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Research Report

Capital flows to developing countries in a historical perspective: Will the current boom end with a bust?

Research Paper, No. 37

Provided in Cooperation with:

South Centre, Geneva

Suggested Citation: Akyüz, Yılmaz (2011) : Capital flows to developing countries in a historical perspective: Will the current boom end with a bust?, Research Paper, No. 37, South Centre, Geneva

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**CAPITAL FLOWS TO DEVELOPING
COUNTRIES IN A HISTORICAL PERSPECTIVE:
WILL THE CURRENT BOOM
END WITH A BUST?**

Yılmaz Akyüz



RESEARCH PAPERS

37

CAPITAL FLOWS TO DEVELOPING COUNTRIES IN A HISTORICAL PERSPECTIVE: WILL THE CURRENT BOOM END WITH A BUST?

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MARCH 2011

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A. INTRODUCTION

An unusual trait of the global financial crisis is that for developing and emerging economies (DEEs) the crisis does not appear to be about finance. Indeed, while many advanced economies (AEs) continue to encounter debt deflation, financial stringency and risks of sovereign and private insolvency, the financial problem for most DEEs is asset and credit bubbles and upward pressure on their currencies. Except for a brief interruption in late 2008 and early 2009, DEEs have continued to receive large inflows of capital in large part because major AEs have responded to the crisis caused by excessive liquidity and debt by creating still larger amounts of liquidity to bail out troubled financial institutions and to lift asset prices and lower interest rates in order to stimulate private spending and promote exports. This is yet to be translated into significant increases in credits to firms and consumers in AEs, but it has given rise to a search for yield in DEEs with considerable higher interest rates and better growth prospects. The combination of low interest rates and monetary expansion in AEs, rapid growth in DEEs, notably in China as the largest commodity importer in the world, and renewed speculation in commodity futures has also given rise to a new boom in commodity prices.

The surge in capital inflows has met with a proliferation of regulation and controls in DEEs. Such a widespread resort to control is unprecedented and would have, indeed, been unthinkable only a decade ago when several DEEs were relying on capital inflows of all kinds to bring inflation under control and/or to sustain growth.

What has changed? There can be little doubt that DEEs now enjoy much more comfortable balance-of-payments positions than a decade ago. However, even some countries with current account deficits are now unwilling to adopt a hands-off approach to capital inflows. This is because capital funded with cheap money in AEs is coming to DEEs not so much to create productive assets as to extract quick windfalls, buy into existing companies and take control over natural resources. Moreover, experience shows that such flows are reversible, particularly when they are driven by push factors emanating from macroeconomic policies and conditions in major AEs. Short-term benefits yielded by them can be more than offset by costs incurred as a result of financial turmoil and economic contraction that may be caused by their rapid exit. This is also the main reason why the IMF has had to recognize willy-nilly that capital controls are legitimate tools of policy (Akyüz 2010c).

Until recently, post-war history has witnessed three generalized boom-bust cycles in private capital flows to DEEs with severe setbacks to development. The first cycle started in the late 1970s and ended with a debt crisis in Latin America in the early 1980s. The second boom started in the early 1990s and was followed by a series of balance-of-payments and debt crises in East Asia, Latin America and elsewhere. The third cycle started in the early years of the new millennium and ended in the second half of 2008 with the subprime crisis. This was soon followed by a new boom, the fourth one in the post-war era, which started in the first half of 2009 and is still continuing with full force as of early 2011.

A common feature of these cycles is that they all started under conditions of rapid expansion of liquidity and low interest rates in major reserve-issuing countries, notably the US. However, the booms ended somewhat differently in different episodes. The first boom was brought to an end when monetary policy in the US made a sharp turn and became highly contractionary, producing a hike in interest rates and a recession in the early 1980s. The second boom ended with a sudden shift in the willingness of international lenders to maintain exposure in East Asia. Deteriorations in external positions of recipient countries resulting from the impact of capital inflows themselves, loss of competitiveness due to external shocks and tightened global financial conditions all played a part in this rapid turnaround. The third bust came again as a result of external shocks, with the deepening of the subprime crisis, notably the collapse of Lehman Brothers, which led to extreme risk aversion and flight to safety.

The current boom in capital inflows has been creating or adding to macroeconomic imbalances and financial fragility in several recipient countries in large part because they have been shy in applying breaks on them. Deficit DEEs such as Brazil, India, South Africa and Turkey are now experiencing currency appreciations even faster than surplus economies and relying on capital flows to finance growing current account deficits. On the other hand, many of those that have been successful in maintaining strong payments positions are facing domestic credit and asset bubbles. Both sets of countries are now exposed to the risk of instability to a greater extent than was seen during the subprime debacle.

When and how the current boom may end remains highly uncertain. It is almost impossible to predict the timing of stops and reversals and the events that can trigger them even when the conditions driving the surge in capital flows can be diagnosed to be unsustainable with a reasonable degree of confidence. There can be little doubt that the conditions that drive the current surge in capital flows, notably the historically low interest rates in AEs, cannot be sustained indefinitely even though they may continue in the near future. These flows can eventually come to halt either as a result of the exit of the US from the policy of easy money, or an event that could lead to extreme risk aversion in financial markets and flight to safety, including a balance-of-payments or a financial crisis in a major emerging economy, or increased inflationary pressures from commodity markets.

The US is now under deflation-like conditions and the Fed is aiming at creating inflation in markets for goods and assets through aggressive monetary easing. But its policies are adding more to the boom in international commodity markets and asset prices and credit expansion in DEEs. If commodity prices continue to rise as a result of strong growth in China, low interest rates and rapid expansion of liquidity in the US, growing speculation in commodity futures and political unrest in the Middle East and North Africa, the Fed may end up facing inflation, but not of the kind it wants. In such a case, the boom in capital flows and commodity markets may end in the same way as the first post-war boom ended in the early 1980s – that is, by a rapid tightening of monetary policy in the US even before the economy fully recovers from the subprime crisis.

According to another scenario, the boom in commodity prices and capital flows may be ended by a growth slowdown in China. As a result of the combined impact of a massive stimulus program in infrastructure investment financed by cheap credits and rapidly increased capital inflows, the Chinese economy is now overheating, with prices rising rapidly in both product and asset markets. Monetary tightening designed to cool the economy could slow down growth considerably, particularly if it pricks the credit and investment bubbles in

the property market and reduces the demand for commodities significantly. This, together with the oversupply built during the boom and the exit of large sums of money from commodity futures, could lead to a sharp downturn in commodity prices, thereby making investments in commodity-rich economies unviable and loans non-performing, and creating extreme risk aversion and flight to safety.

Regardless of how the current surge in capital flows may end, the most likely outcome is that it would coincide with a reversal of the upswing in commodity prices. The most vulnerable DEEs to such an outcome are those which have been enjoying the dual benefits of global liquidity expansion – that is, the boom in commodity prices and capital flows. Most of these are in Latin America and Africa, and some of them have been running growing current account deficits despite the commodity bonanza. Interestingly, the first country that fell into crisis in the early 1980s, Mexico, had also enjoyed the twin booms in the preceding period – the hike in oil prices and massive expansion in international bank lending.

This paper examines the causes, nature and effects of the current boom in capital flows with a historical perspective, and possible consequences of its reversal. Discussions will focus on private capital flows to DEEs, including both the developing countries (DCs) as traditionally defined and the emerging economies of Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS) which are now generally considered in the same class of investment risk as DCs. However, for historical comparison data will also be presented for DCs alone.² A distinction will be made between capital inflows by non-residents and capital outflows by residents. *Capital inflows* refer to the acquisition of domestic assets by private non-residents while sale of assets are defined as negative inflows. *Capital outflows* refer to the acquisition of foreign assets by private residents, including foreign companies and individuals that have established residence in DEEs, and sales are defined as negative outflows. *Net private capital flows* is the difference between net capital inflows and net capital outflows.³

The first two cycles are briefly discussed in the following section. Section C examines private capital flows to DEEs in the new millennium, including the factors driving the pre-Lehman surge in inflows, their brief reversal and the reasons for their quick recovery. Section D shows that the factors that have given rise to swings in capital flows have also contributed significantly to gyrations in commodity prices since the early years of the 2000s.

² Many of the emerging economies of CEE and the CIS did not exist as independent states before the 1990s. Here DEEs correspond to what the IMF WEO (October 2010) calls “Emerging and Developing Countries” plus the Newly Industrialized Economies (NIEs), Hong Kong (China), Korea, Singapore and Taiwan Province of China. Until October 2009 the IMF’s *World Economic Outlook* included NIEs among “Emerging and Developing Countries”, but they are now treated as advanced economies.

³ This study uses data both from the IMF and the IIF (Institute of International Finance). These differ in country coverage, methodology and classification of capital flows. The IMF data include all DEEs as defined above whereas IIF data include the 30 most important emerging economies. In terms of coverage of items, IMF data are also more comprehensive. IMF data are organized around three categories; direct, portfolio and other investments. The IIF distinguishes between equity and debt for both inflows and outflows. For inflows a further distinction is made between portfolio and direct equity and between commercial bank lending and non-bank lending. Historical comparisons here rely on the IMF data whereas both data sets will be used for the more recent period.

This is followed by an examination of the nature, composition and destination of recent capital flows in comparison with previous cycles and their implications for the exposure of DEEs to the risk of instability and crises. Section F examines the impact of capital flows on exchange rates, current accounts and asset markets of DEEs in recent years. Section G discusses the possible developments that can end the current boom and the exposure of different categories of DEEs to a sudden stop and reversal. After reviewing briefly the policy response of DEEs to the surge in capital flows, the paper concludes that they need stronger, more comprehensive and permanent measures of control in order to contain the build-up of fragility and imbalances that could eventually cost them dearly if the boom ends with a bust.

B. PREVIOUS POST-WAR BOOM-BUST CYCLES

Until the second half of the 1970s private capital inflows to DCs consisted primarily of foreign direct investment (FDI) and the main recipients were Latin American countries.⁴ They were either tariff-jumping investment aiming at access to heavily protected markets of DCs or investment for the exploitation of natural resources for export to AEs. Portfolio inflows and private borrowing from international financial markets were almost nonexistent and sovereign borrowing was limited. Total private inflows to DCs were not only small but also relatively stable.

This picture changed in the 1970s with the first post-war boom in capital inflows to DCs (Chart 1). Much of this was in international commercial lending. FDI inflows remained relatively small and there was hardly any portfolio investment. The lending was driven primarily by a rapid expansion of international liquidity associated with oil surpluses and growing US external deficits and facilitated by financial deregulation in AEs and rapid growth of Eurodollar markets. Excess liquidity was recycled in the form of syndicated bank credits at variable interest rates and much of these were denominated in dollars. Banks and non-bank private institutions and public agencies were the principal borrowers. Borrowing from private markets was found more attractive by DCs than loans from multilateral financial institutions because they did not come with policy conditionalities. Moreover, with booming commodity prices, real interest rates on these loans were often negative. Latin America was the main recipient – East Asian DCs were involved to a lesser extent with the notable exception of Korea. Foreign borrowing was encouraged by the Bretton Woods Institutions (BWIs) and the US for fear that oil price shocks could lead to a collapse of global demand and contraction of world output.

This boom ended when the Fed shifted to monetary tightening in order to bring inflation under control. Hikes in policy interest rates in the early 1980s immediately increased the burden of external debt of DCs as rates on outstanding loans were swiftly adjusted. At the same time commodity prices and export earnings faltered with the US recession triggered by contractionary monetary policy. The combination of increased debt burden and reduced capacity to service it resulted in arrears and a sharp cutback in bank lending, forcing many debtor countries to generate trade surpluses and make net transfers abroad through cuts in investment, imports and growth. The result was a debt crisis and a lost decade for many DCs, notably in Latin America.

The second boom came after almost 10 years of interruption of access of most countries in the developing world to international financial markets (Charts 1 and 2). Once again it was associated with rapid expansion of liquidity and large cuts in interest rates in the US and Japan. The US had entered the 1990s with a recession which had been deepened by a banking and real estate crisis (the so-called Savings and Loans crisis) in the previous decade. The response was a sharp reduction in interest rates which allowed domestic debtors to refinance debt at substantially lower rates and banks to build up capital by arbitraging

⁴ For a further discussion of previous post-war cycles in capital flows to DEEs, see UNCTAD TDR (2003) on which this section draws.

