Continuity or Change: Finance Capital in Developing Countries a Decade After

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A decade ago, the East Asian financial crisis, whose effects are still visible, focused attention on the dangers associated with a world dominated by fluid finance. There were a number of features of the global financial system that were starkly revealed in the course of that crisis and in the innumerable analyses that have followed it.

First, all talk of efficiency of financial markets notwithstanding, the structure of the financial system appears to be such that banks and financial institutions are not merely prone to over-exposure in individual markets, but to exposure reflective of unsound financial practices. A combination of moral hazard generated by an implicit guarantee from the State that the financial system would be bailed-out in periods of crisis[1], the herd instinct characteristic of imperfect financial markets, and the competitive thrust for speculative gains on funds garnered from profit-hungry investors, all resulted in a situation where lending to and financial investments in particular countries continued well after there was evidence that high-risk exposure had exceeded warranted limits. The corollary of this was that supply-side factors were likely to result in boom-bust cycles in financial flows to developing countries, with a surge in such flows followed in all likelihood by a sudden collapse of such flows.

Second, the sudden and whimsical turn-around in flows can set off currency speculation in the host country which can have extremely severe consequences for the exchange rate. Typically, internationally accessed capital goes to sustain an "investment boom" in stock and real estate markets, raising rates of return on such investments and fuelling the thrust to garner quick profits through arbitrage. When the speculative boom unwinds in these areas, speculation in the currency begins, precipitating its collapse.

Third, since the surge in capital flows occurs in the wake of financial liberalization in the host country, which dissociates the right to access and use foreign exchange from the responsibility to earn foreign exchange to meet future foreign currency commitments, much of the flow is directed to the private sector. In the course of the surge, private rather than public profligacy results in a boom in the real economy and accounts for the perceived "overheating" of the system. Since, the surge in capital flows also strengthens the value of the host country's currency, investment gets diverted away from tradables to

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[1] The fact that the IMF-negotiated bailout in South Korea involved banks converting $24 billion of short term debt into medium-term debt guaranteed by the government, at an interest rate ranging from 2.25 to 2.75 percentage points above LIBOR, illustrates once again why such policy mistakes occur. International banks have had to pay little penalty, if anything at all, for their lack of diligence.

nontradables, worsening the current account of the balance of payments. Hence, unless the inflows of capital are simply (and wastefully) stored up in the form of accumulated foreign exchange reserves, they could be associated with current account deficits that undermine investor confidence. This means that any country which does not exercise some sort of control or moderation over private capital inflows, creates the conditions for their eventual reversal, when the current account deficits are suddenly perceived to be too large or unsustainable.

Fourth, when the surge in capital flows is reversed, a massive liquidity crunch and a wave of bankruptcies result in severe deflation, with attendant consequences for employment and the standard of living. Asset prices collapse and pave the wave for international acquisitions of domestic firms at low prices denominated in currencies that have substantially depreciated. Such acquisitions are, however, encouraged, since they often prove to be the only means to restructure and revive cash-strapped corporations. A crisis triggered by finance capital becomes the prelude for conquest by international capital in general, with substantial changes in the ownership structure of domestic assets without much greenfield investment.

Finally, among the many lessons learnt from that crisis, one was that external debt remained a major determinant of external vulnerability in developing countries. During the early 1990s, when a surge in foreign direct and portfolio investment flows increased developing-country access to international liquidity, excessive external borrowing, of the kind which led up to the debt crises of the 1980s, was seen as being an increasingly unlikely phenomenon, especially in the more developed of the developing countries. There were three reasons provided to buttress this argument: (i) that capital flows needed to finance current account deficits were increasingly available in non-debt forms such as portfolio and direct investments; (ii) that debt financing was predominantly resorted to by governments, which in the wake of the debt crisis had been forced to restructure their finances and reduce the quantum of deficit financing, especially that based on external borrowing; and (iii) that banks which had over-exposed themselves in a few developing countries and had burnt their fingers, were now far more prudent and cautious when lending to such countries including their governments. Thus, it was argued, a combination of supply- and demand-side factors had made debt-crisis a thing of the past.

The crisis in Southeast Asia challenged this complacence. It is now widely accepted that the excessive accumulation of debt, especially short-term debt, served as the trigger for the collapse of confidence that resulted in massive capital outflows and currency depreciation. Even if we take developing countries as a group, private long-term debt inflows registered a three-fold increase from $18.6 billion in 1991 to $ 60 billion in 1995 and rose further to touch $100.3 and $105.3 billion respectively in 1996 and 1997. Short-term inflows also registered a similar increase between 1991 and 1995, and only tapered off thereafter as lenders became increasingly wary of rolling short-term funds because of the massive accumulation of debt. Thus debt remained a prominent source of external finance in the 1990s as well.

These messages driven home by the crisis triggered a debate on policies that need to be pursued at national and international levels to prevent the recurrence of boom-bust cycles of this kind. The intent here is not to track the efforts at fashioning a “new international financial architecture” or list the policies that were adopted in individual countries in

response to the crisis. Suffice it to say that, immediate responses aside, the world has increasingly moved in the direction were financial institutions themselves were to be encouraged to examine and guard against risk, markets were expected to discipline errant players and norms with regard to better accounting practices and disclosure were expected to keep market participants informed about the behaviour and performance of financial intermediaries and institutions. The question is, after decade after, are we in a world were unbridled capital flows are not inimical to stable growth, where vulnerability is reduced because of the prudence in-built into the financial system, and where the probability of financial crisis that can set back decades of advance in social welfare are significantly lower?

The burgeoning of finance

The movement in the framework of regulation and policy away from intervention to self-regulation seems to suggest that this is the case. But that movement itself is reflective of the strengthening of finance capital, which though still based in the developed industrial countries (especially the US) has only extended its reach further. How large is the world of finance globally? Demarcating the world of finance is indeed a difficult proposition. It includes a range of agents such as banks, merchant banks, insurance companies, securities firms and other non-bank financial institutions. The distinction between the activities of these entities has increasingly been eroded, as a result of financial liberalisation that encourages financial consolidation and the conversion of the larger financial entities into financial supermarkets or universal banks that undertake diverse financial activities. Finally, there are a range of markets varying from equity and debt markets to markets for derivatives and foreign exchange. Derivatives themselves are financial instruments whose value is based on some other security, such as a stock or a bond. And within derivatives there are those that are "exchange-traded" and are therefore subject to some regulation, and those that are created and exchanged in private "over-the-counter" deals, that are neither regulated nor officially recorded.

Given this diversity of agents, instruments and markets and the lack of transparency in over-the-counter markets, it is extremely difficult to guage the size and nature of the world of finance. But the available figures do point to galloping growth in the global operations of financial firms. At the end of June 1997, 23 countries reporting to the Bank of International Settlements, reported that the international asset position of banks resident in those countries stood at $9.95 trillion, involving $8.6 trillion in external assets after adjusting for local assets in international currencies. By December 2006, when 40 countries were reporting, this had risen to $29.38 trillion, with external assets totaling $26.1 trillion (bank of International Settlements, *Quarterly Review*, various issues). But the expansion in international asset position was not only the result of the increase in the countries reporting. The trend was visible in countries that reported on both dates as well. Thus, the international assets of UK-based banks had increased from $1.5 trillion to $5.2 trillion, and that of US banks from 0.74 trillion to $2.3 trillion.

