			Reserve Increases					
	2004	2005	2006	2007 <sup>e</sup>	2004	2005	2006	2007 <sup>e</sup>	2004	2005	2006	2007 <sup>e</sup>
<b>Emerging markets</b>	<b>348.8</b>	<b>519.6</b>	<b>572.8</b>	<b>620.3</b>	<b>150.2</b>	<b>274.1</b>	<b>380.2</b>	<b>419.5</b>	<b>398.2</b>	<b>442.2</b>	<b>554.0</b>	<b>756.2</b>
Asia	165.6	220.5	260.5	208.3	115.2	181.0	290.1	423.2	296.1	270.6	34.1	487.9
Latin America	41.8	70.0	52.6	106.0	22.3	41.1	51.6	26.5	22.5	29.7	50.3	95.2
Europe	131.1	204.1	234.0	276.1	5.7	35.8	23.7	-45.6	60.8	116.5	128.9	137.7
Africa/Middle East	10.4	25.0	25.8	29.8	6.9	4.0	5.5	6.4	18.7	25.5	33.7	35.3

Source: IIF (various issues)

e = estimate

than in others.<sup>4</sup> The pull factors have not always been linked to economic fundamentals such as growth and price stability, and external payments, debt or reserve positions. In fact, international financial markets have made little differentiation among countries with respect to many of these factors, focusing, instead, on opportunities for short-term capital gains and arbitrage profits.

There have been considerable amounts of footloose capital motivated by speculative gains in all parts of the developing world, although the exact form it has taken has varied among countries depending on their individual circumstances. Such flows fall basically into three categories. First, capital attracted by carry trade profits due to large interest rate differentials with industrial countries, notably Japan, of which highly leveraged hedge funds have been among the main beneficiaries.<sup>5</sup> Second, capital inflows seeking gains from prospective currency appreciations in countries with undervalued exchange rates and large current account surpluses, notably China. Third, investment in asset markets, which has been a common feature of capital flows to emerging markets in different regions.

It is notable that during 2004-07 emerging markets in Central and Eastern Europe received as much foreign private capital as those in Asia even though their total income is one-fifth of the total income of Asia, and their average growth has been much lower. In this region the combination of high interest rates with independent floating has resulted in growing current account deficits which reached, on average, 7 per cent of GDP in 2007.<sup>6</sup> High interest rates in some larger economies in Central and Eastern Europe and Latin America (e.g., Turkey and Brazil) attracted large amounts of capital

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<sup>4</sup> That the push factor is generally more important in boom-bust cycles in international capital flows is also noted by the World Bank (2003: 26): the “dynamics of net capital inflows and the changes of official reserves over the cycle do indeed indicate that the push factor is more important for middle-income countries, while the pull factor dominates in high-income countries.”

<sup>5</sup> On different forms of carry trade and interest differentials, see BIS (2007: 83-88), UNCTAD *TDR* (2007: Chap. I) and IIF (October 2007).

<sup>6</sup> For current account and growth figures in Central and Eastern Europe (excluding the Russian Federation), see IMF (2007c: Tables A4 and A12).

linked to carry trade. There have also been considerable intra-regional carry trade activities in these regions where funds borrowed in low-interest currencies have been invested in the same region in higher-interest currencies. High local interest rates have also attracted international investors to domestically issued local-currency debt, as these investors have become more willing to assume the exchange rate risk in return for much higher yields.<sup>7</sup>

In gross terms, capital inflows to Asia, as a proportion of GDP, have been close to historical highs, but in net terms they have been around the long-term average because of increased resident outflows (IMF 2007b; IIF October 2007). Since 2003, about 60 per cent of private capital inflows to the Asian countries in Table 1 have been in equity investment, compared to less than 40 per cent in other emerging markets. Of these, two-thirds have been in direct equity and one-third in portfolio equity.<sup>8</sup> Equity flows have been particularly strong in China and, more recently, India. But in the latter country much of these are in portfolio equity rather than foreign direct investment (FDI). This is also true for Malaysia where cumulative portfolio inflows during 2002-07 were nine times cumulative inflows of FDI (Khor 2008). Hedge funds from the United States and the United Kingdom have been very active in equity markets in the region, with assets managed by them being estimated to have grown sevenfold between 2001 and 2007.

Following the cutback in bank lending after the 1997 crisis, international bank inflows to Asia started to exceed repayments in the early years of the decade. The share of net international bank lending has been slightly

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<sup>7</sup> The proportion of domestic-currency sovereign debt held by non-residents in emerging markets is estimated to have reached 12 per cent – Mehl and Reynaud (2005) and De Alessi Gracio, Hoggarth and Yang (2005). The expansion appears to be particularly rapid in Latin America due to high levels of sovereign debt. Available data shows that foreign investment in local-currency government securities went from less than \$15 billion at the beginning of 2003 to \$200 billion by the end of 2006 – see Tovar and Quispe-Agnoli (2008). Moreover, some Latin American countries have been able to issue local-currency-denominated global bonds at rates below those in domestic markets because of lower jurisdiction spreads (Tovar 2005; IMF 2005).

<sup>8</sup> For further discussion of components of capital flows to Asian emerging markets, see BIS (2007), IMF (2007d and 2007e) and McCauley (2008).

over one-quarter of the total private inflows to Asia, and the remainder is other types of debt flows such as bonds and carry-trade-related inflows, including those involving arbitrage among regional currencies. Sovereign bond issues have been relatively small in Asia because of strong fiscal and public debt positions. However, there has been a visible growth in syndicated loans privately placed by corporations in several countries. In many cases bank inflows have been encouraged by prospects of gains from currency appreciations. However, private financial and non-financial corporations have also engaged in “carry-trade-style” short-term external borrowing in India, Korea and the Philippines, particularly through low-interest yen-linked loans. Highly leveraged hedge funds are also known to be very active in carry trades in Asia. A relatively high volume of carry trade appears to be a reason why the category “other investment” accounts for a high share of total capital inflows to the region. While restrictions on foreign participation in domestic bond markets have generally been maintained, in some countries such as Malaysia and Indonesia there have been marked increases in foreign holding of local-currency debt instruments. In the region as a whole, local claims of foreign banks, including local bond holdings, as a percentage of all foreign banks’ claims, more than doubled since the beginning of the decade, suggesting a growing preference for international banks to lend in local currencies at higher rates.