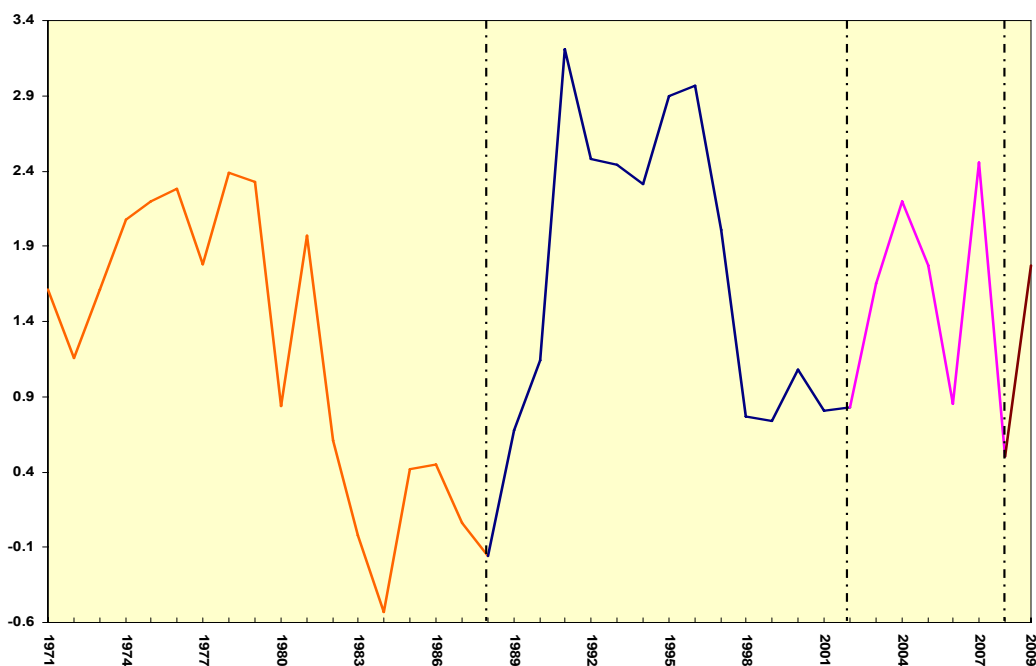
Chart 1.a: Real net private capital flows to DCs, 1971-2009

(Billions of dollars)



Chart 1.b: Net private capital flows to DCs, 1971-2009

(Per cent of GDP)



Source: IMF, WEO, 2010 database, IFS; UNCTAD, Trade and Development Report 2003.

Note: Real flows are nominal flows adjusted for changes in the United States GDP deflator.

between the Fed and the Treasury and riding the yield curve. Japan also engineered a massive liquidity expansion in response to a recession brought about by the collapse of stock and property market bubbles in the late 1980s. The surge in capital inflows was also greatly encouraged by the success of the Brady Plan for sovereign debt restructuring in Latin America and rapid liberalisation in many DEEs. This time Latin America, East Asia and CEEs all received large amounts of foreign capital

During this second post-war boom, net private capital flows to DEEs were determined mainly by inflows – there were effectively no outflows until the second half of the decade (Chart 3). A higher proportion of inflows were in direct investment, notably due to the acquisition of existing firms, and portfolio equity than in the first boom of the 1970s. These were often attracted by privatization programmes and prospects of quick capital gains in stock markets rapidly opened up to foreigners and sharply lifted by increased confidence resulting from neo-liberal policies, particularly in Latin America and CEE.

Despite a crisis in Mexico in 1994 brought about by an unexpected increase in the US interest rates and political uncertainty, the generalized boom in capital inflows continued, but shifted to East Asia. Net private capital flows peaked in 1995 before ending with the Thai crisis in July 1997 which spread to several countries in the region. They plummeted as a result of a cut-back in international bank lending and a sharp drop in portfolio inflows. The East Asian crisis was followed by a series of crises in several other emerging economies including Brazil and Russia in 1998, Turkey in 2000-01 and Argentina in 2001-02.

While the nature, composition and destination of capital flows varied between these two post-war cycles, there were also important similarities. In both episodes booms were associated with a rapid expansion of liquidity and low nominal and real dollar interest rates. Again both booms ended under tightened financial conditions in the US, including higher interest rates and stronger dollar. In the first cycle the US Treasury Bill rate more than tripled and the dollar started to appreciate rapidly in the early 1980s. In the second cycle US interest rates during 1997-98 were around 200 basis points higher than their levels at the beginning of the surge in capital inflows. Similarly, the nominal effective exchange rate of the dollar appreciated by more than 20 per cent between 1992-93 and 1997-98.

In both episodes, rapid shifts in market assessments of borrowers' risk-return profiles and loss of appetite for risk played a key role in the reversal of capital flows. Deteriorations in macroeconomic and external positions of recipient countries no doubt influenced the rapid turnarounds in the willingness of international lenders and investors to maintain exposure. In the first cycle, increased payments difficulties were largely the outcome of external shocks caused by a sudden shift in US monetary policy. In the second cycle reversals of capital flows were often associated with a deterioration of the external positions of the recipient countries, but in most cases this resulted mainly from the effects of capital flows themselves. And East Asian countries faced rapid outflows despite strong macroeconomic fundamentals and fiscal discipline.⁵

⁵ In East Asia, deteriorations in current accounts were partly due to external factors affecting competitiveness and exports, such as the entry of low-cost producers and terms-of-trade losses. For the East Asian crisis, see UNCTAD TDR (1998) and for a comparative analysis of the East Asian, Russian and Brazilian crises, see UNCTAD TDR (1999).

C. CAPITAL FLOWS IN THE 2000S

1. The third post-war boom

The third boom in private capital inflows started in the early years of the new millennium. Again it was triggered by exceptionally low interest rates and rapid expansion of liquidity in major AEs – factors that subsequently led to the most severe post-war global financial crisis and economic contraction. The US Fed responded to the bursting of the dot-com bubble and the sharp fall in equity markets by bringing policy rates to historical lows for fear of asset deflation and recession. The policy of easy money and low interest rates was also mirrored in several other AEs. Interest rates in Japan were brought down to almost zero as a result of efforts to break out of deflation. Even the otherwise conservative European Central Bank joined in and brought interest rates to unusually low levels.

The surge in private capital inflows was also helped by the willingness of surplus DEEs to invest in official reserves, mainly the US Treasuries. DEEs as a group started running growing current account surpluses thanks to the strong export performances of China and a few smaller East Asian economies and oil surpluses of Fuel Exporters (FEs). China has had twin surpluses in its current and capital accounts since the beginning of the decade, investing both of them fully into reserves, mostly in dollars.⁶ About two-thirds of oil surpluses of FEs earned after 2002 went into reserve accumulation and the rest was used for FDI and portfolio investment, rather than being recycled through international banks as in the 1970s. Large acquisitions of US Treasuries by China and FEs helped to keep long-term rates relatively low even as the US Fed started to raise short-term rates.⁷ Thus, while growing US external deficits were being financed “officially” there was plenty of highly-leveraged private money searching for yield in DEEs. A mutually reinforcing process emerged between private flows to DEEs and official flows to the US – the former were translated into reserves in DEEs and constituted an important part of official flows to the US which, in turn, supported lower rates there and private flows to DEEs.

Both net inflows and net flows to DEEs peaked in 2007 before the outbreak of the subprime debacle (Table 1, Charts 2 and 3).⁸ There was a moderate decline in net flows in 2006 compared to the previous year, due to a global sell-off in May-June, triggered by concerns over accelerating inflation and prospects of rising interest rates in AEs (Upper and

⁶ Here capital account surplus is used in the conventional sense; that is, surplus on non-reserve financial account.

⁷ Bernanke (2011) argues that not only *net* capital inflows from surplus DEEs but also *gross* capital inflows from Europe, leveraged by issuing sovereign debt and bank deposits, raised net demands for safe US assets and brought down long-term rates.

⁸ Capital flows in Chart 3 also include official flows. These are included mainly among “other investment.” Net official flows to DEEs were negative until 2009.

Chart 2.a: Real net private capital flows to DEEs, 1980-2009

(Billions of dollars)

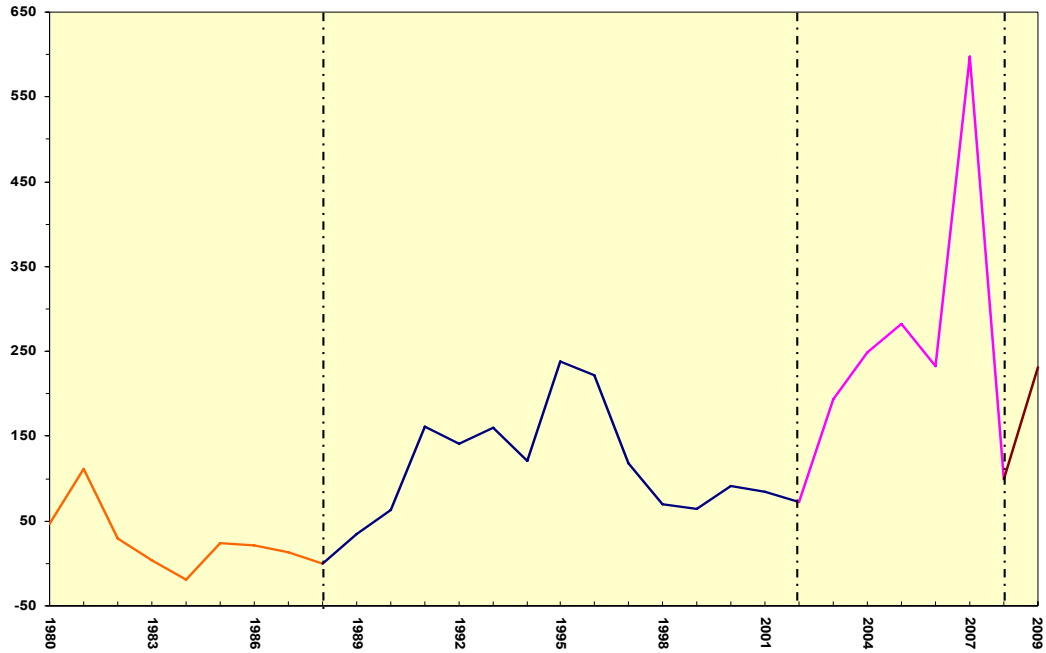
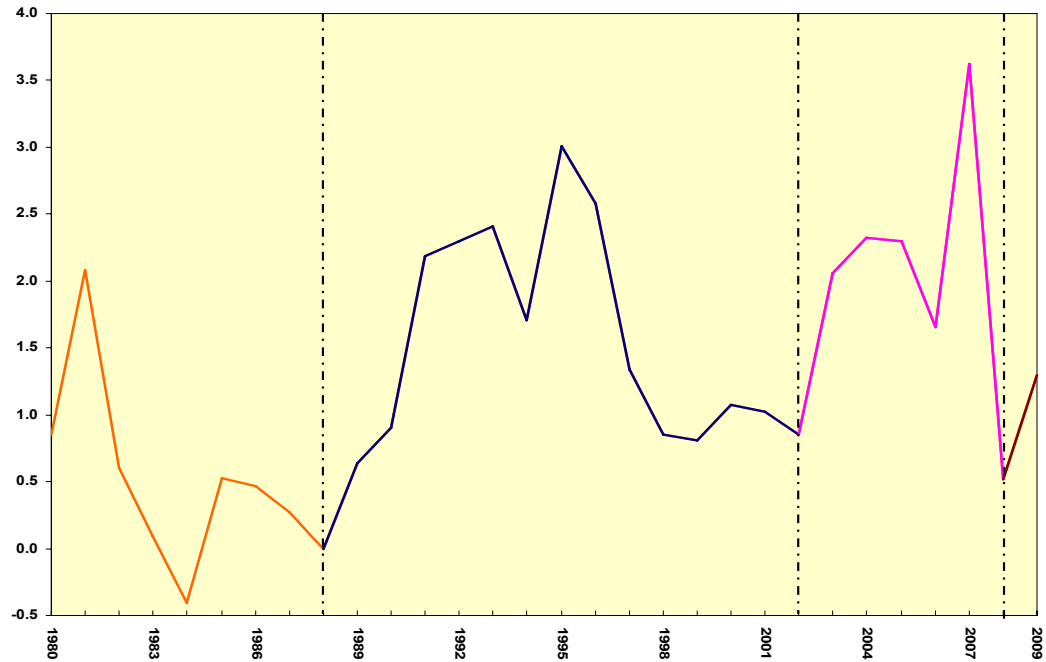


Chart 2.b: Net private capital flows to DEEs, 1980-2009

(Per cent of GDP)



Source: IMF, WEO, 2010 database.

Note: Real flows are nominal flows adjusted for changes in the United States GDP deflator.

Wooldridge 2006). For the first time after the 1997 crisis East Asian DEEs saw a synchronized withdrawal of residents and non-residents from stocks markets, but the amounts involved were quite small. This was followed by a massive surge in net private inflows to all regions which continued in the early phases of the subprime debacle, until the collapse of Lehman Brothers in September 2008.

FDI in DEEs increased rapidly with the acceleration of growth in these countries, but an important part of the increase in inflows was in portfolio investment. Lending attracted by carry-trade profits due to large interest rate differentials with major AEs, notably the yen carry-trade, played an important part, of which highly leveraged hedge funds were among the main beneficiaries. Many unleveraged Japanese investors and funds and individuals (“Mrs Watanabe”) also joined in the search for yield in conditions of near-zero interest rates and stagnant equity prices in that country. Such inflows into target countries such as Brazil and Turkey with much higher interest rates often led to appreciations of their currencies, thereby raising the return on arbitrage capital. Short-term money was also attracted by prospects of currency appreciations in countries such as China where interest rates were relatively low.⁹ Favourable interest rate differentials and upward pressures on currencies made a major contribution to growth in private borrowing abroad, including by banks in several DEEs in order to fund domestic credit expansion.

Table 1: Private capital flows to emerging economies

(Billions of dollars)

	2003	2005	2007	2008	2009	2010
Net Private Inflows	280	642	1285	594	602	908
Equity	185	360	597	422	475	550
Direct Investment	137	289	500	509	322	350
Portfolio Investment	48	71	97	-86	153	199
Private Creditors	95	282	688	172	127	358
Commercial Banks	24	189	451	29	-15	164
Non-banks	71	93	237	143	142	194
Net Private Outflows	-143	-497	-825	-772	-527	-500
Equity Investment	-46	-89	-277	-229	-258	-270
Resident Lending/Other	-97	-407	-547	-544	-269	-230
Net Private flows	137	145	460	-178	75	408

Source: IIF, October 2010 and January 2011.