But this was not all. Increasingly non-bank financial firms—pension funds, insurance companies and mutual funds—have emerged as important intermediaries between savers and investors. According to the Committee on the Global Financial System, the total financial assets of institutional investors stood at $46 trillion in 2005. Of this, insurance firms accounted for close to $17 trillion, pension funds for $12.8 trillion and mutual

funds for $16.2 trillion. The United States dominated here, accounting for as much as $21.8 trillion of institutional investors' assets, while the United Kingdom was far behind at just $4 trillion. Here too, growth has been rapid with total assets more than doubling between 1995 and 2005 from $10.5 trillion in the US and $1.8 trillion in the case of the UK. The assets of autonomous pension funds in the US, for example, rose from $786 billion in 1980, to $1.8 trillion in 1985, $2.7 trillion in 1990, $4.8 trillion in 1995, $7.4 trillion in 2000 and $8 trillion in 2004 (OECD 2001 and 2003).

Besides these institutions there are other less regulated and opaque institutions, particularly hedge funds and private equity firms, that directly manage financial assets for high net worth individuals, besides the institutional investors themselves. Assets managed by around 9000 surviving hedge funds are now placed at around $1.6 trillion (FSF 2007). And, according to one study, private equity assets under management are now nearing $400 billion in the United States and just under $200 billion in Europe. Private equity expansion is also reportedly strong with aggregate deal value growing at 51 percent annually from 2001 to 2005 in North America.[2] The largest private equity firms, such as Blackstone, the Texas Pacific Group, or Kohlberg Kravis Roberts & Co.,[3] each control companies with combined net revenues that exceed most US companies.

Transactions other than in debt and equity by these entities have also risen rapidly. In 1992, the daily volume of foreign exchange transactions in international financial markets stood at $820 billion, compared to the annual world merchandise exports of $3.8 trillion or a daily value of world merchandise trade of $10.3 billion. According to the last Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity relating to 2004, the average **daily** turnover (adjusted for double-counting) in foreign exchange markets stood at $1.9 trillion. With the average GDP generated globally in a day standing at close to $100 trillion in 2003, this appears to be a small 2 per cent relative to real economic activity across the globe. But the sum involved is huge relative the daily value of world trade. In 2003, the value of world merchandise exports touched $7.3 trillion, while that of commercial services trade rose to $1.8 trillion. Thus the daily volume of transactions in foreign exchange markets exceeded the annual value of trade in commercial services and was in excess of one quarter of the annual merchandise trade.

More significant is the trade in derivatives. The Triennial Survey indicates that the average daily volume of exchange traded derivatives amounted to $4.5 trillion in 2004. In the OTC derivatives market, average daily turnover amounted to $1.2 trillion at current exchange rates. The OTC market section consists of "non-traditional" foreign exchange derivatives – such as cross-currency swaps and options – and all interest rate derivatives contracts. Thus total derivatives trading stood at $5.7 trillion a day, which together with

[2] Figures from Venture Economics; Private Equity; and Buyouts Magazine.quoted in Bloomberg and Schumer 2006.

[3] Prominent private equity firms include: Kohlberg Kravis Roberts & Co., Blackstone Group, Texas Pacific Group, Bain Capital, Carlyle Group, Madison Dearborn, Clayton, Dubilier & Rice, TA Associates, Harvest Partners, and Warburg Pincus. Europe-based firms include: Apax Partners, BC Partners, Bridgepoint Capital, Candover, Cinven, CVC Capital Partners, Permira, Terra Firma Capital Partners and 3i

the $1.9 million daily turnover in foreign exchange market adds up to $7.6 trillion. This exceeds the annual value of global merchandise exports in 2003.

All of this has meant that liquidity in the international financial system has been at unprecedented levels, ensuring that the pressures to push funds into emerging markets that prevailed at the time of the debt crisis in the 1980s and the East Asian crisis in 1997 has only intensified. The massive increase in international liquidity that these developments imply have found banks and non-bank financial institutions desperately searching for means to keep their capital moving.

One consequence of these developments is that at different points in time one or another group of developing countries has been discovered as a "favourable" destination for foreign financial investors. Increasingly, this has meant that the international flows of capital to developing countries have little to do with the need of these countries either for balance of payments or investment finance. Increased competition and falling returns in the developed countries are also encouraging financial firms to seek out new opportunities in emerging markets. This supply side push can translate itself into an actual flow only when developing countries as a group, and the so called emerging markets among them, relax controls on the inflow of capital and the repatriation of profits and investment as well as liberalize their financial systems to accommodate international players and their operating strategies. In practice, despite the East Asian crisis and the number of other similar crises that have followed it in other parts of the world, and the evidence that such crises result from more open capital accounts, developing countries have competed with each other to attract these inflows, often not even for balance of payments reasons.

The result has been that there are a host of new financial institutions and assets in the emerging markets, which are characterized by higher rates of return ostensibly because of the greater risks of investment in these areas. The greater 'perceived risk' associated with financial instruments originating in these countries, also provides the basis for a whole range of new derivatives that bundle these risks and offer a hedge against risk in different individual markets, each of which promise high returns.

Capital flows to developing countries: New trends

Overall, the willingness to accommodate supply-side pressures has had rather dramatic implications for capital flows to developing countries. The first of these is an acceleration of financial flows to developing countries precisely during the years when as a group they have been characterised by rising surpluses on their current account (Table 1). Total flows touched a record $571 billion n 2006, having risen by 19 per cent on top of an average growth of 40 per cent during the three previous years. Relative to the GDP of these countries, total flows, at 5.1 per cent, are at levels they touched at the time of the East Asian financial crisis in 1997.

Table 1: Current Account Balance (US$ million)

	China	Indonesia	Korea	Malaysia	Philippines	Thailand
1997	36963	-4889	-8383.7	-5935.25	-4351	-3021.08
1998	31472	4096.97	40371.2	9528.65	1546	14242.5
1999	21115	5782.9	24521.9	12603.7	-2874	12427.9
2000	20518.4	7992.09	12250.8	8487.89	-2225	9313.14

2001	17401	6900.92	8032.6	7286.84	-1744	5100.88
2002	35422	7823.52	5393.9	7189.74	-279	4691.12
2003	45874.8	8106.79	11949.5	13381.2	288	4771.81
2004	68659.2	1563.02	28173.5	14871.5	1633	2759.36
2005	160818	929.309	14968	19979.9	2338	-7857.07
2006	n.a.	n.a.	6092.7	n.a.	n.a.	3230.33
Source: IMF, *International Financial Statistics Online*						

A second feature is the acceleration of the long term tendency for private flows to dominate over official (bilateral and multilateral) flows. Private debt and equity inflows, which had risen by 50 per cent a year over the three years ending 2005, increased a further 17 per cent in 2006 to touch a record $647 billion. On the other hand net official lending has in fact declined over the last two years. One factor accounting for this is the failure of the G-7 to match promises of a substantial hike in aid disbursements beyond what the retirement of the debt of few heavily indebted poor countries ensures. The other is that the more developed among the developing countries have chosen to make advance repayments of debt owed to official creditors, especially the IMF and the World Bank. Overall, principal repayments to official creditors exceeded disbursements by $70 billion in 2005 and $75 billion in 2006. In the event there has been a reverse flow of capital to the World Bank and the IMF, which is threatening the viability and influence of these institutions, especially the latter. However, the increase in private flows has more than matched the reverse flows to official creditors.