## Chapter 3

### **CREDIT, ASSET AND INVESTMENT BUBBLES**

THE composition of capital inflows to Asian emerging markets is generally considered to be more favourable than in other emerging markets because of a high share of equity flows. Foreign investment in equity and local-currency debt is not considered as a serious potential threat to stability because the exchange rate risk is assumed by investors. Vulnerability to a sudden stop and reversal of capital flows is often assessed on the basis of short-term external liabilities in relation to reserves. Indeed, according to the so-called Greenspan-Guidotti rule formulated after the Asian crisis, in order to avoid a liquidity crisis international reserves in emerging markets should meet short-term external liabilities, defined as debt with a remaining maturity of up to one year.<sup>9</sup>

However, what matters for vulnerability to instability in capital flows is not simply currency denomination and maturity but also liquidity of liabilities. A run by non-residents away from domestic equity and bond markets could create significant turbulence in currency and asset markets with broader macroeconomic consequences, even though declines in asset prices could mitigate the pressure on the exchange rate, and losses from asset price declines and currency collapses fall on foreign investors. This potential source of instability naturally depends on the relative importance of foreign participation in local financial markets. Extensive foreign participation not

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<sup>9</sup> For a discussion of the adequate level of reserves, see UNCTAD *TDR* (1999: Chap. V). For an attempt to empirically determine the optimum level of reserves based on welfare criteria, see Jeanne and Rancière (2006).

only increases market volatility, but also raises exposure to adverse spillovers and contagion from financial instability abroad. That such exposure has been on the rise is suggested by increased correlation between global and emerging-market equity returns since 2004.<sup>10</sup>

Recent capital inflows have resulted in a rapid increase in foreign presence in Asian equity markets. Figures for net equity inflows understate this because, as noted, there has also been a rapid increase in resident outflows. Available evidence shows that non-resident holding of Korean equities reached almost one half of market capitalization (McCauley 2008). According to a recent study on foreign net purchases and net sales of equities in Asian markets, the share of foreigner transactions in 2005 in average daily turnover was around 20 per cent in Korea, 30 per cent in Thailand and 70 per cent in Taiwan (China), while the share of foreigners in total equity investment by foreign and domestic investors was between 20 and 30 per cent in India, Taiwan (China) and Thailand, and as high as 57 per cent in Korea. There is also strong evidence that the entry and exit of foreigners to Asian equity markets are subject to a bandwagon effect – that is, foreign investors tend to move in and out of several Asian markets simultaneously – suggesting strong contagious influences across the region. Although equity inflows into this group of countries appear to have been driven not so much by gains from anticipated currency appreciations as by local market returns, they have put a strong upward pressure on exchange rates.<sup>11</sup>

A relatively large proportion of financial inflows to China appears to have been motivated by expectations of appreciation of the yuan (Setser 2008; Yu 2008). These have gone partly into equity and property markets, benefiting also from local price booms. Some of these are reported to have entered the country as investment or through trade, including over-invoicing of exports. According to some market participants, the so-called “hot money” amounted to \$5 to \$10 billion a month during 2007.

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<sup>10</sup> See BIS (2007: 51) which points out that this correlation has been higher during the most recent periods of global market volatility.

<sup>11</sup> For the evidence cited in this section, see Chai-Anant and Ho (2008). The evidence is from six emerging Asian markets – India, Indonesia, Korea, the Philippines, Taiwan (China) and Thailand.

Large capital inflows to equity markets – together with the consequent expansion of liquidity – have been both the cause and effect of sharp increases in stock prices in several Asian markets. There is in fact a strong correlation between changes in net portfolio equity flows and stock prices in Asia – much stronger than that observed in Latin America.<sup>12</sup> For the region as a whole the equity market index tripled between 2002 and mid-2007, with increases exceeding 400 per cent in China and India.<sup>13</sup> The price/earnings ratios have also risen rapidly, resulting in a sharp drop in equity costs.<sup>14</sup> That such increases more likely reflected asset-price bubbles than improvements in underlying fundamentals was actually cautioned by the Institute of International Finance (IIF March 2005: 4): “there is a risk that the pickup in flows into some emerging market assets has pushed valuations to levels that are not commensurate with underlying fundamentals.” It is notable that since then until mid-2007 the Asian markets rose by another 50 per cent. China increased the stamp duty on stock market transactions in order to restrain the bubble, only to reverse it after the recent decline due to the fall-out from the subprime crisis.

The two largest countries, China and India, which have seen the strongest surge in capital inflows and largest increases in stock prices, and, to a lesser extent, Korea, have also experienced a boom in property markets. During 2002-06, in real terms residential property prices rose by over 8 per cent per annum in China and 10 per cent in India.<sup>15</sup> In these countries the price-to-rent ratio rose by more than 20 per cent during the same period

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<sup>12</sup> See IIF (October 2007: Chart 13). IMF (2007e), however, finds that institutional investors appear to have little impact on equity prices in emerging markets, but introduce considerable volatility because of herd behaviour.

<sup>13</sup> In China the equity market is segmented between residents and non-residents in A-share and B-share markets, with the former being reserved exclusively for residents. Both residents and non-residents are allowed to use foreign exchange to invest in B shares. Large inflows of capital, together with growing current account surpluses, affect A-share equity prices mainly through liquidity expansion. In India, by contrast, the link between capital inflows and equity prices is more direct.

<sup>14</sup> Data on equity prices and price/earnings ratios are from IMF (2007e).

<sup>15</sup> For an analysis of developments in Asian housing markets, see IMF (2007b) which somewhat underplays the extent of the bubble and the risks involved, but nevertheless points out that speculative dynamics cannot be ruled out, notably in China, India and Korea.

while Korea saw an increase of more than 15 per cent. The last couple of years have also seen acceleration of property price increases in Singapore and Vietnam. While these have not been as dramatic as increases in the United States – where the price-to-rent ratio rose by 30 per cent over the same period – there are large pockets in China, India, Korea and the Philippines where increases have been comparable and even greater.<sup>16</sup> Concerned by the growing speculative spree, China has adopted a number of measures to stem increases in property prices, including higher interest rates and larger downpayments on both residential and commercial property loans (ESCAP 2007: 10).

In some cases house prices have also outstripped strong growth in incomes. Housing loans have expanded faster than other types of lending and have been a major factor in sharp increases in household indebtedness. In Korea, for instance, bank lending to households grew rapidly after 2005, and household debt has reached 140 per cent of disposable income – above the level of household indebtedness in the United States (ADB 2007). While detailed data are limited, there are indications that speculative purchases motivated by strong prices as well as foreign demand for commercial space have made an important contribution to the boom in property markets in India and China.

The recent booms in housing and equity markets in Asia are a source of concern because of their potential adverse macroeconomic consequences. There is evidence, not only from industrial countries but also from a number of Asian emerging markets, including Hong Kong (China), Indonesia, Korea, Malaysia, the Philippines, Singapore and Thailand, that such booms (defined as periods in which asset prices exceed their trend by more than 10 per cent) significantly raise the probability of output being eventually pushed below its potential level and the price level above its trend (Gochoco-Bautista 2008). This implies that monetary and capital account policies should not neglect developments in asset markets since their longer-term consequences may undermine price stability and growth.