⁹ The Chinese yuan appreciated by some 12 per cent in the first half of 2008, providing a very attractive return for investors leveraged in dollars – see IIF (October 2008). According to SAFE (2011), net “hot money” flows seeking such quick profits amounted to \$57 billion in 2007, rising to \$76 billion in 2010.

The surge in capital inflows was accompanied by rapidly narrowing 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, coming down to 200 basis points in the first half of 2007 before starting to edge up with the outbreak of the subprime crisis. As noted by the IMF GFSR (2004: 66) “liquidity and an increase in risk appetite [were] relatively more significant influences on spreads than fundamentals in the emerging market debt rally that began in late 2002.” Indeed most DEEs enjoyed the increased risk appetite and shared in the boom in capital inflows irrespective of their underlying fundamentals. During 2002-07 the emerging economies of CEE received as much foreign private capital as Asian DEEs even though their total income was one-fifth of the total income of Asia and their economic performance was not as impressive.

2. The Lehman collapse and contraction in capital flows

Private capital inflows to DEEs held up initially despite growing strains in credit and asset markets in the US and Europe triggered by the subprime debacle. However, with the collapse of a number of leading financial institutions in the US, notably Lehman Brothers, the boom came to a halt in the second half of 2008. Net portfolio equity and debt inflows and net commercial lending all collapsed, turning negative in the course of 2008-09 as non-residents pulled out of equity and bond markets and international banks cut lending. Total net private inflows were more than halved but resident outflows proved to be more resilient. Consequently, there was a massive drop in net flows from the peak reached in 2007 (Table 1, Charts 2 and 3).

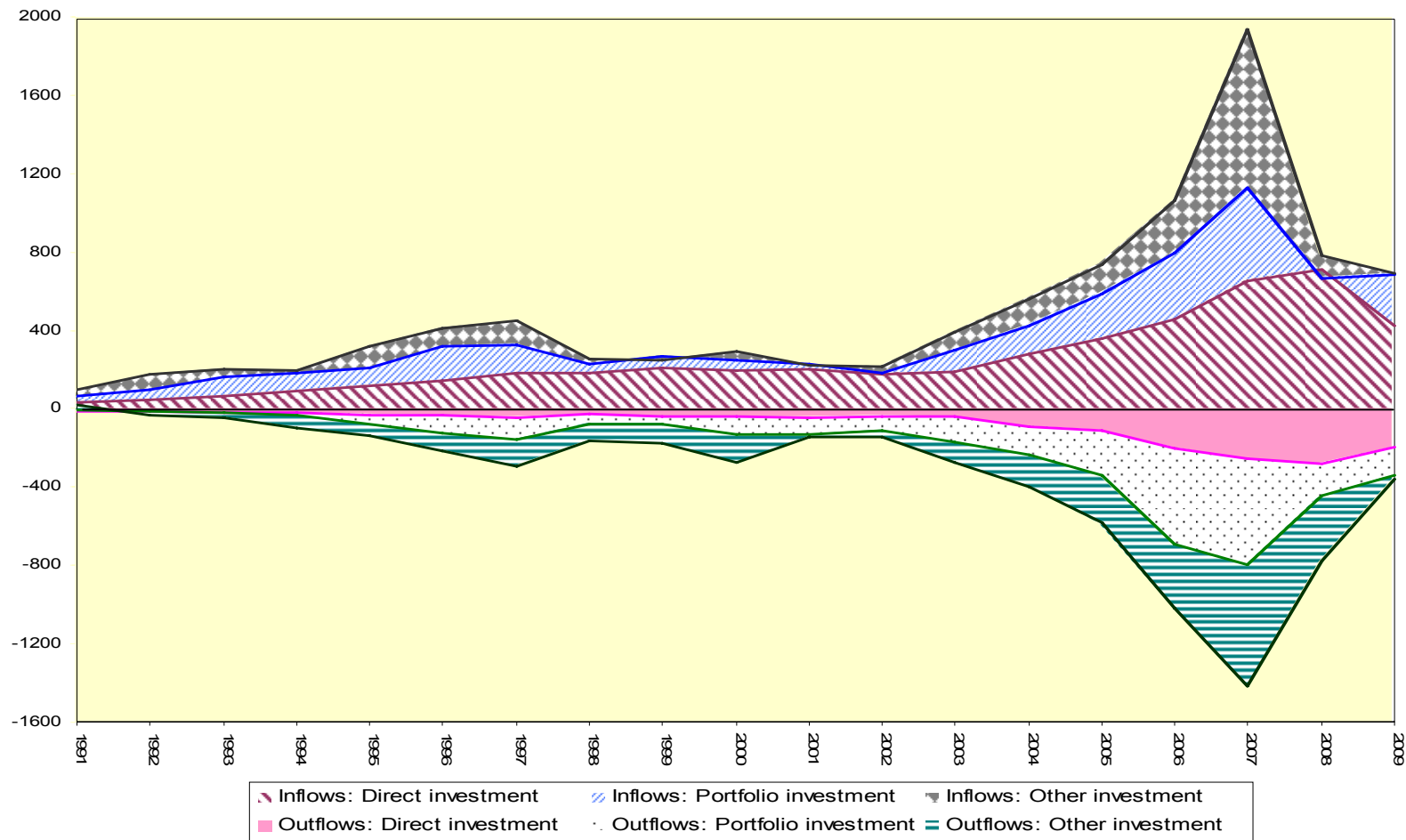
There were many reasons for this sudden stop and reversal. First, the rapidly growing volatility in financial markets led to extreme risk aversion on the part of international lenders and investors, increasing significantly the risk component of assets held. Before the outbreak of the crisis, premium on credit default swaps (CDS) were exceptionally low, remaining below 200 basis points for most DEEs. They started to shoot up at the end of August 2008 with increases reaching, on average, almost 600 basis points for Latin America and CEE. Similarly the average EMBI Global Yield Spread rose from some 170 basis points at the end of 2006 to over 720 basis points at the end of 2008.¹⁰ These resulted in a narrowing of the margin of return over risk on arbitrage money, thereby triggering a rapid reversal of carry trade and flight to safety into US Treasuries.

Exit from DEEs was also encouraged by the introduction of extensive government guarantees on banks deposits and other liabilities in some AEs. Global deleveraging by highly indebted investors, tightened liquidity constraints and higher margin calls added momentum to the exit while falling commodity prices led to a rapid decline of investment in commodity-dependent economies. Foreign bank subsidiaries in some DEEs also funded their parent banks during the crisis in order to strengthen their liquidity and overall financial positions (BIS 2010b). Finally, as it became clear that DEEs would not be decoupled from

¹⁰ On emerging market spreads, see IMF GFSR (April 2009) and BIS (2009).

Chart 3: Capital flows to DEEs: Composition of net inflows and net outflows, 1991-2009^a

(Billions of dollars)



Source: IMF, GFSR various issues, and IFS.

^a: Includes official flows.

the difficulties in AEs and growth prospects were subdued almost everywhere, there was not much appetite for equity investment.

Increased international financial instability and sharp declines in risk appetite also gave rise to an appreciation of the dollar vis-à-vis other major currencies, notably the euro, even though the US was at the centre of the crisis. The US Treasury Bills provided a safe haven and the reversal of carry-trade benefited the dollar. The surge in dollar funding costs and currency mismatches in the balance sheets generated by losses on dollar securities also added to the demand for dollar assets (McCauley and McGuire 2009).

3. The current boom

Both the strength of the dollar and the contraction in capital inflows to DEEs were short-lived. The dollar started to weaken during the first half of 2009. Simultaneously private capital inflows to DEEs started to recover, led by equity portfolio while FDI inflows remained weak. Asia, particularly China, has been receiving a larger share of inflows than other regions. According to IMF estimates after falling from \$1720 billion in 2007 to \$820 billion in 2008 and \$535 billion in 2009, inflows would reach \$760 billion in 2011.¹¹ Current estimates put net inflows at 4 per cent of GDP of DEEs, compared to 6 per cent during the pre-Lehman boom (IMF GFSR January 2011). Again, according to the latest estimates by the IIF (January 2011), net private flows to the 30 most important emerging economies are now very close to the peak reached in 2007 (Table 1). Spreads on emerging-market sovereign debt have also declined sharply – in the first months of 2011 they were about one-third of the level reached after the collapse of Lehman Brothers in 2008.

As in previous episodes, a key factor in the current boom in capital flows is a sharp cut in interest rates and rapid expansion of liquidity in major AEs, notably the US. This was first done in a coordinated way, agreed in the April 2009 G20 summit in London as a countercyclical response to the crisis. In the US recovery started in summer 2009 but the strong growth of close to 4 per cent in the first quarter of 2010 was followed by deceleration to less than 2 per cent in the second quarter. The response of the Fed was to initiate another round of quantitative easing through purchases of long-term Treasuries and other securities. Although the declared objective was to stimulate private spending by lowering long-term rates and raising asset values, this move has also been widely seen as an effort to weaken the dollar and stimulate exports. It was followed by a similar plan in Japan to stem the ongoing upward pressure on the yen. Similarly, while major countries in the Eurozone have started fiscal tightening to calm markets about sovereign debt difficulties, injection of large scale liquidity has continued to support troubled governments.

However, rapid expansion of liquidity has not been translated into a significant increase in private lending and spending in the US because of problems on both the supply and demand sides of the credit market. As uncertainty about recovery and stability has continued unabated, banks have not been willing to lend to private sectors but simply cash in the differentials between short and long rates and look for profit opportunities abroad. Similarly, overburdened with debt, consumers have not been keen on borrowing and spending while, in the face of relatively stagnant

¹¹ IMF WEO (October 2010). These do not include inflows to NIEs.

consumer markets, firms have not had much incentive to continue investing and stock-piling which they had started earlier on. As a result, excess liquidity has spilled over globally in a search for yield in DEEs and this has put many of them on the defensive, in response to what is widely seen as a competitive devaluation by the US.

A key factor in the post-Lehman surge in capital inflows to DEEs is their significantly better growth performance and prospects than AEs. On the other hand, although policy interest rates in many major DEEs were initially brought down in response to fallout from the crisis, the arbitrage gap has widened as they started to increase them in 2010 while rates in AEs have continued unchanged at very low levels. As a result, carry-trade has been re-established and key emerging economies with high interest rates such as India and Brazil have become the main targets (IIF October 2010). Low interest rates in the US, together with the ongoing weakness of the dollar, made the dollar the new funding currency for carry-trade operations, replacing traditional carry-trade currencies such as the yen and the Swiss franc (BIS 2010a).

Furthermore, because of unprecedented difficulties encountered by large financial institutions in the US and Europe and increased public deficits and debt, the crisis has given rise to a durable shift in the perception of risks against investment in AEs in comparison with DEEs. Perhaps for the first time in post-war history, the risk margin between AEs and DEEs has narrowed because of increased risks of default on liabilities issued by public and private sectors in the former countries. A natural outcome is that DEEs now carry greater weights in the equity and bond portfolios of investors in AEs.¹² The reduced risk margins, together with increased interest rate differentials, have widened the arbitrage opportunities compared to the pre-Lehman boom, making carry-trade type of borrowing and lending even more attractive.

4. Financial and commodity cycles in the 2000s

Like capital flows to DEEs, commodity markets have shown considerable swings in the 2000s according to shifts in market assessment of risks and return. This is largely because these markets have rapidly become more like financial markets, with several commodities being treated as a distinct asset class and attracting growing amounts of money in search for profits from price movements (Domanski and Heath 2007; IATP 2008). During 2003–10 assets allocated to commodity index trading strategies are estimated to have risen from \$13 billion to \$320 billion and the number of outstanding contracts in commodity futures and options from 13 million to 66 million (Masters 2008; World Bank 2011a; BIS 2010a).

In various reports the US Senate Permanent Sub-Committee on Investigations has described the disruptions caused by growing activities of index traders in commodity markets, including oil, natural gas and wheat, and how they have altered the traditional relation between futures prices and supplies (USSPSI 2006, 2007 and 2009). Evidence also suggests that the growing financialization has reduced the traditional segmentation of commodity markets resulting from the diversity of factors affecting real supply and demand for different products. There has thus been an increased correlation among commodities, particularly those subject to index trading,

¹² The weight of emerging market equities in the All Country World Index of the MSCI (Morgan Stanley Capital International) rose from less than 5 per cent in 2003 to 13 per cent in 2009 and this is expected to increase further in coming years – see IIF (January 2011) and IMF GFSR (October 2010).

and synchronization of boom-bust cycles in various commodity markets (Tang 2011, Nissanke 2011).

The post-2000 swings in commodity markets show strong correlation with those in capital flows to DEEs and the exchange rate of the dollar (Charts 4 and 5). The evolution of the market value of equity of commodity-related companies and mutual fund investments in commodities also looks strikingly similar to the boom-bust cycles in capital flows to DEEs – after rising constantly they both declined in late 2008, but recovered rapidly afterwards (Oliver Wyman 2011). This is also true for the number of derivatives traded globally on commodity exchanges – after increasing constantly they fell in the second half of 2008 but recovered rapidly afterwards.