The third feature is that the dominance of private flows has meant that both equity and debt flows to developing countries have risen rapidly, with the surge being greater in the case of the former. Net private debt and equity flows to developing countries have risen from a little less that $170 billion in 2002 to close to $647 billion in 2006, an almost four-fold increase over a four-year period. While net private equity flows, which rose from $163 billion to $419 billion dominated the surge, net private debt flows too increased rapidly. Bond issues rose from $10.4 billion to $49.3 billion and borrowing from international banks from $2.3 billion to a huge $112.2 billion. What is more, net short-term debt, outflows of which tend to trigger financial crises, has risen from around half a billion in 2002 to $72 billion in 2006.

The fourth feature, which is a corollary of these developments, is that there is a high degree of concentration of flows to developing countries, implying excess exposure in a few countries. Ten countries (out of 135) accounted for 60 per cent of all borrowing during 2002-04, and that proportion has risen subsequently to touch three-fourths in 2006. In the portfolio equity market, flows to developing countries were directed at acquiring a share in equity either through the secondary market or by buying into initial public offers (IPOs). IPOs dominated in 2006, accounting for $53 billion of the $96 billion inflow. But here too there were signs of concentration. Four of the 10 largest IPOs were by Chinese companies, accounting for two-thirds of total IPO value. Another 3 of those 10 were by Russian companies, accounting for an additional 22 per cent of IPO value.

Finally, despite this rapid rise in developing country exposure, with that exposure being excessively concentrated in a few countries, the market is still overtly optimistic. Ratings

upgrades dominate downgrades in the bond market. And bond market spreads are at unusual lows. This optimism indicates that risk assessments are pro-cyclical, underestimating risk when investments are booming, and overestimating risks when markets turn downwards. But two consequences are the herding of investors in developing country markets and their willingness to invest in a larger volume of money in risky, unrated instruments.

In sum, we are now witnessing a return to a period when large and rising inflows, hers behaviour and over exposure have come to characterize capital flows from the North to the South. Is there reason to believe that this time around these development are benign, or even positive from the point of view of the developing countries as some would suggest? Besides the many crises that have occurred across the developing world, including in Argentina and Turkey, during the decade since 1997, structural changes in the global financial systm sugges that risk, ncluding systemic risk has only increased.

Structural transformation of global finance

The rapid rise of capital flows to developing countries has associated with it the institutional globalization of international finance. During the 1990s, the three-decade long process of proliferation and rise to dominance of finance in the global economy reached a new phase. Characteristic of that was a growing process of financial consolidation that was concentrating financial activity and financial decision making in a few economic organizations and integrating hitherto demarcated areas of financial activity that had been dissociated from each other to ensure transparency and discourage unsound financial practices.

A study of financial consolidation commissioned by Finance Ministers and Central Bank Governors of the Group of 10[4] found, as expected, that there had been a high level of merger and acquisition (M&A) activity in the study countries during the 1990s, with an acceleration of such activity especially in the last three years of the decade. The number of acquisitions by financial firms from the survey countries increased from around 337 in 1990 to over 900 by 1995, and more or less remained between 900 and 1000 a year since then. What is more the size of each of these acquisitions had increased substantially since the mid-1990s. The total value of financial sector M&A initiated by firms in these countries, which stood at $39 billion in 1990 and $53 billion in 1994, rose three-fold to $154 billion in 1995 and $299 billion, $499 billion and $369 billion respectively in 1997, 1998 and 1999 respectively. This was because the average value of the M&A instances covered rose from just $224 million and $111 million in 1990 and 1994, to touch $504 billion, $793 billion and $649 billion respectively during the last three years of the decade. As a result the annual value of M&A transactions, which stood at less than 0.5 per cent of the GDP of these nations in the early 1990s, had risen to as much as 2.3 per cent of their GDP in 1998. Clearly, M&A in the financial sector was creating large and complex financial organizations in the international financial system.

Further, over the 1990s as a whole the evidence seems to be that M&A activity was largely industry-specific, with banking firms tending to merge dominantly with other

[4] The study covered besides the 11 G-10 countries (US, Canada, Japan, Belgium, France, Germany, Italy, Netherlands, Sweden, Switzerland and UK), Spain and Australia.

banks. However, the pattern was changing over time. While in 1994 there was one instance of cross-industry M&A for every five instances of intra-industry mergers, the ratio had come down to one in every three by 1999. The merger and acquisition drive within the financial sector was not merely creating large and excessively powerful organizations, but firms that straddle the financial sector. Exploiting the process of financial liberalization these firms were breaking down the Chinese Walls that had been built between different segments of the financial sector.

Needless to say, in terms of region North America, especially the US, which has become the apex of financial dominance, accounted for an overwhelming share of M&A activity in the study countries in terms of both numbers and value. Europe was a close second. And given the much larger and more dispersed financial sector in the US, as well the compulsions generated by monetary union in Europe, M&A activity in North America was dominated by intra-country, 'within-border' transactions, whereas cross-border M&A played a much more important role in Europe. But as the report notes, through strategic alliances the American financial industry has also spread its tentacles across the globe. In the net, the 1990s saw an acceleration of the concentration of financial power and financial decision-making in fewer hands worldwide.

Mergers and acquisitions in developing countries

Given the wave of financial liberalization in the developing world, it was inevitable that this process would effect developing countries as well. According to a Working Group set up the Committee on the Global Financial System (CGFS) there was a surge in foreign direct investment in the financial sectors of developing countries. The study, by using cross-border M&As targeting banks in emerging market economies (EMEs), found that cross-border deals involving financial institutions from EMEs as targets, which accounted for 18% of such M&A deals worldwide during 1990-96, rose to 30% during 1997-2000. The value of financial sector FDI rose from about $6 billion during 1990-96 to $50 billion during the next four years. Such FDI peaked at $20 billion in 2001, declined sharply in 2002, but stabilized in 2003. The net result is a clear shift in the ownership structure of the financial sector (Table 2). Anecdotal evidence indicates that this figure would have risen sharply since then.

Table 2: Ownership structure in the banking systems of EMEs (1)

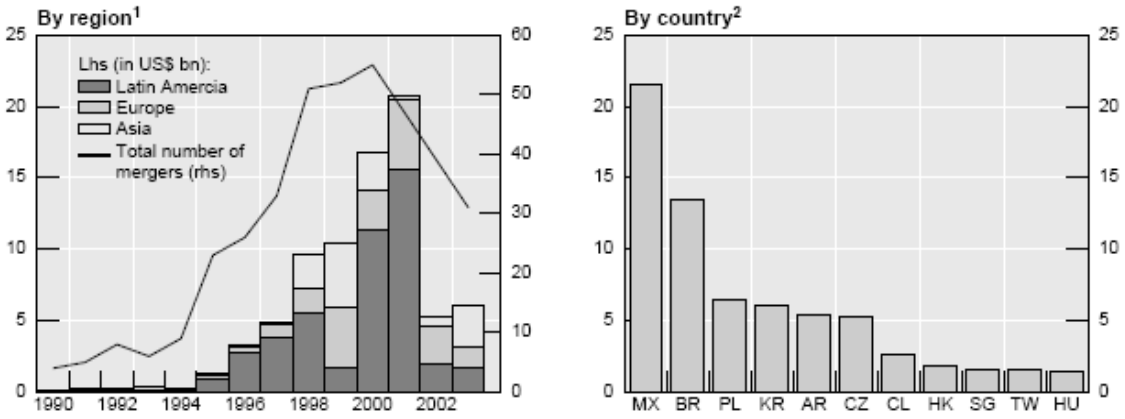
	1990				**2002 (2)**		
	Domestic		**Foreign**	**Domestic**			**Foreign**
	Private (3)	**Govt**		**Private**		**Govt**	
Asia							
China	0	100	0		98		2 (4)
Hong Kong SAR	11	0	89		28		72
Indonesia	…	…	4	37		51	13
India	4	91	5	12		80	8
Korea	75	21	4	62		30	8
Malaysia	…	…	…		72		18
Philippines	84	7	9	70		12	18
Singapore	11	0	89	24		0	76
Thailand	82	13	5	51		31	18
Latin America							