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<sup>16</sup> Korean and the United States data from OECD (2007: annex table 60). For the others, see BIS (2007: 50) and IMF (2007b).

Rapid domestic credit expansion and low interest rates have played an important role in bubbles in equity and property markets in Asia. As in some mature economies, monetary policy has been highly expansionary and real policy interest rates have been considerably lower than those in other regions. However, the surge in capital flows is part of the reason for rapid expansion of liquidity since interventions in foreign exchange markets (discussed below) could not be fully sterilized. After 2003 private credit growth in real terms reached nearly 9 per cent per annum in China and 5 per cent in other countries.<sup>17</sup> Ample liquidity and low equity costs and loan rates together have made a strong impact on investment spending, occasionally pushing it to levels that may not be sustained over the longer term.

This is particularly the case in China and, to a lesser extent, India – investment rates in most other Asian countries did not fully regain their pre-crisis levels.<sup>18</sup> In China gross fixed capital formation has been growing 4-5 percentage points faster than real income, with the share of investment in GDP now reaching 46 per cent and exceeding the share of consumption. This increase appears to have been associated with considerable excess capacity and wastage of capital. Although 40 per cent of China's state-owned industrial enterprises are reported to have been running losses and facing declining rates of return on capital, easy access to credit has been encouraging overinvestment (BIS 2007: 56). In the event of a sharp upward adjustment in the exchange rate and a slowdown in exports, the capacity built in some industries may become unviable.<sup>19</sup> Similarly, in India growth in investment has been faster than GDP by more than 5 percentage points per annum, with the investment ratio rising to over 30 per cent of GDP from less than 24 per cent in the early years of the decade. This has been greatly facilitated by capital inflows and credit and asset bubbles, and may not be sustained with the return of normal financial conditions.

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<sup>17</sup> For credit conditions and interest rates in Asia, see BIS (2007: 39-41), Mohanty and Turner (2006: 43), and IMF (2007c: 5).

<sup>18</sup> For a discussion of why boom-bust-recovery cycles harm investment, see Akyüz (2008b).

<sup>19</sup> See Goldstein and Lardy (2004), Nagaraj (2005) and Branstetter and Lardy (2006) on excess capacity, waste and sustainability of the investment boom in China.

## Chapter 4

# **CURRENT ACCOUNT BALANCES, EXCHANGE RATES AND RESERVES**

WHILE major Asian emerging markets have not been able to prevent capital inflows from leading to asset and investment bubbles, they have been more successful in managing their impact on exchange rates and the current account. Developing countries of the region taken together had a current account surplus of more than 7 per cent of GDP in 2007, up from 1.5 per cent in 2001. This is largely due to China's strong export performance, but a number of other countries have also been enjoying surpluses, including Malaysia and, to a lesser extent, Indonesia, Thailand and the Philippines. Among the newly industrialized economies (NIEs), Singapore continues to run a massive current account surplus while in Korea the current account has been broadly in balance. Current account deficits have been increasing in India, Pakistan and Vietnam in the past few years, but only in Pakistan has it been approaching the danger zone, expected to reach some 5 per cent of GDP at the end of 2007. However, these trends reflect not so much the effects of currency appreciations as acceleration of growth from the first half of the decade and the rising cost of oil imports.

Since the Asian crisis, several countries in the region have moved towards more flexible exchange rate arrangements. But they have followed various shades of managed floating rather than leaving their currencies entirely to the whims of international capital flows. Most countries have strived to absorb excess supply of foreign exchange generated by strong capital inflows and/or current account surpluses in reserves through interventions in foreign exchange markets, rather than allowing them to push up currencies to unsustainable levels and undermine their trade performance. To keep

liquidity expansion and inflation under control, attempts have been made to sterilize such interventions, mainly by issuing government and/or central bank debt and by raising reserve requirements in the banking system.

Currency market interventions are generally believed to be ineffective in mature economies. The IMF has also drawn a similar conclusion from its research on developing countries; that is, sterilized intervention in emerging markets is likely to be ineffective when the influx of capital is persistent, and tends to be associated with higher inflation (IMF 2007c: 122-24). By contrast, recent work in the Bank for International Settlements (BIS 2005) shows that sterilized interventions in Asia have been reasonably effective in influencing the exchange rate without leading to loss of control over inflation.<sup>20</sup> There have been relatively sizeable appreciations in some countries, but these are moderate in comparison with those in other emerging markets where independent floating is practised. Moreover, appreciations in Asia have occurred under much more favourable current account positions and faster economic growth.<sup>21</sup>

The monetary impact of interventions has not been fully offset particularly in China where large trade surpluses added to the glut of foreign exchange generated by the surge in capital flows. However, despite rapid expansion of liquidity generated by interventions and loose monetary conditions, inflation has been kept under control, though only in product markets, not in asset markets.

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<sup>20</sup> See, notably, Disyatat and Galati (2005), Mihaljek (2005) and Mohanty and Turner (2006); and for a general survey of the issues involved, see Sarno and Taylor (2001).

<sup>21</sup> Most Latin American and European emerging markets have experienced sizeable appreciations in real effective exchange rates – see UNCTAD *TDR* (2007) and IIF (October 2007). According to United Nations Conference on Trade and Development (UNCTAD) figures, real effective exchange rates were relatively stable in India and China during 2002-06 while Indonesia saw an appreciation of over 20 per cent and Malaysia close to 10 per cent. Appreciations in Korea and Thailand were in the order of 10 per cent – see also BIS (2007: 41, 81). India, the Philippines and Thailand saw relatively strong appreciations in 2007.

In China, government control over the financial system has allowed it to keep the fiscal cost of intervention down.<sup>22</sup> Reserve requirements of banks were constantly raised from 7 per cent in 2003 to 17.5 per cent in 2008, and banks have come to hold over 80 per cent of central bank securities issued for that purpose, with their share in total bank assets exceeding 20 per cent (Yu 2008). In India the cash reserve ratio was also increased in several steps, from 4.75 per cent in 2003 to 7.5 per cent in 2008, but because of higher interest rates, the cost of intervention reached 2 per cent of GDP in 2007 – more than half of the central government deficits.<sup>23</sup>

As of end-2007, total reserves in developing Asia (excluding NIEs) exceeded \$2 trillion and over 80 per cent of these were generated after 2001 (Table 2).<sup>24</sup> Asian reserves now account for more than half of total reserves of the developing world. The twin surpluses that the region as a whole has been running on its balance of payments (that is, on both current and capital accounts) have been fully converted into reserves.<sup>25</sup> Of the \$1.7 trillion reserves accumulated after 2001, almost two-thirds are earned and one-third “borrowed”.<sup>26</sup> Unlike other regions, therefore, reserve increases in Asia have

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<sup>22</sup> Ignoring exchange rate changes, the fiscal (or quasi-fiscal) cost of each dollar of reserves acquired through intervention can be written as:  $i_g - i_r = (i_g - i_x) + (i_x - i_r)$ , where  $i_g$ ,  $i_r$  and  $i_x$  are the rates, in common currency, on government domestic debt, reserve holdings and external borrowing, and typically  $i_g > i_x > i_r$ . The margin between  $i_x$  and  $i_r$  is determined mainly by the credit risk and between  $i_g$  and  $i_x$  by the exchange rate risk. When non-resident claims are only in foreign currencies, the first term on the right-hand side of the equation is captured by the holders of public debt at home and the second term is the net transfer abroad – what Rodrik (2006) calls the social cost of foreign exchange reserves. For the distinction between the two types of transfers and costs, see UNCTAD *TDR* (1999: Chap. V). Mohanty and Turner (2006) provide some estimates of the fiscal cost of intervention in emerging markets.