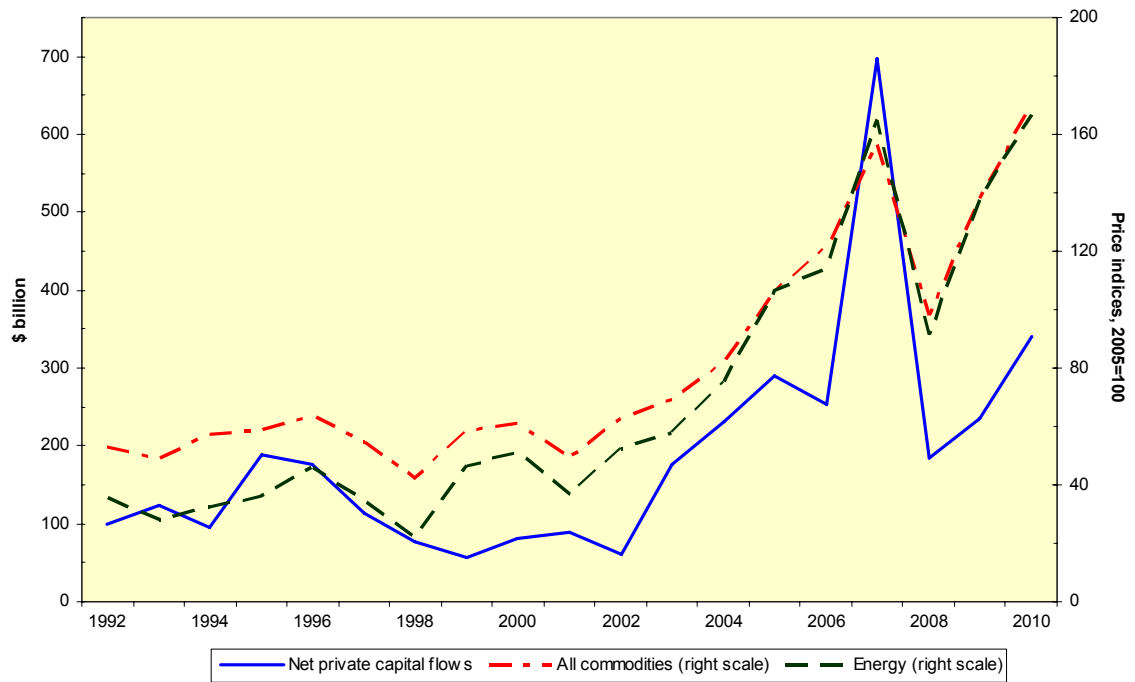
With rapid liquidity expansion and acceleration of growth in the global economy, both oil and non-oil commodity-prices started to rise in 2003, gaining further momentum in 2006. The factors driving the boom included strong pace of activity in DEEs where commodity-intensity of growth is high, low initial stocks, weak supply response and relatively weak dollar. In the case of food, diversion to bio-fuels, droughts, changing demand patterns in DEEs and high cost of fertilizers and transport due to high fuel prices played a role. The upward trend in prices also attracted index-based investments in commodity futures, creating bubble-like increases.¹³

Despite growing financial strains in the US during 2007 and much of 2008, index trading in commodity futures continued to increase during that period, contributing to the acceleration of commodity price increases. Prices reached a peak in July 2008 when investment in commodity futures reached an unprecedented \$317 billion and the number of contracts in commodity derivatives 44 million and open positions rose rapidly (Masters and White 2009; BIS 2010a). However, they made a sharp downturn in August 2008, as investors pulled out large amounts of money from oil and non-oil futures, more or less at the same time as capital flows to DEEs were reversed and the dollar started to strengthen.

This boom-bust cycle in commodity prices in the middle of the subprime crisis was largely due to shifts in market sentiments. Initially, throughout 2007 and much of 2008, the subprime crisis was seen as a hiccup. It was not expected to generate a deep recession and a glut in commodity markets, particularly since DEEs were generally believed to decouple from the difficulties in mature markets. The downturn in economic activity was expected to be short, followed by a rapid and robust recovery. The IMF was quite optimistic, downplaying the difficulties (Akyüz 2010c). In fact it revised its growth projections upwards during early Summer 2008, expecting the global economy to grow by 3.9 per cent in 2009, AEs by 1.4 per cent and DEEs by 6.7 per cent, compared to what turned out to be –0.6 per cent, –3.2 per cent and 2.5 per cent, respectively (IMF WEO Update, July 2008). However, with the mounting financial difficulties in the US and the collapse of Lehman Brothers, sentiments turned sour. Almost simultaneously there was a rapid exit of capital from

¹³ Examining the empirical evidence Gilbert (2010) concludes that during 2006-08, index-based investment in commodity futures may have been responsible for a significant and bubble-like increase of energy and non-ferrous metals prices, although the estimated impact on agricultural prices is smaller.

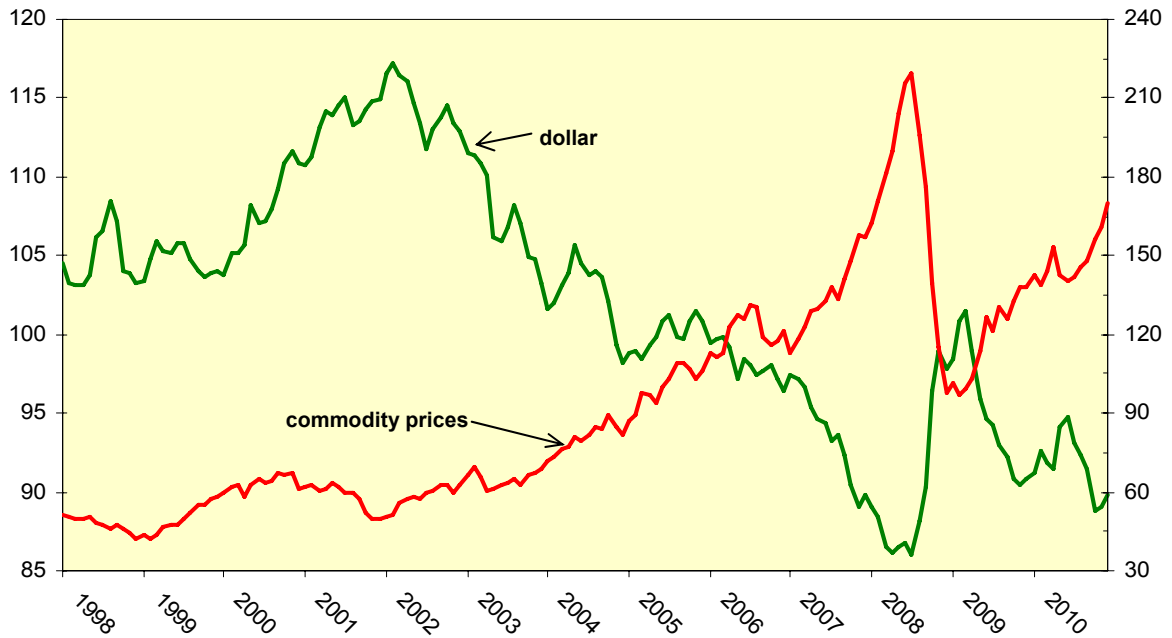
Chart 4: Net private capital flows to DEEs and commodity prices, 1998-2010



Source: IMF, WEO, 2010 database.

Chart 5: Commodity prices and the dollar ^a

(Index numbers, 2005=100)



Source: BIS (nominal effective exchange rate; left scale) and IMF (commodity prices; right scale).

a: Nominal effective exchange rate.

commodities and DEEs, and a flight to safety to the dollar. By the end of October 2008, food was 27 per cent and oil 45 per cent below their peaks.

The post-Lehman upturn in commodity prices also coincided with the recovery of capital flows to DEEs and the decline of the dollar. Non-oil commodity price index rose by some 25 per cent and oil by 28 per cent in 2010 and they are expected to increase further in 2011. Strong growth in DEEs, notably in China, has been a major factor. There have also been shortages in some commodities such as grains due to adverse weather conditions in several countries. At the beginning of 2011 food prices have reached historical highs. Political unrest in the Middle East and North Africa has also been pushing up oil prices further, including oil futures, due to concerns over supply disruptions.

Index trading has played an important part in the post-Lehman rise in commodity prices. After falling in late 2008 and early 2009, it started to gain momentum as commodity prices turned up in spring 2009 as a result of increased demand from DEEs in conditions of continued expansion of liquidity, historically low interest rates and limited investment opportunities in AEs. Investment in commodities reached \$320 billion in mid-2010, a figure last seen during July-August 2008, when commodity prices peaked while the number of exchange traded options and futures rose to unprecedented levels (World Bank 2011a; BIS 2010a). Thus, very much like capital inflows to DEEs, the current boom in commodity prices is driven not only by fundamentals of real supply and demand but also strong speculative elements.

The parallel movements in capital flows, commodity prices and the dollar are due not only to common influences regarding overall market assessment of risks and return and global liquidity conditions. They are also directly linked. A weaker dollar often leads to higher commodity prices because, *ceteris paribus*, it raises global demand by lowering non-dollar prices of commodities. On the other hand, changes in commodity prices have a strong influence on capital inflows to commodity-rich DEEs. As already noted, declines in commodity prices after summer 2008 triggered exit of capital from such economies. Similarly, the current boom is an important factor in the surge in capital flows to commodity-rich economies in Latin America, Africa and the CIS. This is not limited to oil and minerals. With increased interest in bio-fuels and hikes in food prices, acquisition of farmland in DEEs has become an attractive form of investment. In Africa alone, such deals made throughout 2009 are estimated to have reached 56 million hectares before the year ended (World Bank 2011b).

D. THE CHANGING NATURE OF CAPITAL FLOWS

In comparison with previous cycles, private capital flows to DEEs now manifest certain distinct features regarding their destination, size and composition. They are now more synchronized across countries than in the past. The amounts involved are much higher. They are no longer unidirectional, from AEs to DEEs – there are significant resident outflows from DEEs and capital flows among DEEs have been growing rapidly. Finally, the composition of inflows has shifted significantly towards domestic-currency instruments of recipient DEEs, including highly volatile portfolio equity investment –described as the “canary in the coalmine in emerging market capital flow cycles” (IIF October 2009: 10) – and carry-trade style borrowing, lending and investment. All these have significant implications for the impact of fluctuations in capital flows on DEEs and the nature of their exposure to the risk of instability and crises.

First, both pre- and post-Lehman booms and the brief contraction during 2008-09 affected all major DEEs. By contrast, mainly the Latin American DCs were involved in the first boom-bust cycle starting in the late 1970s. In the second cycle the surge in capital flows was regionally concentrated, first in Latin America and then East Asia and CEE. The recent synchronization of expansion and contraction of capital flows across all major emerging economies is largely due to liberalization of international capital flows and increased financial investment opportunities in a wider range of DEEs.

Second, in previous booms all major recipient countries were running current account deficits and using net capital flows mainly to meet external shortfalls. By contrast, recently DEEs have been receiving large amounts of foreign capital even though as a group and for several countries individually they do not need them for external financing. The twin surpluses on the capital and the current accounts of DEEs, which together reached 8 per cent of their GDP in 2007, were fully recycled back to AEs as investment in international reserves, which recorded an increase of over \$1.3 trillion in 2007.

Third, the amounts involved are now much larger. In real terms the peak reached in 2007 in net private capital flows was more than five times the peak reached in 1981 during the first cycle and 2.5 times the peak reached in 1995 during the second cycle. Now the swings in net private flows are also more pronounced. As a proportion of GDP, the drop in net private capital flows to DEEs was around 2.0 per cent during the first cycle and 2.5 per cent in the second cycle compared to 3.6 per cent during the Lehman collapse. However, in the latter case the downturn was short-lived.

Fourth, recent years have also witnessed significantly increased two-way traffic in capital flows between AEs and DEEs (Chart 3). The resident outflows from DEEs, which barely existed two decades ago except in the form of illegal capital flight, have been growing rapidly and net inflows now exceed net flows by a growing margin. In the pre-Lehman boom, net inflows rose by around \$1600 billion between the late 1990s and 2007 while net flows increased by only \$600 billion and the difference was accounted for by outflows. The current boom is also seeing rapid increases in both net inflows and net outflows. In other words, an important part of net private inflows are now leaking abroad through net private acquisition of foreign assets by residents, rather than used for external financing or invested in reserves.

Two factors have played a key role in increased capital outflows from DEEs. First, foreign presence in DEEs has been growing rapidly through new investment and asset acquisition. The stock of inward FDI in DEEs increased more than nine-fold between 1990 and 2009 while the accumulated stock of capital inflows to DEEs rose from under 10 per cent of their GDP to around 45 per cent during the same period (UNCTAD WIR 2010; IIF January 2011). When foreign companies and individuals take residence in DEEs, their cross-border transactions are treated and recorded in much the same way as those of the nationals of these countries, even when they are special purpose entities and legal structures established simply for holding assets with little or no physical presence.¹⁴ Since these are engaged in international transactions to a greater extent than the nationals of DEEs, their increased presence results in greater outflows of capital. On the other hand, since increased foreign presence is the outcome of growing capital inflows, there is an intricate link between capital inflows and outflows.

The second factor is liberalization of outward investment in DEEs. Many rapidly growing large DEEs have been encouraging national firms to expand their global outreach and become important players in world markets not only through exports but also through direct investment abroad. It is estimated that total FDI outflows from DEEs was close to \$300 billion during 2008, or over 18 per cent of total global FDI, compared to the previous peak of \$99 billion in 2000 and some \$4-5 billion in the mid-1980s (UNCTAD WIR, various years). Much of these came from China (some \$110 billion, including Hong Kong and Taiwan Province), Russia (\$55 billion) and Brazil, Korea and India (around \$20 billion each). Investors from smaller economies such as Chile and Malaysia have also started to expand their activities globally. An important part of outward investment by large firms in DEEs is in cross-border acquisitions. The companies involved are often owned or controlled by the state, including Sovereign Wealth Funds. Their investment is usually driven by strategic considerations rather than quick windfall profits (UNCTAD WIR 2010). Assets acquired abroad by China and Russia are financed from current account surpluses while in Brazil, India and Korea where the current account is balanced or in moderate deficits, outward investments are funded mainly by net private capital inflows – that is, they are leveraged.