Argentina	…	36 (5)	10 (6)	19		33	48
Brazil	30	64	6	27		46	27
Chile	62	19	19	46		13	42
Mexico	1	97	2	18		0	82
Peru	41	55	4	43		11	46
Venezuela	93	67	17	39		27	34
Central and eastern Europe							
Bulgaria	…	…	0	20		13	67
Czech Republic	12 (5)	78 (5)	10 (5)	14		4	82
Estonia	…	…	…	1		0	99
Hungary	9	81	10	11		27	62
Poland	17 (7)	80 (7)	3 (7)	10		17	63
Russia	…	…	6	23		68	9
Slovakia	…	…	0	9		5	85

1 Percentage share of total bank assets. 2002 figures for central and eastern Europe: percentage share of regulatory capital. 2 Data are shown for the latest year available, which is mainly 2002. 3 Calculated as residual. 4 1999. 5 1994. 6 Average of 1988-93. 7 1993. … = not available.

Source: CGFS (2004)

Graph 1 **Acquisition of banks in EMEs**



MX = Mexico, BR = Brazil, PL = Poland, KR = South Korea, AR = Argentina, CZ = Czech Republic, CL = Chile, HK = Hong Kong SAR, SG = Singapore, TW = Taiwan (China), HU = Hungary.

[1] By residency of purchased bank. [2] Cumulative from 1990 to 2003, in billions of US dollars.

Sources: Thomson Financial; Bank of England.

Turning to Asia, CGFS found that: "The proportion of cross-border M&As in East Asia's financial sector initially was small compared with other regions. The value of cross-border M&As targeting non-Japan Asian countries was $14 billion or 17% of the total during 1990-2003. Asia, however, has been one of the fastest growing target regions for M&A, with a sizeable jump in cross-border M&A activity occurring in Korea and

Thailand. In addition, there has been a large number of small-value cross-border M&A transactions in the finance sector between East Asian economies. In 2003, Asia received the largest share of FSFDI inflows."

While liberalization and the high returns offered by hitherto protected financial market offered new opportunities, financial crises favoured globalization. As the CGFS study notes: "A standard response to crises by EME governments, encouraged by the international financial institutions, was to accelerate financial liberalisation and to recapitalise banks with the help of foreign investors. This was the case in Latin America in the years following the 1994 Mexican crisis." In Asia also governments liberalized the terms of foreign entry and ownership after the crisis, but because of a major role played by governments in the recapitalization of banks, the expansion of foreign presence came with a delay.

Thus, the global financial system is obviously characterised by a high degree of centralisation. With US financial institutions intermediating global capital flows, the investment decisions of a few individuals in a few institutions virtually determines the nature of the "exposure" of the global financial system. The growing presence of a few international players in the developing countries and the consolidation of these players had implications for the accumulation of risk in markets where agents tend to herd. Unfortunately, unregulated entities making huge profits on highly speculative investments are at the core of that system.

The role of new institutions: Hedge Funds and private equity firms

Liberalisation has not just increased consolidation and global integration of the banking industry in developing countries. Many of them are now home to the activities of institutions like hedge funds and private equity firms that are loosely regulated in the developed countries, are highly leveraged and pursue unconventional, speculative and risky investment strategies in relatively illiquid assets aimed at exploiting mispricing and arbitrage opportunities to ensure high returns for their investors. With investment banks and fund managers adopting practices similar to these entities the distinction between these and other financial institutions is blurring at the level of activity, excepting perhaps for the concentration of the activities of these entities on specific kinds of trades. But hedge funds are important players, with their business accounting for 15-20 per cent of the revenues of the investment banking industry. Moreover, given their highly leveraged operations the share of these entities in actual trading is much higher than suggested by the assets under their management (Table 3).

Table 3: Shares of Hedge Fund Trading in US Markets

	(Per cent)
Cash equities	30
Credit Derivatives (plain vanilla)	60
Credit Derivatives (structured)	33
Emerging Mkt Bonds	45
Distressed debt	47
Leveraged loan trading	33
High Yield bond trading	25

Source: Greenwich Associates, as reported in the Financial Times.

Many years back the Group of 30 had cautioned governments that these funds were a source of concern because they were prone to "undercapitalisation, faulty systems, inadequate supervision and human error". While controversial for long, hedge funds gained notoriety in 1992 when George Soros' Quantum Fund was held responsible for the speculative attack on the British pound and in the late 1990s with the collapse of the much publicized Long Term Capital Management with its star traders, Nobel-winning economists and high-return track record. For developing countries, their notoriety was linked to the role they are alleged to have played in the currency speculation that precipitated the 1997 crisis.

Yet hedge fund activity in developing countries has increased substantially in recent years, including in Asia. Encouraged by liberalization that ensures not only entry but the proliferation of instruments, the growth of derivatives markets, the emergence of futures, and the increase in shorting possibilities, these firms have devoted much attention to these markets. According to one estimate quoted by the Financial Stability Forum (2007), the share of hedge fund assets managed in Asia has risen from 5% in 2002 to 8% in 2006, while the share managed in Europe has doubled, to 24%, over the same period. These increases have been at the expense of the US, which while recording a significant increase in hedge fund activity in absolute terms, has seen a decline in share of the global total from more than 80% in 2002 to about 65% in 2006.

Besides hedge funds, portfolio diversification by financial investors in developed countries seeking new targets, higher returns and/or a hedge has over the last quarter of a century has seen a revival of private equity firms. Private equity, as originally broadly defined, involves investment in equity linked to an asset that is not listed and therefore not publicly traded in stock markets. More recently, private equity firms have invested even in listed companies, though the buy-out by the investor occurs through a negotiated process, with the buy-out being friendly or hostile depending on whether the negotiation is with the controlling interest or not. In sum, private equity is acquired either through the private placement of new shares or the sale of pre-existing shares by the controlling interest or minority shareholder, and therefore has features that characterize most take-overs. It can be bought directly by an investor or through an intermediary such as a private equity fund that mobilizes capital to finance a set of such investments. However, capital mobilized from investors is substantially enhanced by borrowing to finance acquisitions.

Given the broad definition of what constitutes private equity, a range of transactions and/or assets fall under its purview, including venture capital investments, leveraged buyouts and mezzanine debt financing, where the creditor expects to gain from the appreciation in equity value by exploiting conversion features such as rights, warrants or options.