<sup>23</sup> Fiscal cost from ESCAP (2007: 21) and central government deficits from IMF (2007d: 20).

<sup>24</sup> It should be noted that reserve figures are subject to a valuation effect which can be large because of sharp changes in cross rates among reserve currencies.

<sup>25</sup> Here capital account surplus is used in the conventional sense; that is, surplus on non-reserve financial account.

<sup>26</sup> “Borrowed” in the sense that they accompany increased claims by non-residents in one form or another, including direct and portfolio equity investment, which entail outward income transfers.

**Table 2: Current account and reserves**  
(billions of US dollars)

	Asia	China
<b>Reserves</b>		
2007	2068.0	1559.5
2001	379.5	216.3
Increase	1688.5	1343.2
<b>Current account<sup>a</sup></b>		
2002-07	1067.8	939.9
<b>Borrowed reserves<sup>b</sup></b>		
2002-07	620.7	403.3
<b>Import coverage<sup>c</sup></b>		
2001	4.9	6.6
2007	8.8	12.8

Source: IMF (2007b)

- a. Cumulative current account balance over 2002-07.
- b. Difference between increases in reserves and cumulative current account balance over 2002-07.
- c. Months of imports covered by reserves.

come mainly from current account surpluses rather than capital inflows (Table 1).<sup>27</sup> Moreover, these reserves are earned in the context of rapid growth, rather than by sacrificing growth.<sup>28</sup> However, excluding China, two-thirds of Asian reserves in recent years are also from capital inflows. In India and other Asian countries with current account deficits, reserves are one hundred per cent “borrowed”.

<sup>27</sup> In most emerging markets in Table 1 reserves are fully borrowed since the current account is broadly balanced. In some, notably in Europe, however, net capital inflows are used partly to finance current account deficits and partly to add to reserves.

<sup>28</sup> For instance, until recently Brazil also earned reserves by running a current account surplus, but this was accompanied by sluggish growth. Because of a high degree of vulnerability to deterioration in the market sentiment, monetary and fiscal policies have been kept tight, restraining growth and imports. With the recent acceleration of growth towards 6 per cent, the Brazilian current account has indeed started to run deficits.

On the Greenspan-Guidotti rule noted above, Asian reserves are excessive. They are several times the total short-term external debt of the region, which stood at less than \$300 billion at the end of 2007, and more than twice the total external debt of some \$950 billion.<sup>29</sup> They now cover close to nine months of imports, much higher than the three months of imports traditionally considered as adequate for addressing the liquidity problems arising from time lags between payments for imports and receipts from exports.

A policy of accumulating reserves at times of strong capital inflows and using them during sudden stops and reversals appears to be a sensible countercyclical response to instability in international capital flows. By intervening in the foreign exchange market and accumulating reserves, a country facing a surge in capital flows can both reduce its external vulnerability by preventing appreciations and trade deficits, and secure self-insurance against possible speculative attacks. In other words, if inflows are believed to be temporary, it would be rational to resist an inward transfer by allowing the domestic consumption and/or investment to increase and the current account to run into deficits through faster growth and appreciations.<sup>30</sup>

However, such a strategy lacks a strong rationale because it implies that a country would borrow even if the funds thus acquired are not used to finance investment and imports, but held in short-term foreign assets in order to pay back the lenders and investors when they exit. This is all the more so because reserves accumulated out of capital inflows are highly costly – that is, the return earned on reserves is less than the cost of foreign capital, including the cost of foreign borrowing and the foregone return on assets sold. In fact, it is more so for equity flows for the acquisition of ownership rights of existing assets since rates earned by transnational companies ex-

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<sup>29</sup> On external debt, see IMF (2007c). According to BIS (2007: 94), at the end of 2006 reserves in China were 13 times the short-term debt, defined as bank debt with a maturity up to and including one year plus international debt securities with a maturity of up to one year.

<sup>30</sup> See Williamson (1995) on the rationality of reserve accumulation under such conditions. Polak and Clark (2006: 555) refer to fear of floating in explaining reserve holding in China, Korea and Singapore.

ceed the cost of international borrowing by a very large margin (UNCTAD *TDR* 1999: Chap. V).

In previous decades the current account in Asia was generally in deficit so that a very large proportion of reserves held at the beginning of this decade was “borrowed” rather than earned reserves. If this is added to reserves accumulated from capital inflows since 2001, about half of the total stock of reserves in Asia now would be “borrowed” reserves. This is approximately equal to the existing stock of external debt of the region. Assuming a moderate 500-basis-point margin between the interest cost on debt and the return on reserves, this would give an annual carry cost of \$50 billion for the region as a whole.<sup>31</sup> This is how much the region as a whole could save per year by paying up its external debt by drawing on reserves.<sup>32</sup> The carry cost of reserves accumulated from debt-creating and portfolio equity inflows since the beginning of the decade alone can be estimated to be as much as half of this amount. It would be much higher if FDI inflows for acquisitions are included. Furthermore, in view of the ongoing downward pressure on the dollar, countries with a large stock of dollar reserves stand to incur considerable losses.

The high carry cost of reserves in excess of possible liquidity needs, together with the risk of exchange-rate-related losses, raise the question of alternative investments in higher-yielding foreign securities, as done by several fuel exporters and Singapore through sovereign wealth funds (SWFs). Like China, fuel exporters as a group also generate large current account surpluses, but unlike China, they run deficits in their capital accounts. About two-thirds of oil surpluses generated since 2002 have been used for reserve accumulation and one-third for investment abroad, mainly through SWFs: according to some estimates, total assets of these funds in fuel exporters

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<sup>31</sup> This figure appears quite modest if one takes the average spread over the full boom-bust cycles in capital flows to emerging markets. For instance, the average spread of emerging-market bonds exceeded 700 basis points during the 1990s and never fell below 400 basis points.