Recent years have also seen a rapid increase in outward portfolio investment by the residents of DEEs. In some countries restrictions on these have been relaxed in an effort to ease the upward pressure on currencies during surges in capital flows. This, rather than control over inflows, was the response of several Asian countries, including China, India, Korea, Malaysia and Thailand to the pre-Lehman surge in capital inflows (Akyüz 2010a). Before the outbreak of the subprime crisis, portfolio outflows from DEEs reached twice the level of FDI outflows, matching or exceeding portfolio inflows (Chart 3).¹⁵

Fifth, capital flows among DEEs have also been increasing significantly. There has been a certain amount of intra-regional carry-trade activities in Latin America and CEE where funds borrowed in low-interest currencies are invested in the same region in higher-interest currencies. However, a very large proportion of south-south capital flows have been in direct investment and much of these are intra-regional. On some estimates, in 2007 about 94 per cent of south-south FDI

¹⁴ In balance-of-payments statistics the residence of each institutional unit is defined as the economic territory with which it has the strongest connection. For the concept of residence, institutional units and economic territory, see IMF (2010).

¹⁵ This is why net portfolio flows during the pre-Lehman boom were relatively weak, barely higher in 2007 than the peak reached during the previous boom of the 1990s– see, IIF (October 2008)

in Latin America was in the region and this figure was 77 per cent in South-East Asia and 55 per cent in East Asia (Giroud 2009; UNCTAD WIR 2006; and Rajan 2010). China has become a major investor in other DEEs, particularly in commodity sectors in an effort to provide a reliable supply of energy, minerals and other key commodities. A number of Indian transnational companies have also become active in other DEEs as part of their drive to place themselves on the world stage. Again companies in some NIEs (such as POSCO in Korea) are now investing in other DEEs. South Africa has become an important investor in Sub-Saharan Africa, particularly southern Africa.

Sixth, the nature of net external liabilities of DEEs has also undergone a significant transformation. Until recent years external liabilities of DEEs were denominated largely in foreign currencies for two main reasons. First, with few exceptions, portfolio equity inflows were limited as stock markets were underdeveloped and/or closed to foreign investors. Second, DEEs were generally unable to borrow in their own currencies. Typically, they borrowed short-term in foreign currency and this exposed them to both exchange rate and interest rate risks, making them more susceptible to balance-of-payments and financial crises than major mature economies.¹⁶

The composition of external liabilities of DEEs has started to change in favour of domestic currencies in the past decade. First, with the opening of stock markets and generous incentives for FDI, a growing part of capital inflows has been in equity investment. Second, with stronger payment positions the need of DEEs for foreign-currency debt has diminished and the debt of DEEs to non-residents is increasingly dominated in domestic currencies. As a result, the share of direct plus portfolio investment in total inflows to DEEs has been rising; in the pre-Lehman boom these two accounted for about 70 per cent of total inflows compared to some 40 per cent during the 1990s.

International bond issues in domestic currencies by DEEs have been limited in recent years because public and private sectors in many developing countries still cannot issue such debt and others who are in a position to do so have little need for it. However, there has been a rapid increase in local-currency debt issues by government and corporate borrowers in emerging economies, from some \$92 billion in 2003 to \$437 billion in 2010 and a growing number of countries have allowed non-residents to acquire domestically issued public and/or corporate debt.¹⁷ Although there are no comprehensive statistics on the extent to which such debt is held by non-residents, available evidence suggests that in recent years debt-related flows “have become increasingly dominated by local market instruments, with creditors eager to take both currency and interest rates risks.”¹⁸ This is also suggested by the rapid growth of carry-trades. Again, a growing proportion of operations of foreign banks in DEEs are now concentrated in local-currency

¹⁶ For this so-called problem of original-sin, see Eichengreen and Hausmann (1999).

¹⁷ It is reported that of this \$437 billion, \$172 billion was due to China, \$101 billion to Korea and \$36 billion to India – see Curran (2011). Of these countries the Chinese market is largely closed to foreigners but the Korean market is wide open – see Lee (2010). In India foreigners are given incentives to enter the corporate bond market.

¹⁸ IIF (October 2008: 6). For the reduced reliance on external financing in both public and private sectors and the shift towards domestic currency debt in Latin America, see Jara and Tovar (2008). By contrast, examining the surveys conducted by the US Treasury on bonds held by US investors, Hausmann and Panizza (2010) argue that investors in the US remain unwilling to take currency risk by increasing their exposure to domestic currency bonds traded in local markets. They, however, note that US investors’ holding of bonds issued by the residents of DCs almost doubled between 2003 and 2007. This is likely to have increased further after 2008 when the dollar became more prominent in carry trade.

lending, often funded externally (see Jara, Moreno and Tovar 2009 for Mexico). These banks have become major players in the domestic financial markets of most emerging economies. By the end of 2008, total lending by foreign banks and their affiliates in DEEs exceeded \$1,500 billion in emerging Asia, \$900 billion in emerging Europe and \$800 billion in Latin America (BIS 2010b).

Finally, the growing importance of portfolio inflows has increased the presence of non-residents in the securities markets of DEEs. In some Latin American and European emerging economies, the share of non-residents in actively traded shares has come to exceed that of residents. Even many Asian economies with stricter conditions of access have seen rapid growth of foreign presence in their markets. At the end of 2007, the stock of portfolios held by the residents of AEs in Asian DEEs was about 25 per cent of the GDP of these economies (Balakrishnan *et al.* 2009). In Korea, non-resident holding of equities reached almost one-half of market capitalization (McCauley 2008). In China foreign share as a percentage of market capitalization increased from 2.5 per cent in 2001 to 23.2 per cent in 2006 and in India from 6.6 per cent to 10 per cent in the same period (BIS 2009). The share of non-residents in long-term local-currency-denominated bonds rose in Indonesia and Malaysia to reach 15-20 per cent in 2007 (World Bank 2009).

The presence of investors from DEEs in the equity and bond markets of AEs has also been increasing as a result of rapid growth of portfolio outflows. The two-way traffic in private capital flows and increased presence of AEs and DEEs in each other's markets are likely to continue in the coming years. On the one hand, as noted, the shift in risk perceptions against mature markets has increased the weight of DEEs in the bond and equity portfolios of investors in AEs, and reallocation is likely to continue unless held back by financial instability and crises in some major DEEs. On the other hand, with continued inflows and upward pressure on their currencies, DEEs can be expected to continue to ease restrictions on outward investment in the near future, allowing their residents to diversify equity and bond portfolios globally.

E. CHANGING VULNERABILITIES TO BOOM-BUST CYCLES

These changes in the nature and composition of capital flows have important consequences for the sources of vulnerability of DEEs to boom-bust cycles. Exposure to the risk of instability and crises generally results from macroeconomic imbalances and financial fragility built up during the surge in capital inflows mainly in three areas. First, surges in capital flows can produce or support unsustainable exchange rates and current account deficits. This is quite independent of the composition of capital flows. A surge in FDI would have the same effect on the exchange rate, exports and imports as a surge in portfolio investment or external borrowing.¹⁹ If such imbalances are allowed to develop, sudden stops and reversals would produce sharp declines in the currency and economic contraction unless there are adequate reserves or unlimited access to international liquidity.

Second, financial fragility arises because of extensive dollarization of liabilities, and currency and maturity mismatches in balance sheets. This would be the case when borrowing is in foreign currency and short-term. When capital flows dry up and the currency declines sharply, mismatches could result in increased debt servicing difficulties and defaults.

Finally, capital surges can produce credit and asset bubbles. Credit expansion can occur when banks borrow abroad to fund domestic lending, currency market interventions cannot be fully sterilized or inflows lower long-term interest rates. The link between capital flows and asset markets strengthens with greater presence of foreigners in domestic markets. Not only portfolio investments but also many types of capital inflows that are traditionally included in FDI, such as acquisition of existing firms and real estate investment, can create asset bubbles.²⁰ Reversal of capital flows could then create credit crunch and asset deflation with severe macroeconomic consequences.

The growing denomination of external liabilities of DEEs in their own currencies changes the nature of the risks associated with borrowing from non-residents. It no doubt reduces currency mismatches in balance sheets, which played a key role in most past episodes of crises in DEEs, and transfers the currency and interest rate risks to international lenders and investors. However, it also enhances the impact of instability in capital flows on domestic securities markets and increases the risk of exposure to international contagion. The exposure is also amplified by growing international portfolio diversification by the residents of DEEs through investment abroad. Indeed, evidence suggests that stock prices in DEEs are now closely correlated with net private capital flows, more so in Asia than in Latin America, and the correlation between global and emerging-market equity returns has been rising in recent years with increased two way traffic in capital flows between emerging and mature economies (IIF October 2007; BIS 2007).

¹⁹ Of course FDI can directly lead to an increase in capital goods imports. Over time it may lead to export expansion or import substitution if it is greenfield investment in traded sectors.

²⁰ The distinction between direct and portfolio equity investment is quite arbitrary and because of the way FDI is defined and recorded, it is not possible to identify the extent to which FDI really consists of investment in productive assets rather than in equity or debt instruments. For a discussion, see UNCTAD TDR (1999) and for the definition and coverage of FDI, see IMF (2010).

In previous booms it was the debtors who were highly leveraged, taking both currency and interest rate risks by borrowing short-term in foreign currencies. Now international lenders and investors have become highly leveraged by borrowing in their own currencies and investing in local currency instruments of DEEs. Thus, tightened credit conditions in AEs can lead to a rapid withdrawal by highly leveraged investors from DEEs, causing asset and currency declines, as observed after the collapse of Lehman Brothers. Furthermore, with increased foreign presence, domestic bond markets may no longer be relied on as a “spare tyre” for private and public borrowers and provide an escape route at times of interruptions to access to external financing (Jara, Moreno and Tovar 2009).

Still, on the basis of past experience, many DEEs consider that exposure to instability and crises associated with borrowing in local currency is considerably less serious than exposure resulting from liability dollarization that proved fatal during the 1997 crisis. Mitigating currency and maturity mismatches in financing is indeed one of the main rationales of the Asian Bond Market Initiative introduced by ASEAN+3 governments in 2003. The same considerations also explain why several other countries such as Korea are so keen on broadening foreign participation in bond sales as a way of cutting crisis risk (Seo 2011).

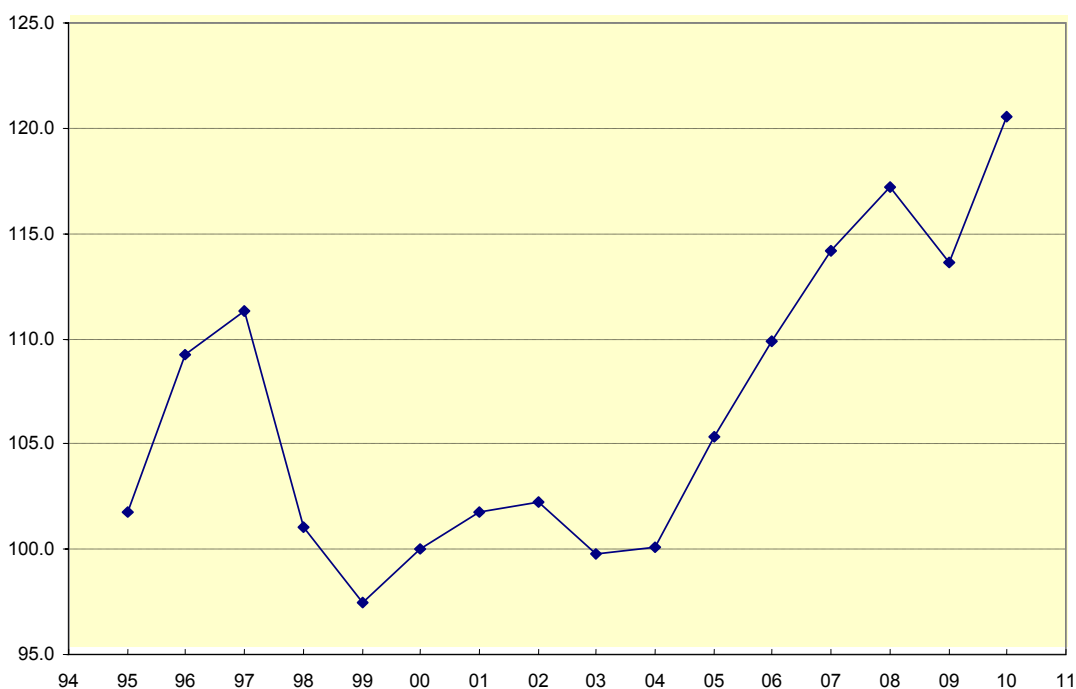
F. THE IMPACT OF RECENT CAPITAL FLOWS ON DEES

In previous boom-bust cycles, surges in capital flows generally created imbalances on all the three areas noted above and in almost all major recipient countries. Consequently, sudden stops and reversals simultaneously gave rise to sharp currency declines, widespread debt servicing difficulties and defaults, and credit crunches and asset deflations. By contrast the surge in recent years did not always create imbalances in all these areas or in all major DEEs because of changes in the nature and composition of capital flows and differences in policy response. As a result, the impact of the reversal of capital inflows on DEEs after the Lehman collapse was a lot more varied than in the past.²¹

Generalized boom-bust cycles in capital flows are almost fully mirrored by movements of exchange rates of DEEs: rapid appreciations during surges followed by sharp declines with sudden stops and reversals. As seen in Chart 6, this pattern was clearly visible during the mid-1990s. The 2000s also saw a similar boom-bust cycle in the currencies of major DEEs, except that appreciations during the pre-Lehman boom went much further than those in the 1990s and the downturn during 2008-09 was much shorter.