Despite the entry of different kinds of investors into this area over the years, only as recently as the 1970s, private equity investment was restricted to venture capital inputs into small firms in fast-growing sectors by high net worth families like the Whitneys and the Rockefellers. Though venture capital investments have come a long way since then, as illustrated by their successes in the information technology area, they account today

for a small share of less than a fifth of the private equity business.[5] Non-venture investments have become an important and growing part of the private equity business. In fact, it was the raft of leveraged buy-outs of the 1980s that gave private equity its fame, making it largely an activity which involved the take over of relatively large companies financed substantially with debt.

The transformation of the 1980s was related to two developments in the world of increasingly deregulated finance. The first was the desire of banks and pension funds to find new avenues for investment of their burgeoning resources. Public pension funds like the California Public Employees' Retirement System, the largest public pension fund in the US, have taken the lead. According to Politi and Guerrera, (2006), quoting estimates by Russell Investment Group, an investor services company, public pension funds have nearly doubled their exposure to private equity over the past decade and on average invest some 8 per cent of their funds in that asset class. On the other hand, corporate pension funds invest less than 7 per cent and their exposure has decreased slightly since 1995. A similar though different situation characterised the banks. In their case, developments such as the oil price increases of the 1970s, which led to large deposits of petrodollar surpluses, result in an increase in their lendable resources and had them also looking for new avenues for investment and lending.

The second development of significance, influenced by the first, was the relaxation of rules relating to investments that could be undertaken by institutional investors like banks and pension funds. In 1971, the Competition and Credit Control policy in the UK gave banks greater investment flexibility. Similarly, in the US, a clarification of the "prudent man" rule (incorporated in the Employee Retirement Income Security Act of 1974)[6] issued by the US Labour Department in 1978 relaxed many of the limitations placed on institutional pension funds allowing them to invest in private equity and other alternative assets. Since then there have been a series of structural and legal changes in Europe and the US, involving *inter alia* pension fund and insurance company regulation, which have had the same impact. These have been accompanied by changes in taxation laws that have encouraged leveraged investments and made investments that promise capital gains more attractive. Most recently in the US, the Gramm-Leach Bliley Act, which became law on November 12, 1999, is seen as having opened new opportunities for lenders interested in mezzanine financing or other equity participation to support leveraged buyouts and other leveraged transactions, and for banking organizations interested in venture capital and other equity-based financing. The law expanded the permitted securities and merchant banking activities of those bank holding companies that are well-

[5] Figures from "The New Kings of Capitalism", *The Economist*, November 25, 2004. Instances of companies backed by private equity venture capital are Digital Equipment (which went public in 1968 valued at US$37 million after Digital's original funding of US$70,000 in 1959), Federal Express and Apple Computer.

[6] The "prudent man rule" refers to the fiduciary responsibility of investment managers. It requires that an investment manager must only invest funds entrusted to him/her as would a person of prudence, i.e. with discretion, care and intelligence. Before 1978, each investment in a portfolio was expected to meet safety standards in and of itself. Under the revised interpretation, the Department of Labour accepted the concept of portfolio diversification of risk, thereby permitting portfolio managers to invest a small portion of the portfolio in riskier investments as long as the portfolio in the aggregate met fiduciary standards of risk. See Craig (2001).

capitalized and well-managed. Among these new activities is investment in portfolio companies, the creation of their own qualifying private equity funds or investing in other qualifying private equity funds.

Table 4: Sources of European Private Equity 1998-2002	
Total 1998-2002 (€ billion)	161.3
Shares	***Percent***
Corporate Investors	8
Private Individuals	6
Govt. Agencies	6
Banks	24
Pension Funds	22
Insurance Cos.	12
Funds of Funds	9
Academic Institutions	1
Capital Markets	1
Realised Capital Gains	5
Others	6
Source: European Private Equity and Venture	
Capital Association at	
http://www.evca.com/html/investors/inv_why_01.asp	

The expansion of funds available for and seeking alternative investments resulted in increased demand for an asset class like private equity, and for intermediaries who could intermediate investment of such capital. Simultaneously, interest in and concern about private equity increased with the proliferation of private equity firms and funds in which investments were made not just by high net worth individuals but also institutions such as banks and pension funds. Banks and pension funds account for an overwhelming share of total capital raised by private equity firms. In Europe for example, of the total of Euro 161.3 billion raised between 1998 and 2002, banks, pension funds and insurance companies accounted for 58 percent of the commitment (Table 4). A more general survey for 2005 focused on US funds conducted by Dow Jones Private Equity Analyst arrived at a lower but similarly substantial figure: 45 percent. (Tracy 2006).

Figures from Venture Economics suggest that between 1980 and 2000, the amount of commitments of capital to funds managed by private equity firms increased from $2.3 billion to about $177 billion, cumulatively totaling $737 billion (Table 4). However, estimates of the industry's size vary, reflecting the secrecy that shrouds it. The largest

private equity firms, such as Blackstone, the Texas Pacific Group, or Kohlberg Kravis Roberts & Co.,[7] each control companies with combined net revenues that exceed most US companies. And the large volumes of committed investor capital controlled by these funds and their substantial access to bank credit make them consider and execute deals that are huge and often unprecedented. One such recent deal is the Blackstone take over, after an intense battle with Vornado Realty Trust, of Equity Office Properties (the publicly traded owner of US office towers) at a price of $39 billion. This is reportedly the largest leveraged buyout ever.

Table 5: New Commitments to Private Equity Partnerships			
Billions of dollars			
Year	Total	Venture	Non-Venture
1980	2.3	2.1	0.2
1981	1.8	1.6	0.3
1982	2.6	2	0.6
1983	5.6	4.2	1.4
1984	6.6	3.2	3.5
1985	6.3	3.1	3.2
1986	8.9	3.7	5.1
1987	21.2	4.8	16.4
1988	15.9	4.5	11.4
1989	17.5	5.6	11.9
1990	10.8	3.1	7.7
1991	7.1	1.8	5.3
1992	18	5	13
1993	22.3	4.5	17.7
1994	30.6	7.6	23
1995	41.8	9.9	31.9
1996	48.2	11.8	36.4
1997	71.7	17.1	54.6

[7] Prominent private equity firms include: Kohlberg Kravis Roberts & Co., Blackstone Group, Texas Pacific Group, Bain Capital, Carlyle Group, Madison Dearborn, Clayton, Dubilier & Rice, TA Associates, Harvest Partners, and Warburg Pincus. Europe-based firms include: Apax Partners, BC Partners, Bridgepoint Capital, Candover, Cinven, CVC Capital Partners, Permira, Terra Firma Capital Partners and 3i

1998	97.4	29.4	68
1999	123.2	60	63.2
2000	177.3	104.8	72.5
1980-2000	737.1	289.8	447.3
Source: Covitz and Liang (2002)			

While private equity has been growing rapidly, its activities in the developed countries is being curbed by the growing opposition to these firms and their activities. In particular they are being accused of yielding the hatchet against workers or breaking up companies when firms are being restructured. Brendan Barber, the general secretary of the Trade Union Congress in the UK recently launched an attack on the private equity industry (Adams and Smith 2007), accusing some operators of being "amoral asset-strippers" and "casino capitalists". Barber said that, while private equity had sometimes turned round ailing companies, operators sometimes gave the impression "of being little more than amoral asset-strippers after a quick buck; casino capitalists enjoying huge personal windfalls from deals at the same time as they gamble with other people's futures."