<sup>32</sup> Since “borrowed” reserves of some countries fall short of their total external debt, realization of this aggregate benefit would require lending by countries with excess reserves to those with deficits at rates earned on reserves.

exceed \$1.5 trillion (IMF 2007e: Annex 1.2; Truman 2007b). Many of these have recently been acquiring high-risk equity in western banks hit by the subprime crisis, thereby acting as a global force for stability while suffering significant losses.

SWFs in fuel exporters and Singapore are established from earned reserves and fiscal surpluses except that in the former case reserves are directly acquired by the government from oil exports while in the latter they are purchased from private exporters. These are quite distinct from SWFs that could be established with borrowed money – that is, where reserves come from capital inflows not current account surpluses, and governments acquire them by issuing domestic debt rather than generating fiscal surpluses, as has been the case in India. Investing these into foreign equity would seriously expose the economy to a deterioration in global financial conditions which could not only lower the value of investment but also raise the need for reserves by leading to sudden stops and reversals in capital flows and/or sharp increases in current account deficits. In such countries it may make better sense not to borrow them in the first place than to invest them in highly volatile assets.

In this respect, China stands in between fuel exporters and India in that its reserves are largely earned from current account surpluses but acquired by the government by issuing domestic debt. At some \$200 billion, the assets of the recently established China Investment Corporation (CIC) are only a fraction of the total reserves of the country, and only a small part of these appear to have been used for investment abroad.<sup>33</sup> There is certainly scope for considerable expansion of Chinese investment abroad, including for securing greater control over supply of natural-resource-based commodities, notably minerals. However, given the deep suspicion and misgivings about Chinese government investment in some advanced countries, a large proportion of its reserves cannot be expected to be quickly translated into in-

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<sup>33</sup> Its first batch of investment abroad in the Blackstone Group has not been very lucrative but quite controversial in China; see Bradsher (2007).

vestment in more lucrative, less risky assets in these countries.<sup>34</sup> An alternative would be to recycle them in the region for, *inter alia*, infrastructure projects in low-income countries in need of development finance. This may best be achieved through a genuinely regional development bank, established and owned by the developing countries of the region along the lines of the recent Banco del Sur in Latin America.

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<sup>34</sup> Such investment is sometimes considered as cross-border nationalization; see Weisman (2007). Several commentators including Summers (2007) and Truman (2007a) call for greater transparency and accountability – something visibly missing in the case of western institutional investors and hedge funds. Others such as Wade (2007) see SWFs as “a partial redress to the unlevel playing field built into the ‘global system’ through a panoply of international rules ... which confer structural advantages on western companies.”

## Chapter 5

# CAPITAL ACCOUNT MEASURES

MANY Asian emerging markets are incurring high reserve costs and facing macroeconomic policy dilemmas mainly because they have chosen to keep their economies open to the surge in capital inflows, rather than imposing tighter countercyclical measures of control.<sup>35</sup> Indeed, capital accounts in the region are more open today than they were during the Asian crisis.<sup>36</sup> In China, for instance, one of the countries with the tightest restrictions, calculations based on an IMF formula are said to show that 80 per cent of the capital account has been liberalized.<sup>37</sup>

In several cases the opening to inflows has been selective, such as raising the limits on the QFII (qualified foreign institutional investors) in China. Countries such as India have liberalized sectoral caps on FDI. Foreign banks have generally been allowed greater freedom to operate, with many domestic borrowers receiving funding from such banks directly from abroad or through their local offices. However, there have been some efforts to bring

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<sup>35</sup> These include direct restrictions over foreign borrowing by residents and access of non-residents to domestic securities markets, supplemented by market-based or administrative restrictions over maturity and currency mismatches in banks' balance sheets and restrictions designed to limit exchange-rate-related credit risks – for a discussion, see Akyüz (2008b).

<sup>36</sup> For recent measures in Asia, see BIS (2007), IMF (2007b and 2007e) and McCauley (2008).

<sup>37</sup> See Yu (2008). It has been argued that China's capital controls remained substantially binding during the period of a de facto dollar peg until July 2005, as suggested by sustained and significant gaps between onshore and offshore renminbi yields. It is also found that since July 2005 there has been a partial convergence between onshore and offshore yields; see Ma and McCauley (2007).

greater transparency to capital inflows. For instance, in 2007 India adopted a proposal by the Securities and Exchange Board to restrict the foreign buying of shares through offshore derivatives despite an adverse initial reaction from the stock market – a move that was designed not so much to relieve the upward pressure on the rupee as to bring greater transparency by restricting the activities of hedge funds.

Efforts have no doubt been made to curb excessive inflows in order to ease the upward pressure on their currencies. In 2006 China extended to foreign banks the restriction over borrowing abroad to fund domestic dollar assets. In 2007 its foreign exchange regulators felt obliged to take action against 10 international banks for breaching capital account regulations by “assisting speculative foreign capital to enter the country disguised as trade and investment” (Anderlini 2007). More recently in July 2008 exporters have been required to park their export revenues in temporary accounts in order to enable the officials to check and verify that invoices are backed by genuine trade transactions.

Similarly at the end of 2006 Korea raised banks’ reserve requirements from 5 per cent to 7 per cent in order to support the dollar vis-à-vis the won. Around the same time Thailand imposed a 30 per cent reserve requirement on capital inflows held less than one year, including portfolio equity flows, in order to check continued appreciation of the currency. This provoked a strong reaction from the stock market, forcing the government to exempt investment in stocks from reserve requirements. The remaining restrictions were removed in March 2008. With a continued surge in capital inflows, India reversed the liberalization of the limits on external commercial borrowing, tightening them in 2007. Again, Korea restricted external funding of domestic lending by foreign banks and reintroduced limits on lending in foreign currency to domestic firms.

However, the main response to the surge in capital inflows has been to liberalize outward investment by residents. This is partly motivated by a desire to allow national firms to expand abroad and become important players in world markets. This has particularly been the case in China and India. However, while in China assets acquired abroad are financed from trade

surpluses, in India these are funded by capital inflows, in much the same way as Korean *chaebols* did in the run-up to the 1997 crisis.<sup>38</sup> As remarked by an observer, “the global flood of money (and attendant hubris) has enabled Indian companies like Tata to buy themselves a place on the world stage rather than earning it through export success or technological advance” (Bowring 2008a).

There has also been considerable liberalization of portfolio outflows. For instance, China took a decision to permit investment by its residents in approved overseas markets and raised the limits on corporate and individual purchases of foreign currency for mitigating the pressure for appreciation through the so-called QDII (qualified domestic institutional investor) scheme. The share of portfolio investment in the total international assets of China in 2006 was three times that of FDI abroad; the former increased from under 10 per cent in 2004 to about 15 per cent in 2006 while the share of FDI fell to about 5 per cent in the latter year (Hang Seng Bank 2008).