Chart 6: Emerging markets real effective exchange rate

(2005=100)



Source: IIF, October 2010.

²¹ For a detailed account of the impact of the crisis on capital flows, financial intermediation and markets in major emerging economies and central bank response, see BIS (2010b).

While all major emerging economies faced upward pressures on their currencies during the pre-Lehman boom, the extent of appreciations varied significantly depending on the policy response (Chart 7). Drawing on the lessons learned from the 1997 crisis, most East Asian countries avoided sharp appreciations, maintained strong current account positions and accumulated large stocks of international reserves as self-insurance. By contrast several emerging economies in Latin America and CEE saw sizeable appreciations, even though some of the Latin American countries intervened in foreign exchange markets and accumulated large stocks of reserves.²² Every single emerging economy in CEE ran current account deficit during 2002-07, with the average hovering around 6 per cent of GDP. This was also true for Turkey and South Africa; in the former country capital inflows added to deficits by leading to a sizeable appreciation. Brazil too experienced strong appreciations but managed to maintain its current account broadly in balance thanks to booming commodity prices.²³

Public borrowing in foreign currencies slowed almost everywhere, including in Latin America where governments traditionally relied on such financing, but there was a rapid growth in private borrowing in several DEEs. In Asia, private financial and non-financial corporations in India, Korea and the Philippines are known to have engaged in “carry-trade-style” short-term external borrowing, particularly through low-interest yen-linked loans.²⁴ In CEE, banks borrowed abroad in both short-term and long-term markets in order to fund domestic lending (IIF January 2009). In particular, foreign banks carried considerable currency mismatches in their balance sheets (BIS 2010b). In Latin America, the degree of currency and maturity mismatches in the corporate sector fell compared to the 1990s, but there were considerable off-balance sheet foreign exchange exposure through derivative positions, notably in Mexico and Brazil (Jara, Moreno and Tovar 2009; BIS 2009).

During the pre-Lehman surge, domestic equity and bond markets in major DEEs also boomed (Charts 8-10). Rapid domestic credit expansion and low interest rates played an important role. As in mature economies, monetary policy was also highly expansionary and interest rates were low by historical standards. However, the surge in capital flows was part of the reason for the rapid expansion of liquidity since interventions in foreign exchange markets could not always be fully sterilized.

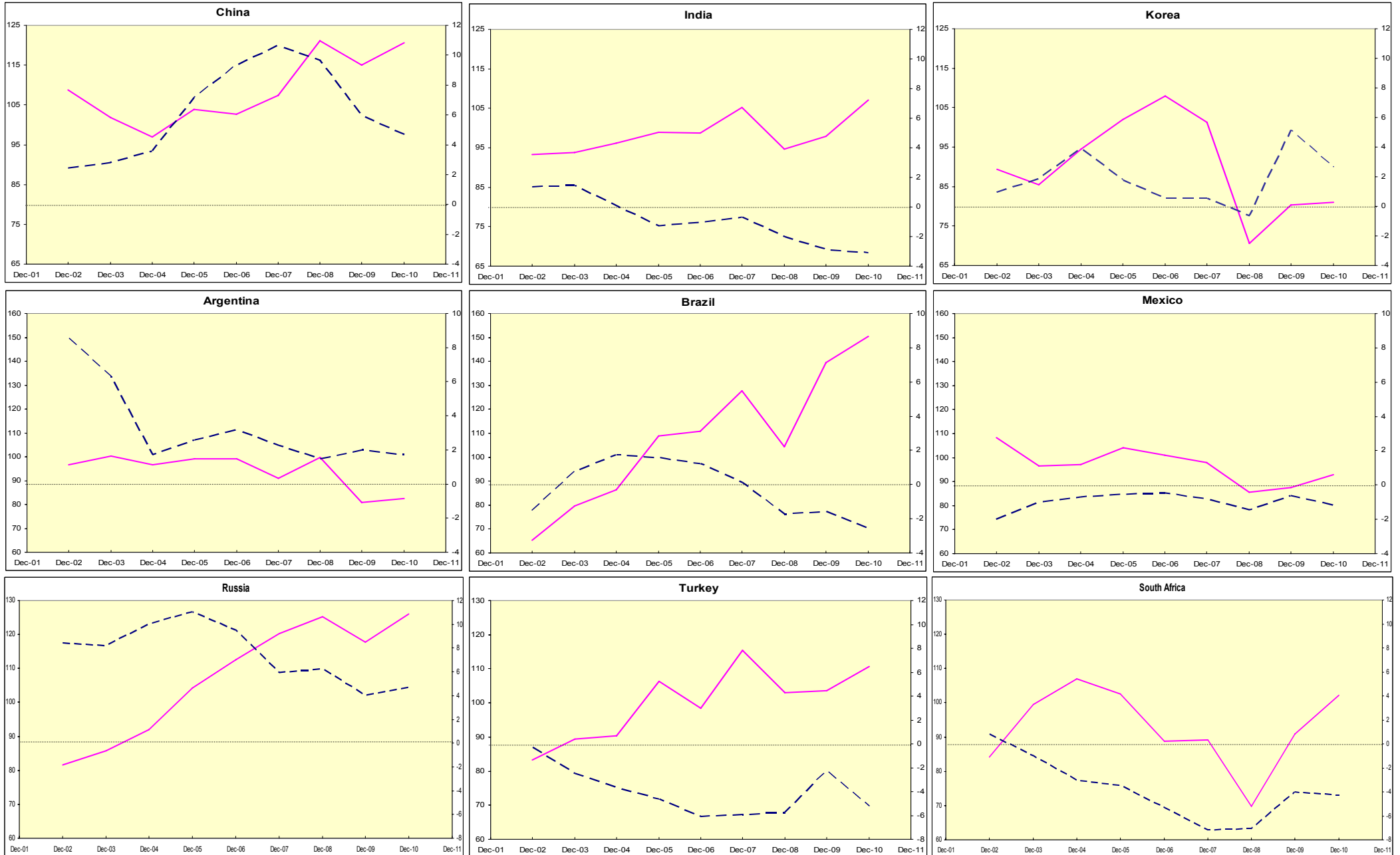
Equity prices in most emerging economies rose sharply between 2002 and 2007 both in dollar and local currency terms. The increase was particularly strong in Brazil (by almost 10 times), China (6 times), India and Turkey (4.5 times). That such increases more likely reflected speculative bubbles than improvements in underlying fundamentals was cautioned by the 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

²² See Akyüz (2010b) for Asia and Jara, Moreno and Tovar (2009) for Latin America. See also UNCTAD TDR (2007), IIF (October 2007) and BIS (2007).

²³ It is estimated, for Latin America as a whole, that terms-of-trade gains after 2002 improved the current account balance by some 4 per cent of GDP; see, Jara and Tovar (2008).

²⁴ The corporate sector in India used significant foreign borrowings to fund expansion, including in foreign markets, while banks in Korea relied on global borrowing to fund credit-dependent household spending, pushing the loan-to-deposit ratio close to 120 per cent, the highest in the region – ESCAP (2010). For Korea, see also BIS (2009) and Lee (2010).

Chart 7: Real effective exchange rate (REER) and current account balances for selected DEEs, 2002-2010



Source: BIS, real effective exchange rates database, and IMF, WEO, 2010 database.

— REER index (2005=100; left scale).

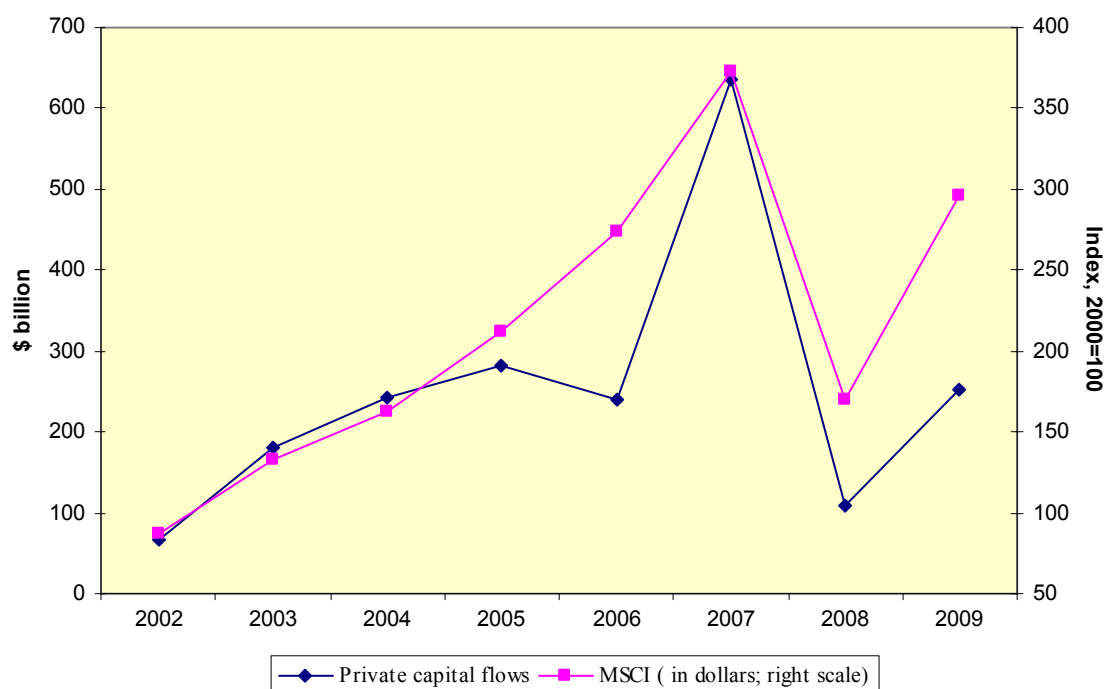
- - - Current account balances as per cent of GDP (right scale).

fundamentals.” Some Asian countries, notably China and India, also experienced property bubbles because of cheap money, speculative purchases motivated by strong prices and increased foreign demand for commercial space (Akyüz 2010a).

With the global spread of the subprime crisis and flight to safety, there was a generalized downward pressure on the currencies of almost all DEEs (Kohler 2010). In the event, most saw declines, including those with strong payments and reserve positions. Among the major DEEs, India, Korea, Turkey and South Africa experienced heavy selling pressures and sharp declines. Brazil, Korea, Mexico and Singapore established or increased bilateral swaps with the US Fed, and some DEEs, including Mexico and Colombia, sought access to the newly established Flexible Credit Line at the IMF. Rapid exit of capital and falling exports entailed large reserve losses in India and Korea, while most countries facing strong trade shocks from the crisis welcomed the decline in their currencies and abstained from using their reserves to stabilize them. However, external adjustment proved highly deflationary in countries with large current account deficits. Even though many of these were less dependent on exports for growth and the trade shocks they received were less severe than in successful East Asian exporters, they experienced large drops in GDP, commensurate with losses incurred during the crises in the 1990s. Loss of growth could have been much greater should capital flows have failed to recover quickly in the course of 2009.

Equity markets of all major DEEs experienced heavy selling pressures after the Lehman collapse. Over 80 per cent of the gains enjoyed in equity markets during the earlier boom were lost in a matter of a few months. The property bubble in China came to an end with house prices falling in December 2008 for the first time for many years, forcing the

Chart 8: DEEs: Net private capital flows and equity market index



Source: IMF, *WEO*, 2010 database and MSCI.

government to take measures to revive the property market. In several other countries governments came to the rescue of the highly exposed private corporations having to repay maturing debt at a time when their access to international markets was curtailed. Central banks in Brazil, Mexico and Russia provided international liquidity from their reserves to keep them current on their payments to international creditors (IIF June 2009; BIS 2009). However, the impact of sharp currency declines on corporate solvency was generally small compared to the Asian Crisis because of government support, limited exposure to currency risks and short-duration of the decline in capital flows and currencies.

With the recovery in capital flows from early 2009, the downward pressures on currencies were soon reversed and most of them have seen renewed appreciations (Charts 6-7). Several economies with relatively large and growing current account deficits, notably Brazil, India, Turkey and South Africa, have been appreciating faster than East Asian surplus countries – China, Korea, Malaysia, Thailand, Philippines and Singapore.²⁵ Turkey and South Africa which had large and growing CA deficits during the pre-Lehman boom but saw these narrow significantly during the Lehman collapse are now witnessing widening deficits and strengthening currencies. This is also true for Brazil and India which had managed to maintain broadly balanced current account positions before the outbreak of the global crisis.

Equity markets recovered sharply from early 2009 and the MSCI index for emerging-market equities in local currency rose by about 60 per cent in 2009 and another 12 per cent in 2010. Increases were even faster in dollar terms because of currency appreciations – by 75 per cent and 16 per cent, respectively. However, there has been a softening of prices in the early months of 2011 as a result of increased concerns with inflation and the impact of consequent monetary tightening on growth in several major DEEs.