In his view: "The problem is simple: private equity can steer clear of the responsibilities a public company has to live up to. Its owners will disclose as little as possible about what they are doing, and why. In companies that are often leveraged to the hilt, it's employees who end up shouldering much of the risk, with downward pressure on pay, pensions and job security."

Meanwhile, criticism is growing among investors as well about the practices and performance of private equity firms. The view that private equity firms align the interests of investors, or limited partners, and the general partners who manage the funds, is under challenge. This is because, as noted earlier, even as funds have grown in size, the management fee defined as a per cent of the fund has reduced little. In the past, general partners were paid an annual management fee of 1.5 to 2 per cent, with a profit share of 20 per cent. These percentages should have fallen to reflect the growing scale of funds under management. In practice, there has merely been a marginal reduction in management fees from 2 per cent to 1.5 per cent. This means that fund managers earn huge fees on the billions of dollars they have managed to raise in recent times, even if the investments do not garner promised returns. On the other hand a study by David Swensen found that net of fees, limited partners received lower than market returns with substantial levels of risk while the general partners received large fees. There is evidence it appears that incentive structures are such that general partners satisfied with high fees are not delivering performance and returns to limited partners, in a market that is flush with funds.

A major criticism of private equity is their lack of transparency. Paul Myners, former chairman of Marks and Spencer, whose review of institutional investment in 2002 had recommended that pension schemes should consider investing in a wide range of asset classes including private equity and hedge funds, declared: “We are seeing public companies go private and they go from being transparent and accountable into a dark

box." (Packard and Smith 207). The performance of funds and their underlying businesses should remain as open as those of public companies, he reportedly said.

Finally, private equity firms are seen as being favoured by government in the UK because of its practice of taxing profits after interest has been deducted. Since private equity firms finance their investments with a high proportion of debt, which reduces taxable profit, buy-out firms are seen as being given an unfair advantage in pursuing their questionable practices.

One result of all this is that private equity firms are finding their business getting harder to conduct in the US and Europe. Not surprisingly, there are signs that the business is increasingly moving overseas, especially to emerging market countries where markets are booming because of foreign institutional investment inflows.

According to Emerging Markets Private Equity Association, fundraising for emerging market private equity surged in 2005 and 2006. Estimated at $3.4 billion and $5.8 billion in 2003 and 2004, the figure shot up to 22.1 billion in 2004 and $21.9 billion in the period to November 1 during 2006. Asia (excluding Japan, Australia and New Zealand) dominated the surge, with the figure rising from $2.2 and $2.8 billion in 2003 and 2004 to $15.4 billion during 2005 and $14.5 billion during the first ten months of 2006.[8]

Dealmaking in the region has also gained momentum. Dealogic estimates that the value of private equity deals in the Asia Pacific, excluding Japan, more than tripled to $26 billion in 2006 from $7 billion in 2005.[9] Private equity buyouts have accounted for 7 percent of regional merger and acquisition volume this year, up from 3 percent in 2005 but still below the global figure of 17 percent. Though Australia accounted for $11.7 billion in activity, deals in the Indian sub-continent jumped to $3.1 billion in 2006 from $764 million in 2005, with Kohlberg Kravis Roberts & Co.'s $900 million purchase of Flextronics Software Systems, India's largest deal. North Asia deals totalled $10.4 billion, led by Goldman Sachs' $2.6 billion investment in Industrial & Commercial Bank of China, this year's biggest regional deal. Investment banks have raked in $304 million in net revenue from private equity investors thus far in 2006, compared with $239 million last year.

Table 6: Emerging Markets Private Equity Fundraising ($ millions)

	Asia (ex Jap/ANZ)	CEE/Russia	Latin America	Africa/Middle East	Total EM
2003	2200	406	417	350	3373
2004	2800	1777	714	545	5836

[8] "Emerging Markets Private Equity: The current landscape and the road ahead", EM PE Quarterly Review, Volume II, Issue 4 Q4 2006, available at www.empea.net/docs/newsletters/EMPE_QuarterlyReview_Vol2_Issue4.pdf, accessed 2 February 2007.

[9] Metrics 2.0, "Asia Pacific Private Equity Deals Tripled in 2006", http://www.metrics2.com/blog/2006/12/13/asia_pacific_private_equity_deals_tripled_in_2006.html, accessed 27 February 2007

2005	15446	2711	1272	2706	22135
2006	14528	2759	813	3807	21907

Source: "Emerging Markets Private Equity: The current landscape and the road ahead", EM PE Quarterly Review, Volume II, Issue 4 Q4 2006, available at www.empea.net/docs/newsletters/EMPE_QuarterlyReview_Vol2_Issue4.pdf, accessed 27 February 2007.

It must be noted that these figures differ substantially from those provided by Thomson Financial, Thomson's figures point to investment of $7.6 billion in private equity deals in 2006 and does not point to a surge in 2006. However, Thomson does suggest that foreign investments accounted for 63 percent of the Asian private equity market in 2006, with $4.39 billion out of the total.[10]

India's experience is illustrative of the rush of private equity to the developing world. Observers began to take note of private equity's growing presence in India when in late 2002 Oak Hill Capital and Financial Technology Ventures resorted to a buyout deal by backing a management bid to acquire Conseco's stake in Delhi-based EXL Services. Subsequently in September 2003, ICICI Venture bought out the Tatas' controlling stake in Tata Infomedia. Three months later, CDC Capital Partners, the UK-based private equity investor, struck a Rs 75-crore deal to buy ICI India's industrial chemicals business in Gujarat (Sengupta 2004). The private equity asset class had arrived in the country.

Since then there has been an increase in such activity with all the majors finding their way to the country. Growth has also been substantial. The total number of M&A deals struck in 2006 was estimated at 782 ($28.2 billion) compared with 467 ($18.3 million) in 2005[11]. Of these, 302 involved private equity. Private equity investments also saw substantial growth in 2006. From $1.1 billion invested in 60 deals in 2004, private equity investments rose to $2 billion in 124 deals in 2005, and a remarkable $7.9 billion in 302 deals in 2006. This remarkable 287 percent increase in the total value of private equity during 2006, points to a growing value in each deal. There were more than 29 deals valued at over $50 million as against 10 such in 2005. The average private equity investment size increased from $16.40 million in 2005 to $26.02 million in 2006.

Some of the big deals included Kohlberg Kravis Roberts & Co's $900-million investment in Flextronics Software Systems; Providence Equity Partner's $400-million investment in Idea Cellular and Temasek Holdings Pte's $330-million investment in Tata Teleservices Ltd. Such deals are continuing in 2007 with Blackstone Group acquiring a 26 percent stake in Ushodaya Enterprises Limited , which publishes Telugu-language newspaper *Eenadu* and owns television channels under the same name.

The transformation of the financial sector

[10] Thomson Financial (2006), *Thomson Financial Asia Pacfic Private Equity Markets, 2006 Year-end report: Asian Private Equity Reach Record High*, Hong Kong: The Thomson Corporation Hong Kong Ltd.

[11] "2006: Milestone year for mergers, acquisitions", *The Hindu Business Line*, Sunday, 7 January 2007.