In Malaysia where limits on foreign assets held by some institutional investors and investment trusts were increased significantly, at some RM870 billion (about \$270 billion), cumulative portfolio outflows during 2004-07 were slightly below cumulative portfolio inflows and nine times direct investment abroad. During the same period there was also a large net outflow on foreign lending and borrowing, mainly through banks. As a result, there was a net outflow of capital (excluding reserve accumulation) which absorbed as much as half of the current account surplus in 2007.<sup>39</sup>

Korea has also liberalized rules limiting individual or institutional investment abroad, and even provided incentives for residents to invest in foreign securities and real estate assets. Thailand raised the limits on and extended the duration of deposits that could be held abroad by resident corporations, removed restrictions over foreign currency accounts in local banks by residents, allowed investment by local funds abroad, and abolished the surrender requirement for Thai exporters. The Philippines allowed residents

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<sup>38</sup> For a discussion of inward and outward FDI in India, see Chandrasekhar (2008).

<sup>39</sup> For recent trends in capital flows in Malaysia, see Khor (2008).

to invest abroad without approval and raised the limits over such investment. India liberalized resident outflows, giving greater freedom for portfolio investment abroad.

Capital account opening for residents as a response to a surge in inflows is clearly an alternative to sterilized intervention and has the advantage of avoiding carry costs for reserves. But, like interventions, it does effectively nothing to prevent currency and maturity mismatches in balance sheets, or instability and vulnerability to shocks associated with greater presence of foreigners in domestic asset markets. Its rationale as a longer-term strategy for closer integration with global financial markets is highly contentious. Besides, in countries such as China where property rights are not clearly defined, liberalization of resident outflows could encourage asset stripping and money laundering (Yu 2008). As a countercyclical measure, it can be even more problematic – once introduced for cyclical reasons, it may not be easily rolled back when conditions change. Thus, unlike official reserves, these do not provide self-insurance against payments and currency instability and may even aggravate them when market sentiments change.

## Chapter 6

# VULNERABILITY TO SHOCKS AND CONTAGION FROM THE GLOBAL FINANCIAL CRISIS

THE Asian emerging markets are now much more closely integrated into the international financial system than they were in the run-up to the 1997 crisis. Foreign presence in Asian financial markets has increased not only because of historically high non-resident portfolio inflows, but also because of increased penetration of foreign-owned banks and other financial firms. More importantly, net resident outflows have reached unprecedented levels, particularly through portfolio investment rather than direct investment. It is notable that this pattern of investment and integration is quite different from that pursued by earlier successful industrializers in East Asia, including Korea and, notably, Japan, where resident portfolio investment abroad emerged at a much later stage of development, after a global expansion of highly successful indigenous firms through direct investment abroad.<sup>40</sup>

As a result of closer global financial integration, Asian emerging markets have no doubt become more susceptible to external financial influences, including shocks and contagion from the current global financial turmoil triggered by the subprime crisis. What is more, this process has resulted in greater fragility of the domestic financial system by contributing to credit, asset and investment bubbles even though payments and reserve positions

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<sup>40</sup> Japanese corporations had already established themselves as global players through direct investment abroad and sustained surpluses in manufacturing trade long before Japanese financial and savings institutions were allowed to invest freely in foreign assets as a result of financial liberalization brought about by the 1984 United States-Japan accord. Indeed, a key provision of that accord was relaxation of restrictions on the purchase of foreign bonds by Japanese residents – see Osugi (1990).

of many of these countries are strong enough to provide insurance against balance-of-payments and exchange-rate instability of the kind experienced during 1997.

The increase in the share of foreign assets in national portfolios would no doubt entail greater exposure to instability in market valuation of these assets in mature markets as well as exchange rate swings. Asian economies do not have large direct exposure to securitized assets linked to subprime lending, even though some losses have been reported in the region.<sup>41</sup> However, they appear to have invested large amounts in debt issued by the United States Government Sponsored Enterprises, including mortgage firms Fannie Mae and Freddie Mac with combined liabilities of around \$5.5 trillion. Holding by central banks outside the United States of such debt is estimated to be in the order of \$1 trillion and large amounts are also known to be held in private portfolios. China's holding of United States agency debt is estimated to be at least 10 per cent of its GDP, mostly in Fannie and Freddie assets (Pesek 2008). Had the United States government not bailed out these institutions, losses would have been severe. Moreover, should the dollar come under pressure, countries with a large stock of dollar reserves stand to incur considerable exchange rate losses.

There is considerable variation among Asian emerging markets in their vulnerability to sharp swings in the risk appetite and capital flows. Capital flows to Asian emerging markets, including bank-related flows, initially kept up after the outbreak of the subprime crisis, but with the deepening of the credit crunch there was first a moderation (BIS 2008), followed by a sharp decline. According to the latest estimates by IIF (January 2009), capital inflows to emerging markets as a whole fell to \$444 billion in 2008 after reaching some \$950 billion in 2007. The decline in Asia was more marked, from \$315 billion in 2007 to a mere \$96 billion in 2008. Direct investment

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<sup>41</sup> The Bank of China is reported to have lost some \$2 billion on its holdings of collateralized securities, including those backed by United States mortgages (Pearlstein 2008). Standard Chartered, in which Singapore's sovereign wealth fund, Temasek, owns a 19 per cent stake, is reported to have been walking away from its \$7.5 billion special investment vehicles (SIVs) sold in Asia and the Middle East (Bowring 2008b).

flows remained relatively resilient, but with the deepening of the credit crunch in the United States and Europe there was a sharp drop in commercial bank credits, from \$156 billion to an estimated \$30 billion, and this is expected to turn negative in 2009. Net portfolio equity flows to Asia, including outflows by residents, were already negative in 2007, and they are expected to have become even bigger in 2008, reaching \$55 billion.<sup>42</sup> Redemption by highly leveraged hedge funds from the United States and United Kingdom appears to be an important reason. As noted, these institutions had been very active in Asian equity markets in earlier years. They are now hard hit by the crisis, and deleveraging by them appears to be a main reason for the exit of equity portfolio investment not only from Asia but also from emerging markets as a whole.<sup>43</sup>

With rapid exit of foreign capital and global retrenchment of risk appetite, asset bubbles in Asia appear to have come to an end. Equity markets lost almost half of their values in 2008 in China and India. Booms in property markets too are now bust. In China house prices declined in December 2008 for the first time since the government started releasing the data in 2005, and urban fixed asset investment has been falling since September 2008. The government is now taking measures to revive the property market (Xinhuanet 2009a; Forbes.com 2008). In Korea the slump that started in 2008 is now threatening to set off a process of debt deflation, reminiscent of the 1997 crisis when housing prices fell by some 13 per cent (Citigroup 2009).

This cycle in Asian asset markets has many features reminiscent of those in the 1990s, but is different in an important respect. In the current cycle asset deflation is not associated with currency crises and interest rate hikes, but severe trade shocks. The combination of asset deflation with sharp

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<sup>42</sup> Net portfolio investment outflows in 2008 from emerging markets as a whole are estimated to have been \$89 billion (IIF January 2009). It appears that all of the money that came into emerging market funds in 2007 came out again in 2008 (Citigroup 2008).