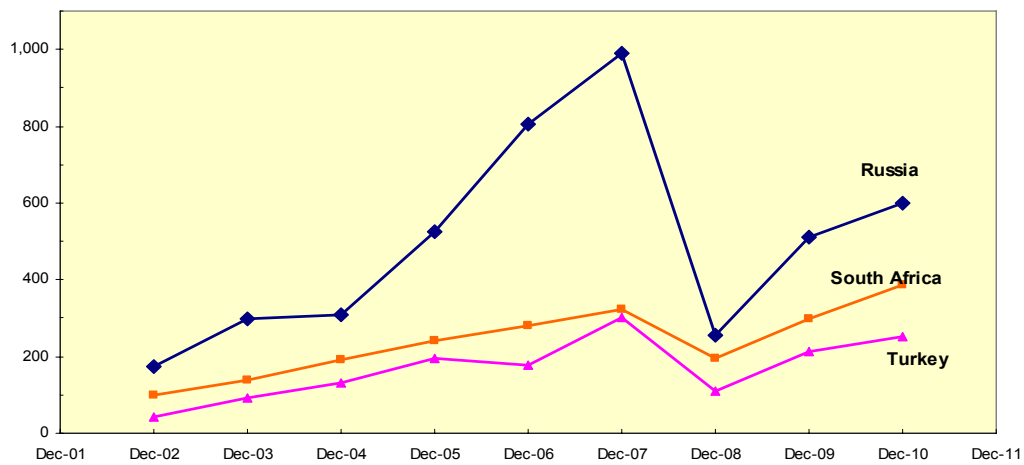
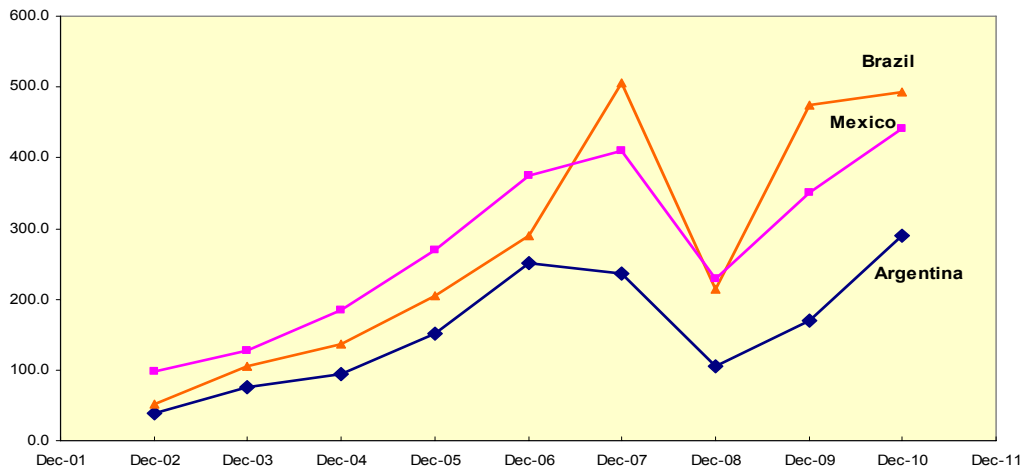
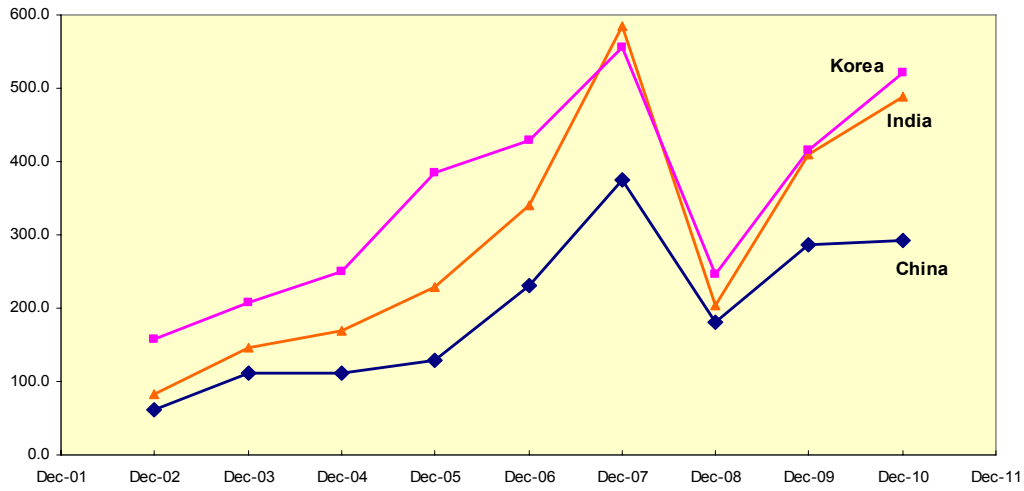
The combination of the surge in capital flows and rapid credit expansion resulting from a massive stimulus package adopted in response to fallouts from the subprime crisis has been overheating the Chinese economy, creating inflation in both property and product markets and posing the risk of a hard landing. There is a massive increase of foreign investment in property, with the share of FDI going into real estate rising from 10 per cent in 2006 to 23 per cent in 2010 (SAFE 2011). GDP growth was above 10 per cent in 2010, consumer prices were up by almost 5 per cent year on year in January 2011, producer inflation by 6.6 per cent and property prices by 10 per cent, forcing the government to take measures to tame commodity and housing prices and to cool the economy (Xinhuanet 2011). Interest rates were raised three times after October 2010 and reserve requirements twice during the first two months of 2011. Fears of accelerating inflation and slowing growth appear to have moderated portfolio equity inflows in recent months and equity prices are now some 30 per cent below the peak in 2007 (Cowie 2011).

In Brazil domestic credit expansion and debt accumulation have become extremely rapid and this has given rise to suggestions that the country may be heading for its own subprime crisis (Marshall 2011). The central bank tightened monetary policy and raised interest rates in January 2011 in order to bring inflation closer to its target. The Indian Reserve Bank has also taken a similar action. All these can be expected to slow portfolio equity investment and dampen price increases while enhancing carry-trade opportunities.

²⁵ While appreciations in surplus Asian countries, notably China, could be seen as a welcome development for the reduction of global imbalances, it is not clear whether currency movements alone could overcome the problem of underconsumption in China and overconsumption in the US. For a discussion, see Akyüz (2011).

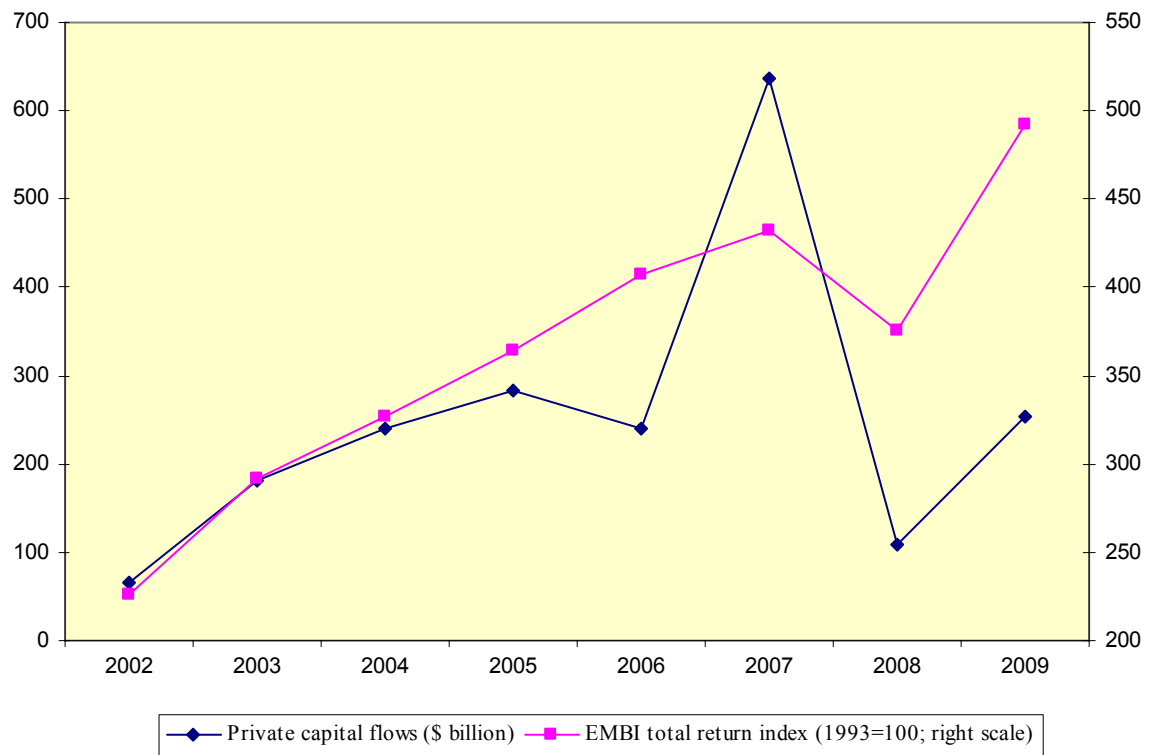
Chart 9: MSCI equity market index for selected DEEs

(In dollars, 2000=100)



Source: MSCI

Chart 10: DEEs: Net private capital flows and emerging market bond index



Source: World Bank, *Global Economic Monitor*.

G. WHAT IS NEXT?

The build-up of macroeconomic imbalances and financial fragility in several DEEs that started with the subprime bubble but was interrupted by the Lehman collapse has continued with greater force in the past two years. To what extent these would go so far as creating serious exposure to the risk of instability and crises depends very much on how long the current boom in capital flows will last and how they are managed by the recipient countries. Experience shows that it is almost impossible to predict the timing of stops and reversals and the events that can trigger them even when the conditions that drive the surge in capital flows can be diagnosed to be unsustainable with a reasonable degree of confidence.

Current projections by both the IMF and IIF are for further increases in capital flows to DEEs during 2011-12. The factors which now favour DEEs in the eyes of international investors and lenders, including higher interest rates, reduced risk margins and faster growth, are likely to continue in the near future. Although the demand for external borrowing remains subdued in many DEEs, FDI inflows may not return to the levels attained during the pre-Lehman boom and recent tightening of monetary policy in several major DEEs in response to rising inflation may moderate portfolio equity investment, these are not expected to result in sharp declines in overall capital flows to DEEs.

A steady return to “normalcy” in the US and Europe in growth and employment and financial market conditions, and the accompanying monetary and fiscal tightening could draw funds gradually back to them without a sharp break in capital flows to DEEs. The US economy is now under deflation-like conditions and in order to sustain recovery and accelerate growth, the Fed wants to encourage inflation in both product and asset markets through aggressive monetary easing (Bernanke 2010). However, so far this has not been happening to a significant degree. Rather, US monetary expansion is adding to the boom in international commodity markets and credit and asset bubbles in major DEEs which are already facing overheating.

If continued policy of easy money in the US, strong growth in DEEs, expansion of index-based trading and investment in commodity futures and political unrest in the Middle East and North Africa sustain the boom in commodity markets, the Fed could eventually face inflation, but not of the kind it wants. The boom in capital flows to DEEs could then end in much the same way as the first post-war boom ended in the early 1980s – that is, with an abrupt shift of the US Fed to a contractionary monetary policy even before the economy fully recovers from the subprime crisis. A mitigating factor is that today a wage-price spiral is much less likely to emerge than in the 1970s because of significantly changed conditions in labour markets and reduced bargaining power of labour. Nevertheless, the bond market can still force the Fed to tighten even in the absence of strong wage response to higher oil and non-oil commodity prices in anticipation of rising inflation.

Another possible scenario is that the surge in capital flows can be brought to an end by a crisis in a major emerging economy, even without a US exit from expansionary monetary policy. This can happen as a result of a balance-of-payments crisis. An abrupt change in the willingness of international creditors and lenders to maintain exposure to a

major emerging economy with an appreciating currency and mounting current account deficits could trigger a reversal of capital flows, leading to contagion across other DEEs, as in the East Asian crisis. It can also happen as a result of a domestic banking and debt crisis brought about by an unsustainable process of credit expansion and debt accumulation, as under the subprime crisis. The likelihood of such a scenario is greater the longer the duration of the boom in capital inflows to DEEs.

Developments in China could no doubt have a strong impact on global financial conditions and capital flows to DEEs. If Chinese growth continues with full force, commodity prices are likely to remain strong, creating destabilizing impulses both for itself and the US. It could thus precipitate monetary tightening in the US. If, on the other hand, China cuts its growth considerably to counter such impulses, it can bring about a rapid turnaround in commodity prices and capital flows to DEEs, notably to commodity-rich countries.

A scenario along these lines is recently presented by Oliver Wyman (2011). According to this, the continued boom in commodity prices could eventually cause rampant inflation in China. This could lead to a real appreciation of its currency, as long advocated by the US, but would also slow its growth by triggering tighter monetary policy. A sizeable slowdown of growth in China would reduce demand for commodities, both for real use and as hedges against inflation. This, together with the global oversupply built during the boom, would bring down commodity prices, and the downturn would be aggravated by an exit of large sums of money from commodity futures. This would make investment in commodity-rich countries unviable and loans non-performing. All these could lead to a generalized increase in risk aversion, flight to safety and a reversal of capital flows to DEEs.

As noted the government in China has already taken measures along these lines to control inflation. However, it is not clear if these would lead to the kind of downturn in Chinese growth, global commodity markets and capital flows envisaged in the scenario above. It is quite unlikely that the government would be willing to cool the economy considerably, given its commitment to strong growth.