It is to be expected that as these entities are permitted to enter and do actually enter developing country markets, they would be interested in the replication of their trading practices in the new environment. This has resulted in a substantial transformation of the financial sector in these countries post-liberalisation. There are three broad objectives that the process of financial liberalization serves: (i) it opens the country to new forms and larger volumes of international financial flows, in order to attract a part of the substantially increased flows of financial capital to the so-called "emerging markets" since the late-1970s; (ii) to facilitate these inflows it liberalizes to differing degree the terms governing outflows of foreign exchange in the form of current account investment income payments and in the form of capital account transfers for permitted transactions; and (iii) it transforms the structure of the financial sector and the nature and operations of financial firms in a manner that makes the financial system resemble that in countries like the US and the UK.

It has been argued for sometime now that the first two of these, involving liberalization of controls on inflows and outflows of capital respectively, have resulted in an increase in financial fragility in developing countries, making them prone to periodic financial and currency crises.[12] Analyses of individual instances of crises have tended to conclude that the nature and timing of these crises had much to do with the shift to a more liberal and open financial regime. What is more, crises rarely lead to controls on capital inflows and reduced dependence on them. Rather adjustment strategies emphasise further financial liberalization, resulting in a history of periodic financial failure.

There are a number of aspects and consequences to such liberalisation as implemented in practice. To start with, financial liberalization removes or dilutes controls on the entry of new financial firms, subject to their meeting pre-specified norms with regard to capital investments. This aspect of liberalization inevitably applies to both domestic and foreign financial firms, and caps on equity that can be held by foreign investors in domestic financial firms are gradually raised and done away with. Easier conditions of entry do not automatically increase competition in the conventional sense, since liberalization also involves freedom to acquire financial firms for domestic and foreign players and extends to permissions provided to foreign institutional investors, pension funds and hedge funds to invest in equity and debt markets. This often triggers a process of consolidation.

Secondly, liberalization involves a reduction in controls over the investments that can be undertaken by financial agents. This can take two forms. Financial agents could be permitted to invest in areas they were not permitted to enter earlier. Most regulated financial systems sought to keep separate the different segments of the financial sector such as banking, merchant banking, the mutual fund business and insurance. Agents in one segment were not permitted to invest in another for fear of conflicts of interest that could affect business practices adversely. Financial liberalization involves the breaking down of the regulatory walls separating these sectors, leading in the final analysis to the emergence of the so-called "universal banks" or financial supermarkets. The consequent ability of financial agents to straddle multiple financial activities implies that the linkages between different financial markets tend to increase, with developments in any one market affecting others to a far greater degree than they did before.

[12] For an early elaboration of this argument see Diaz-Alejandro (1985).

Further, liberalization also involves the expansion of the sources from and instruments through which firms or financial agents can access funds. This not only leads to the proliferation of instruments such as commercial paper and certificates of deposit issued in the domestic market, but the liberalization of the rules governing the kinds of financial instruments that can be issued and acquired in the system. Financial instruments allow agents to share to differing degrees financial gains and risks, where the gains involved are incomes and asset price appreciation and the risks are, therefore, income and capital risks. These assets can either be issued directly by those looking for capital for productive investments or by intermediaries expecting to obtain a part of the incomes in return for carrying part of the risk.

Third, the universalization of banking and the proliferation of financial assets that liberalization involves, transforms the traditional role of the banking system of being the principal intermediary bearing risks in the system. It played this role by accepting relatively small individual liabilities of short maturities that were highly liquid and involved low income and capital risk and made large, relatively illiquid and risky investments of longer maturities. The protection afforded to the banking system and strong regulatory constraints on it were meant to ensure its viability given the role it played.

The way that role is transformed is captured, for example, in the following description of the bank in today's more liberalised financial system: "There was a time when a bank would lend to a business or provide a mortgage, would take the asset and put it on their books much the way a museum would place a piece of art on the wall or under glass – to be admired and valued for its security and constant return. Times have changed. Banks now take those assets, structure them into pools, and sell securities based on those pools to institutional investors and portfolio managers. In effect, they use their balance sheets not as museums, but as parking lots – temporary holding spaces to bundle up assets and sell them to those investors who have a far greater interest in holding those assets for the long term. " (OECD, 2000: 8). Thus, liberalisation triggers a shift in the role of the "pure" banking system as the principal bearer of financial risk to one where its focus is that of generating financial assets that transfer risks to the portfolio of institutions willing to hold them.

Finally, financial liberalization eases conditions for the participation of both firms and investors in the stock market by diluting or doing away with listing conditions, by providing freedom in pricing of new issues, by permitting greater freedoms to intermediaries such as brokers and by relaxing conditions with regard to borrowing against shares and investing borrowed funds in the market.

Homogenisation of financial sectors

Financial liberalization by institutionally linking different segments of financial markets by permitting the emergence of universal banks or financial supermarkets of the kind referred to above, the liberalization process increases the degree of entanglement of different agents within the financial system and increases the impact of financial failure in units in any one segment of the financial system on agents elsewhere in the system.

It also allows for a process of segment-wise and systemic consolidation of the financial system, with the emergence of larger financial units and a growing role for foreign firms

in the domestic financial market. This does mean that the implications of failure of individual financial agents for the rest of the financial system is so large that the government is forced to intervene when wrong judgments or financial malpractice results in the threat of closure of financial firms.

Signs of vulnerability

Stock market boom

Associated with these aggregate trends are developments that signify a substantial increase in vulnerability. One obvious sign that the transformation in the volume and pattern of capital flows is resulting in increased vulnerability is the fact that emerging markets across the Asian region are experiencing a massive "boom" in their stock markets. Market observers, the financial media and a range of analysts agree that foreign investments have been an important force, even if not always the only one, driving markets to their unprecedented highs. There are a number of reasons why this trend points to vulnerability. To start with, the spike in stock prices is extremely sharp. Second, this boom is generalised and occurs independent of the relative economic performance of the country concerned. This not only implies that fundamentals do not have the prime role in determining the behaviour of markets, it also means that the danger of contagion is real. Third, this occurs both in countries where investors have burnet their fingers in 1997 and in those they have not.

Revival of the credit spiral

A second indicator of vulnerability is the revival of the credit spiral, which underlay the East Asian crisis. It was no doubt true that in the years immediately following the crisis the flow of private non-guaranteed debt to developing countries as a group fell till 2000 and registered a marginal decline in the subsequent two years to 2002. With government's wanting to discourage debt-dependence, and creditors wary of lending any further, even public and publicly guaranteed debt from private creditors registered a sharp decline during those years. But matters seem to have changed dramatically over the last four years. The flow of non-guaranteed debt from private sources into developing countries has increased by 250 per cent over the four years ending 2006, or at a scorching pace of 28 per cent compound per annum. Simultaneously, governments too seem to have overcome their fear of debt with public or publicly guaranteed debt from private creditors having risen by more than 150 per cent or growing at a compound rate of around 11 per cent annum. In sum, creditors appear willing to lend and debtors willing to borrow, resulting in an aggregate scenario that spells debt dependence of a much larger magnitude than preceded the 1997 crisis.

There has been some change in composition by source as well. While in the immediate aftermath of the 1997 crisis, the relatively small inflow of debt was on account of bond issues by developing countries, with bank credit collapsing and turning negative, in more recent years there has been a revival of bank credit. In terms of target, as was happening at the time of the crisis there is a sharp shift in borrowing away from the public to the private sector. The corporate share of external debt has risen from less than one-fifth of the total in the late 1990s to more than one-half in 2006.