<sup>43</sup> *Wall Street Journal*, 17 October 2008; see also RGE Monitor (2008). The tendency of investors to liquidate their holdings in emerging markets in order to cover mounting losses and margin calls means that, as suggested by McCauley (2008: 1), emerging markets are providing “liquidity under stressed conditions to portfolios managed in the major markets.”

drops in exports and consequent retrenchment in investment can no doubt wreak havoc in the real economy.<sup>44</sup> This explains why in Asia “the slump in industrial production has been more significant and more rapid than in 1997-98.”<sup>45</sup>

It is important to avoid destabilizing feedbacks between the real and financial sectors, particularly in China because of its wider regional ramifications. A sharp drop in growth can threaten the solvency of the banking system given the high degree of leverage of many firms, which can in turn lower growth further.<sup>46</sup> Whether or not the massive fiscal package proposed by the government would prevent such an outcome remains to be seen. In any event, the challenge faced by China is not only to overcome the deflationary impulses from the subprime crisis, but also to shift to a growth trajectory led by the expansion of domestic consumption.<sup>47</sup>

Even though the region as a whole has strong payments and reserve positions, the behaviour of capital flows, including resident outflows, is likely to continue to exert a strong influence on the space available for policy response to external shocks and hence the performance of several economies of the region. Because of the sharp slowdown in total capital flows and reversal of portfolio flows, several currencies that had faced constant upward pressure against the dollar (and the yuan) after 2003, particularly the Indian rupee, Korean won and Thai baht, have been falling sharply against both currencies since summer 2008. Given strong deflationary impulses from the crisis, this may be viewed as a welcome development, and unlike in

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<sup>44</sup> On some accounts, on its own, the bursting of asset bubbles in China would lower growth only by a couple of percentage points; see Chancellor (2008).

<sup>45</sup> IIF (January 2009: 11). According to preliminary estimates as of January 2009, some Asian countries, notably Korea and Singapore, experienced severe contraction in output during the last quarter of 2008. In China, where manufacturing output also dropped and loss of employment reached some 20 million, more recent indicators seem to be more encouraging; see Xinhuanet (2009b).

<sup>46</sup> BIS (2007: 56) notes that in China the bulk of recorded profits are earned by relatively few enterprises while the rest have high leverage so that if growth slows significantly, a substantial proportion of bank loans can become non-performing.

<sup>47</sup> On why the only viable alternative to exports is domestic consumption and why this requires faster growth in wages and higher share of wages in GDP, see Akyüz (2008a).

1997, governments now seem to be wary of throwing all their reserves into stabilizing their currencies. However, in some of these countries, notably India and Korea, reserves have been declining rapidly as a result of exit of capital and growing current account deficits.<sup>48</sup> In many respects Korea appears to be in worse shape than in 1997, experiencing sharp drops in its currency vis-à-vis the dollar and creating fears of an impending financial crisis.

Thus the lessons learned from the 1997 crisis and strong payments and reserve positions do not appear to be protecting the countries in the region against shocks and contagion from the subprime crisis. This experience shows once again that when policies falter in managing financial integration and capital flows, there is no limit to the damage that international finance can inflict on an economy.

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<sup>48</sup> For the behaviour of reserves in India and Korea during 2008, see Obstfeld, Shambaugh and Taylor (2009) and RGE Monitor (2009a and b).

## References

- ADB (Asian Development Bank) (2007). *Asian Development Outlook*. Hong Kong China.
- Akyüz, Y. (2000). "Causes and Sources of the Asian Financial Crisis." Paper presented at the Host Country Event: Symposium on Economic and Financial Recovery in Asia. UNCTAD X, Bangkok. Reprinted in TWN Global Economy Series, No. 1.
- Akyüz, Y. (2008a). "The Current Global Financial Turmoil and Asian Developing Countries." Paper prepared for the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and presented at the Ministerial segment of its 64th commission session, Bangkok, 29 April 2008. Reprinted in TWN Global Economy Series, No. 11.
- Akyüz, Y. (2008b). "Managing Financial Instability in Emerging Markets: A Keynesian Perspective." *METU Studies in Development* 2008(1).
- Anderlini, J. (2007). "China hits out over 'hot money'." *Financial Times*, 27 June.
- BIS (Bank for International Settlements) (2005). "Foreign exchange market intervention in emerging markets: motives, techniques and implications." *BIS Papers*, 24. Basle.
- BIS (2007). *Annual Report*. Basle.
- BIS (2008). *Annual Report*. Basle.
- Bowring, P. (2008a). "Asia Won't Get Away Clean." *Asia Sentinel*, 25 January.
- Bowring, P. (2008b). "StanChart Leaves Investors Out in the Cold." *Asia Sentinel*, 12 February.
- Bradsher, K. (2007). "Feeling the Heat, Not Breathing Fire." *New York Times*, 3 August.
- Branstetter, L. and N. Lardy (2006). "China's Embrace of Globalization." NBER Working Paper 12373.
- Chai-Anant, C. and C. Ho (2008). "Understanding Asian Equity Flows, Market Returns and Exchange Rates." BIS Working Paper 245.
- Chancellor, E. (2008). "Bursting Chinese Bubble Could Hurt." *Independent Investor*, 18 January.
- Chandrasekhar, C.P. (2008). "India and the World Economy." Available at [www.networkideas.org](http://www.networkideas.org).
- Citigroup (2008). Equity Strategy. EM Fund Flows: How Much Foreign Money has Left EM? 3 December, [www.citigroup.com](http://www.citigroup.com).
- Citigroup (2009). The Asia Investigator. Korea: Asset Deflation Impact on Construction and Banking. 19 January, [www.citigroup.com](http://www.citigroup.com).
- De Alessi Gracio, C., G. Hoggarth and J. Yang (2005). "Capital Flows to Emerging Markets: Recent Trends and Potential Financial Stability Implications." *Bank of England Financial Stability Review*, December: 94-102.
- Disyatat, P. and G. Galati (2005). "The effectiveness of foreign exchange intervention in emerging market countries." *BIS Papers*, 24, May: 97-113.