All in all, the most likely outcome would be the coincidence of the end of the current boom in capital flows and a reversal of the upswing in commodity prices even though it is difficult to predict the dynamic that would bring it about. In terms of vulnerability and exposure to such an eventuality, it is possible to distinguish among three types of DEEs. The most vulnerable are those which have been enjoying the twin benefits of global liquidity expansion – that is, the boom in commodity prices and capital flows. Most of these are located in Latin America and Africa, and some of them, e.g., Brazil and South Africa, have been running growing current account deficits despite the commodity bonanza. These countries could thus be hit twice, as in the early 1980s, by falling capital flows and commodity prices. The South East Asian countries which have also been enjoying the boom in commodity prices are less vulnerable because many of them have been running current account surpluses, preventing sharp appreciations and accumulating large stocks of reserves.

Exporters of manufactures and services which have been experiencing relatively rapid appreciations and running current account deficits, such as India and Turkey, can benefit from a downturn in commodity prices, notably in oil, as they did during the Lehman collapse, but they could still be hit by a reversal of capital flows. They could encounter sharp currency

and asset declines and insolvency in private firms due to their exposure to interest rate and exchange rate risks.

Perhaps the least vulnerable countries are those exporters of manufactures with large current account surpluses and international reserves. This is the situation in China and a few smaller East Asian economies. For such countries a slowdown in capital flows and softening of commodity prices brought about by exogenous factors could be benign, with favourable impact on their balance-of-payments and currencies. No doubt in these countries too a rapid withdrawal of capital and reduced risk appetite could trigger an asset-market correction and bring down growth, particularly if they last for a prolonged period.

H. MANAGING CAPITAL INFLOWS

1. Currency market interventions

The build up of external imbalances and financial fragility in several major emerging economies during the current surge in capital flows, including currency appreciations, widening current account deficits, and credit and asset bubbles suggest that efforts to control and manage the surge have not always been very successful. A common response has been intervention in currency markets. This has been widely practiced in East Asia where various shades of managed floating have been followed after the 1997 crisis and in a few major emerging economies elsewhere. By contrast, in Latin America, with some exceptions, (e.g. Argentina), interventions have been much less widespread as most countries have adopted inflation-targeting, leaving the currency largely to markets. Since central bank purchases of foreign exchange implies expansion of the monetary base, interventions are often accompanied by efforts to sterilize their effects on domestic credit conditions by issuing interest-bearing government (or central bank) papers, creating fiscal surpluses and raising reserve and liquidity requirements in the banking system.

Currency market interventions in DEEs are relatively successful in stabilizing nominal exchange rates and preventing large appreciations.²⁶ The consequent accumulation of reserves also provides self-insurance against sudden stops and reversals in capital flows. However, they cannot deal with the adverse consequences of a surge in capital flows in other areas. First, full sterilization is often difficult to achieve and credit expansion cannot always be prevented. This could lead to price increases in both product and asset markets, thereby appreciating the real exchange rate. Second, interventions and reserve accumulation do not prevent currency and maturity mismatches in private balance sheets, but can only provide public insurance for private risks. Furthermore, they are costly both to the government and the nation as a whole because income earned on international reserves is typically much lower than the cost of foreign capital and the interest on government debt.²⁷ Sterilization by issuing government paper can also raise this cost by pushing up interest rates when inflows are largely in equity investment. In any case, accumulating reserves from unsustainable capital inflows has little economic rationale – in effect, this would mean that the foreign money entering the economy is not used for any productive purpose but kept in low-yielding foreign assets as an insurance against its exit!

²⁶ For a discussion of the issues reviewed in this paragraph and the Asian experience, see Akyüz (2009 and 2010a) and for Latin America, see Jara and Tovar (2008).

²⁷ The annual cost of holding capital inflows in reserves was estimated to be around \$100 billion for DEEs as a whole in 2007; see Akyüz (2008).

2. Liberalizing outflows

Another response to a surge in capital inflows is to ease restrictions on outward investment by residents. As noted, this was done in several Asian countries during the pre-Lehman boom and it has again been introduced by some countries with the renewed surge resulting from quantitative easing in AEs. 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. Direct investment abroad can also bring greater benefits than international reserves. However, it would also imply maturity mismatch for the economy as a whole since long-term foreign assets would be purchased with short-term foreign money.

Moreover, like interventions, such a policy effectively does nothing to prevent currency and maturity mismatches in private balance sheets or vulnerability to shocks associated with a greater presence of foreigners in domestic asset markets. More importantly, liberalization of outward investment introduced as a counter-cyclical measure may not be easily rolled back when conditions change. Unlike official reserves, private assets abroad do not provide self-insurance for the economy against payments and currency instability. Money going out in good times is not necessarily repatriated when needed. Rather, outflows may continue with full force and even increase further when inflows decline sharply, as seen in some countries after the Lehman collapse.²⁸

3. Capital controls

Given the limits of interventions and liberalization of outward investment in dealing with some of the most damaging effects of surges in inflows, capital controls remain a viable alternative. In principle they can be applied either by source countries on outflows or by recipient countries on inflows or by both. While much of the recent debate has focussed on controls over inflows in recipient countries, there have also been suggestions that the US should control speculative outflows to its own benefit (Griffith-Jones and Gallagher 2011).

The US indeed applied interest equalization tax in the 1960s to deter capital flight, but the conditions then were quite different. At the time gold-convertibility of the dollar at a fixed rate meant that outflows would deplete US gold reserves without bringing the benefits of a weaker dollar. This is certainly not the case today when outflows from the US effectively put upward pressure on the currencies of its main trading partners, implying competitive devaluation of the US dollar. On the other hand, it is not clear if control over outflows would lead to faster credit expansion and private spending in the US since, as noted, there are problems on the demand as well as the supply side of the credit market. More importantly, carry-trade brings considerable benefits to US financial institutions, helping them consolidate their balance sheets seriously damaged by the subprime debacle.

The US Fed has argued on several occasions that capital inflows to the US made a major contribution to the subprime bubble, even if they did not cause it (Greenspan 2009;

²⁸ In emerging economies of the CIS net private inflows fell by \$120 billion between 2007 and 2008 while net private outflows rose by \$100 billion, see IMF WEO (October 2010).

Bernanke 2009, 2011). Now monetary policy in and capital flows from the US are producing destabilizing impulses for the world economy. As noted, the US is unlikely to escape unscathed from a possible consequent turmoil. It is thus in the interest of the US to reconsider the potential costs and benefits of its policy. In any case, the matter needs to be addressed at the multilateral level, as part of the reform of the international financial architecture so that destabilizing capital flows are handled at their sources as well as at their destinations.

A myth was promoted after the East Asian crisis that free capital movements should not cause concern if accompanied by effective prudential regulations. After the subprime crisis it is now evident that conventional regulations cannot secure the stability of the banking system, leave alone the stability of capital flows. Still, since a relatively important part of international capital flows are intermediated by domestic financial institutions, prudential regulations appropriately extended to transactions involving foreign assets and liabilities can no doubt play an important role in containing destabilizing impulses of surges in capital inflows by addressing three fundamental sources of fragility: maturity mismatches, currency mismatches and exchange-rate related credit risks (Akyüz 2008).

However, these would not be sufficient to secure stability since even a higher proportion of capital flows goes outside the banking system. Almost 70 per cent of total cumulative inflows to DEEs during 2002–07 were in direct and portfolio investment. Thus, measures designed to control the entry of non-residents to equity and bond markets and external borrowing by non-bank companies would also be needed.

It is often contended that after recurrent crises in the 1990s, many DEEs have taken steps to strengthen prudential measures in order to reduce the risks associated with foreign exchange positions of banks and this is seen as a main reason for their resilience to financial shocks from the subprime crisis (see, e.g., ESCAP 2009 for Asia). However, it is not clear if strengthened prudential regulations, rather than improved macroeconomic conditions, stronger current account positions, large stocks of international reserves and short-duration of the downturn played a more prominent role in containing the financial impact of the subprime shocks on DEEs.

Capital controls recently introduced by DEEs generally consist of market-friendly taxes on selected inward investment rather than direct and comprehensive restrictions.²⁹ These are now conveniently called macroprudential, with the growing acceptance of the concept in the mainstream.³⁰ FDI, among others, have often been excluded even though a surge in direct investment could have the same effect on the currency as other types of inflows. Besides, many inflows classified as FDI do not create new productive assets and are not distinguishable from portfolio investment. There are ways of slowing FDI without closing the doors to foreign investors in productive assets – e.g. through licensing procedures.

²⁹ For a summary, see World Bank (2011) and IIF (January 2011). For the Asian experience, see Nomura (2010). Some countries already had measures of control in place before the recent surge in capital flows. India, for instance, had ceilings on foreign investment on sovereign and corporate debt and a withholding tax (Subbarao 2010). However, these have not been enough to stem the upward pressure on its currency since mid-2009.

³⁰ Talley (2011). Strictly speaking macroprudential policy refers to regulations applied to banks with a view to preventing practices that may threaten the stability of the financial system and the economy as a whole, as opposed to microprudential policy designed to secure the financial health of individual institutions. For the origin and the current use of the concept, see Clement (2010) and Galati and Moessner (2011).

Measures recently adopted include taxes on fixed income and portfolio equity flows (Brazil), on foreigners' government bond purchases and banks' foreign exchange borrowing (Korea), or on interest income and capital gains earned by foreigners (Thailand and Korea). These taxes are quite low compared to profit opportunities presented by interest rate differentials and capital gains from currency appreciations and hikes in equity prices. When the interest rate differential and growth in equity prices are in double-digit figures and the currency is constantly appreciating against the dollar, a 4 per cent tax on portfolio investment or a 20 per cent tax on capital gains and interest incomes would not make much of a dent in arbitrage profits and windfalls.³¹ It should not thus come as a surprise that the Brazilian entry tax is found to have had only a small impact on interest rate arbitrage and to be ineffective in checking not only the overall volume of capital flows but also inflows into bonds.³² It is often such half-hearted attempts that lend support to the orthodox contention that capital controls do not work.

Experience shows that when policies falter in managing capital flows, there is no limit to the damage that international finance can inflict on an economy. This is now recognized even by some of the keen advocates of financial globalization as a key lesson drawn from the subprime debacle:

Looking back on the crisis, the United States, like some emerging-market nations during the 1990s, has learned that the interaction of strong capital inflows and weaknesses in the domestic financial system can produce unintended and devastating results. The appropriate response is ... to improve private sector financial practices and strengthen financial regulation, including macroprudential oversight. The ultimate objective should be to be able to manage even very large flows of domestic and international financial capital in ways that are both productive and conducive to financial stability (Bernanke 2011: 24).

Likewise, the IMF also appears to be breaking away from the orthodox single-minded opposition to restrictions over capital flows, recognizing that for both macroeconomic and prudential reasons there may be circumstances in which capital controls are a legitimate policy response to surges in capital inflows. However, while it is recognized that "controls seem to be quite effective in countries that maintain extensive system of restrictions on most categories of flows", those with "largely open capital accounts" are not advised to go in that direction but use restrictions as a last resort and on a temporary basis (Ostry *et al.* 2010: 5).

It is not, however, clear if the kind of approach advocated by the Fed and the IMF would protect DEEs against the risks posed by unstable capital flows. In all likelihood macroprudential regulations, as usually defined, would not be sufficient to contain the fragilities that capital flows can create in all the three areas discussed above. Unlike the US, DEEs cannot adopt a policy of benign neglect of the exchange rate consequences of capital flows and they need to apply restrictions outside the banking system in order to limit financial imbalances and fragility. Moreover, controls over both inflows and outflows should be part of the arsenal of public policy, used as and when necessary and in areas and doses needed, rather than introduced as *ad hoc*, temporary measures. The instruments are well

³¹ Indeed, return on emerging-market fixed-income securities in 2010 is reported to have ranged between 12 per cent and 13 per cent – see Curran (2011).

³² IMF GFSR (October 2010). Brazilian controls excluded not only FDI but also dollar borrowing by Brazilian banks and firms.

known and many of them were widely used in AEs during the 1960s and 1970s (Swoboda 1976).

I. CONCLUSIONS

At a time when the worst seems to be over, DEEs are receiving strong destabilizing impulses from AEs, notably the US, through capital flows triggered by their self-centred responses to the crisis. Bubbles are forming in credit, equity and property markets, currencies are appreciating and deficits are widening in several major emerging economies. To contain the damages that could be inflicted by such unwanted capital flows, DEEs need to take much more determined action and introduce a comprehensive and effective system of controls.

Collectively DEEs have been running a current account surplus and they do not need capital from AEs for external financing. In fact they have been recycling their twin surpluses to AEs in the form of investment in reserve currencies. However, a number of DEEs have been running structural deficits and are dependent on capital inflows to finance imports, investment and growth. There is thus a need to establish, both at the regional and global level, reliable and stable mechanisms for south-south recycling from surplus to deficit countries without going through Wall Street or the City.

Finally, current difficulties created by unstable capital flows and commodity prices show once again that the international monetary and financial system needs urgent reforms. Ways and means should be found to prevent major reserve-issuing countries from pursuing beggar-thy-neighbour policies and creating destabilizing impulses for the others. The international reserves system should be reformed so that global monetary and financial stability is not left to the whims of self-seeking policies of a single country enjoying an “exorbitant privilege”. The question of regulation of commodity speculation should also be placed squarely on the table in order to put a stop to gambling with the livelihood of the poorest segments of the world population and promote food and energy security.

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ISSN 1819-6926