- ESCAP (Economic and Social Commission for Asia and the Pacific) (2007). *Key Economic Developments in the Asia-Pacific Region 2008*. Bangkok: United Nations.
- Forbes.com (2008). "China Seeks to Revive Property Market." 30 December, [www.forbes.com](http://www.forbes.com).
- Gochoco-Bautista, M.S. (2008). "Asset Prices and Monetary Policy: Booms and Fat Tails in East Asia." BIS Working Paper 243.
- Goldstein, M. and N.R. Lardy (2004). "What Kind of Landing for the Chinese Economy?" Policy Brief 04-7. Institute for International Economics. Washington, DC.
- Hang Seng Bank (2008). "Mainland China's Overseas Investment Escalating." *Economic Focus*, 5 February.
- IIF (Institute of International Finance) (various issues). *Capital Flows to Emerging Markets*. Available at [www.iif.com](http://www.iif.com).
- IMF (International Monetary Fund) (2004). *Global Financial Stability Report*. April. Washington, DC.
- IMF (2005). *Global Financial Stability Report*. April. Washington, DC.
- IMF (2007a). *World Economic Outlook*. April. Washington, DC.
- IMF (2007b). *Regional Economic Outlook. Asia and Pacific*. April. Washington, DC.
- IMF (2007c). *World Economic Outlook*. October. Washington, DC.
- IMF (2007d). *Regional Economic Outlook. Asia and Pacific*. October. Washington, DC.
- IMF (2007e). *Global Financial Stability Report*. October. Washington, DC.
- Jeanne, O. and R. Rancière (2006). "The Optimal Level of International Reserves for Emerging Market Countries: Formulas and Applications." IMF Working Paper 06/229.
- Khor, M. (2008). "Financial Policy and the Management of Capital Flows: The Case of Malaysia." Paper presented to the TWN-CAP workshop on "The global financial turmoil, capital flows and policy responses." Penang, 26-28 August.
- Ma, G. and R.N. McCauley (2007). "Do China's capital controls still bind? Implications for monetary autonomy and capital liberalisation." BIS Working Paper 233.
- McCauley, R. (2008). "Managing Recent Hot Money Flows in Asia." ADBI Discussion Paper 99. Tokyo.
- Mehl, A. and J. Reynaud (2005). "The Determinants of 'Domestic' Original Sin in Emerging Market Economies." Working Paper 560. European Central Bank.
- Mihaljek, D. (2005). "Survey of central bank views on effectiveness of intervention." *BIS Papers*, 24, May: 82-96.
- Mohanty, M.S. and P. Turner (2006). "Foreign exchange reserve accumulation in emerging markets: what are the domestic implications?" *BIS Quarterly Review*, September: 39-52.
- Nagaraj, R. (2005). "Industrial Growth in China and India: A Preliminary Comparison." *Economic and Political Weekly*, 21 May.

- Obstfeld, M., J.C. Shambaugh and A.M. Taylor (2009). "Financial Instability, Reserves, and Central Bank Swap Lines in the Panic of 2008." Paper presented at the ASSA Meetings, San Francisco.
- OECD (Organization for Economic Cooperation and Development) (2007). *Economic Outlook* 82. Paris.
- Osugi, K. (1990). "Japan's Experience of Financial Deregulation since 1984 in an International Perspective." BIS Economic Paper No. 26. January.
- Pearlstein, S. (2008). "More Room to Fall." *Washington Post*, 22 January.
- Pesek, W. (2008). "Asia is About to Give US a Kick in the Fannie." Bloomberg.com, 3 September.
- Polak, J.J. and P.B. Clark (2006). "Reducing the Costs of Holding Reserves. A New Perspective on Special Drawing Rights." In I. Kaul and P. Conceição (eds.), *The New Public Finance: Responding to Global Challenges*. Oxford University Press.
- RGE Monitor (2008). "Hedge Funds in Asia: More Redemptions?" 8 December, www.rgemonitor.com.
- RGE Monitor (2009a). "Reserve Increase: Is Korea Pulling Back from the Brink of Currency Crisis?" 23 January, www.rgemonitor.com.
- RGE Monitor (2009b). "India's Declining Forex Reserves: Capital Outflows and External Deficits Posing Risks?" 6 February, www.rgemonitor.com.
- Rodrik, D. (2006). "The Social Cost of Foreign Exchange Reserves." NBER Working Paper 11952.
- Sarno, L. and M.P. Taylor (2001). "Official Intervention in the Foreign Exchange Market: Is It Effective and, If So, How Does It Work?" *Journal of Economic Literature*, 39(3): 839-868.
- Setser, B. (2008). "The debate over the pace of hot money flows into China." Available at <http://rs.rgemonitor.com/blog/setser>. 20 February.
- Summers, L.H. (2007). "Funds that shake capitalistic logic." *Financial Times*, 29 July.
- Tovar, C.E. (2005). "International Government Debt Denominated in Local Currency: Recent Developments in Latin America." *BIS Quarterly Review*, December: 109-118.
- Tovar, C.E. and M. Quispe-Agnoli (2008). "New financing trends in Latin America." *BIS Papers*, 36.
- Truman, E.M. (2007a). "Sovereign Wealth Funds: The Need for Greater Transparency and Accountability." Peterson Institute of International Economics. Washington, DC.
- Truman, E.M. (2007b). "The Management of China's International Reserves: China and a SWF Scoreboard." Peterson Institute of International Economics. Washington, DC.
- UNCTAD *TDR* (various issues). *Trade and Development Report*. Geneva: United Nations.
- Wade, R.H. (2007). "Sovereign funds a useful weapon for poorer nations." Letter to the Editor. *Financial Times*, 10 August.

- Weisman, S. (2007). "US fears overseas funds could 'buy up America'." *International Herald Tribune*, 21 August.
- Williamson, J. (1995). "The Management of Capital Flows." *Pensamiento Iberoamericano*, January-June.
- World Bank (2003). *Global Economic Prospects*. Washington, DC.
- World Bank (2007). *Global Development Finance*. Washington, DC.
- Xinhuanet (2009a). "Chinese housing prices decline for the first time since 2005." 10 January, news.xinhuanet.com/english.
- Xinhuanet (2009b). "Chinese policymakers need caution to counter financial crisis." 6 February, news.xinhuanet.com/english.
- Yu, Y.D. (2008). "Managing Capital Flows: The Case of the People's Republic of China." ADBI Discussion Paper 96. Tokyo.



## THE MANAGEMENT OF CAPITAL FLOWS AND FINANCIAL VULNERABILITY IN ASIA

After the severe financial crisis of 1997, capital flows to emerging markets in Asia recovered strongly in the early years of this decade, propelled by conditions of ample global liquidity. This paper examines how these economies have responded to the capital surge and whether they have become more susceptible to financial shocks as a result.

Asian capital account regimes, it is shown, are generally more open today than they were in 1997. Countries in the region have not tightened restrictions on capital inflows but chose instead to deal with the influx of funds by accumulating vast stocks of foreign exchange reserves and relaxing resident outflows. While this approach has enabled them to avoid unsustainable currency appreciations and external deficits, it has not prevented rapid credit expansion, build-up of asset and investment bubbles, and currency and maturity mismatches in private sector balance sheets which now leave them highly vulnerable to shocks and contagion from the current global financial turmoil triggered by the subprime crisis.

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