Table 7: The Structure of Private Credit to Developing Countries ($ bn)					
	Bonds	**Banks**	**Others**	**Short-term**	**Total**
1998	38.8	49.4	-5.3	-65.3	17.6
1999	30.1	-5.3	-1.5	-17.3	6
2000	20.9	-3.8	-3.7	-6.3	7.1
2001	10.3	7.8	-6.5	-23.7	-12.1
2002	10.4	2.3	-6.9	0.5	6.3
2003	24.7	14.5	-4.4	55	89.8
2004	39.8	50.6	-4	68.4	154.8
2005	55.1	86	-4.9	67.7	203.9
2006e	49.3	112.2	-5.5	72	228

What is disturbing is the extreme concentration of these flows, with a growing and now substantial share of it flowing to Europe and Central Asia. In 2006, 57 per cent of flows of private non-guaranteed debt went to this region while East Asia ad the Pacific received 14 per cent and Latina America and the Caribbean 19 per cent. Just 10 countries accounted for thee-fourths of all borrowing in 2006, a sharp increase from the already high 60 per cent average during 2002-04. What is more, the evidence points to a growing share of lending to banks in developing countries, interested in exploiting the lower interest rates in international as opposed to domestic markets. Loan commitments to the banking sector totaled $32 billion in 2006, which exceeded commitments to the oil and gas sector, a traditional leader.

Finally, the World Bank's report on *Global Development Finance 2007* suggests that there has been a decline in credit quality accompanying these developments. To quote: "As private debt flows swell, riskier borrowers may be taking a larger share of the market. The share of bonds issued by unrated (sovereign and corporate) borrowers rose from 10 percent in 2000 to 37 percent in 2006, and the share of unsecured loans in total bank lending rose from 50 percent in 2002 to almost 80 percent in 2006."

The point to note, however, is that despite these disconcerting trends creditor confidence is at a high. The average spread between interest rates charged on developing country loan commitments and the benchmark LIBOR fell from more than 200 basis points in 2002 to 125 in 2006 and the average loan maturities have become longer.

One inevitable conclusion from this evidence is that creditors are not pricing risk adequately and taking it into account when determining exposures. One explanation could be that creditor profiles have changed significantly, with the entry of intermediaries such as hedge funds and other less risk-averse entities into the credit market. The other could be the growing role of credit derivatives, which allows for the pooling of risk and the transfer of risk to entities that are less capable of assessing them.

These two aspects are indeed related. The emergence of credit derivative has rendered credit assets tradable. This allows those looking for quick or early profits to operate in this area. But even here financial innovation has played a role. Till recently, other than banks, the major players in the credit business were pension funds and insurers. But with equities proving to be inadequately remunerative investments, banks increasingly geared

to creating new instruments based on debt, and credit derivatives offering liquid credit instruments, new players have emerged as investors–hedge funds and pension funds–and new operators–specialized credit funds and managers of collateralized debt obligations–have emerged as providers of instruments.

According to figures reported by the *Financial Times* "The outstanding notional volume of credit derivatives contracts has doubled every year since the start of this decade to reach $26,000bn in the middle of last year. This has led many traditional credit investors to rethink their strategies. But above all, it has triggered a sharp increase in the number and scale of credit-focused hedge funds. In 1990, according to Hedge Fund Research, hedge funds focused on fixed income strategies accounted for just over 3 per cent of the $39bn of assets under management in the industry. By the end of last year, a more varied array of credit-related strategies accounted for almost 7.5 per cent of a $1,400bn industry – and that does not include convertible bond arbitrage. Similarly, the volume of assets under management in fixed-income arbitrage strategies alone, which seek to exploit price differences between related bonds and rely heavily on derivatives, has leapt from $5.8bn in 2001 to $41bn at the end of 2006, according to HFR." Since these developments are taking pace in the emerging markets as well, hedge funds are looking for a role there as well.

The role of hedge funds

These developments are problematic because of the role that hedge funds are known to play and have played. There are four factors that make these funds controversial. First, the fact that they adopt unconventional trading strategies involving global macro strategies, which bet on big economic trends in equities, debt, commodities or foreign exchange markets, and arbitrage that exploits small differences in prices between different assets and instruments. Second, that since their role is to ensure higher than benchmark returns, they have to identify and undertake investments that do not attract the regular financial institutions, and tend to be risky. In fact, there are many who argue that such niche areas are becoming difficult to identify, because earlier such trends were months long and slow moving, but more recently the top trends are seen as just lasting a few weeks with the opportunities for profit lasting a few days. As a result the hedge fund business is seen as likely to shrink, though there is no evidence of that as yet because of new trades that are being discovered. Third, hedge funds are highly leveraged with their investment turning out to be many multiples of the assets under their management. Finally, hedge funds are lightly regulated in the home countries, when compared to other investment institutions such as mutual funds that need to register with the Securities and Exchange Commission in the US, and meet its disclosure requirements. Moreover, in the US, for example, the "Investment Company Act of 1940 prescribes features of the investment company's organisational structure and restricts its use of leverage (widely used by hedge funds), short selling (of borrowed stocks in anticipation of a fall in their prices which will make possible a profit when they are repaid), and investments in illiquid securities (essential to the strategy of distressed securities). Exemption here is available to companies not making public offerings and with less than 100 investors or with securities owned only by "qualified investors", i.e. persons or family companies with overall investments of at least USD 5 million, certain trusts, and institutional investors with assets of at least USD 25 million." (Cornford 2007)

A September 2003 SEC Report on The Implications of the Growth of Hedge Funds noted that staff enforcement investigations had found a significant role for hedge funds in violations such as late trading, market timing an market manipulation. What is more, there was evidence of overstatement of performance by hedge fund advisers, payment of unnecessary and undisclosed commissions and misappropriation of client assets by using parallel unregistered advisory firms and hedge funds. Eighty per cent of these cases involved hedge funds not registered with the SEC, resulting in the fact that it had no information on the performance of these funds.

The operations of the now infamous Long Term Capital Management illustrate this. On an equity base of a little less than $5 billion, LTCM had borrowed enough to undertake investments valued at $200 billion or more. This was possible because there was nothing in the regulatory mechanism that limited the exposure of these institutions relative to their capital base. Yet when several of its own investments came unstuck in 1998 and LTCM therefore faced major repayment problems of its own, it had to be rescued by the US Federal Reserve, because the costs of its collapse were seen to be too major.

One example of the kind of strategies hedge funds adopt comes from the ERM crisis of 1992. The strategy was based on the presumption that member countries of the European Monetary System (EMS) were converging towards monetary union, which would require countries characterized by high inflation to realign their exchange rates. However, bets were based on the speculation that the extent of exchange rate depreciation would be less than the interest rate differential between high-inflation and low-inflation countries. This warranted borrowing from low interest ERM countries and lending to the high interest countries or taking a long position in the higher yielding currency in the forward currency market and shorting the lower-yielding currency. Fung, Hsieh, and Stsatsaronis (2000) report that George Soros through his Quantum Fund held a $10 billion short position on the British pound and to have made $1 billion for his fund as a result of the pound's September devaluation. To quote: "Altogether, "large" hedge funds are estimated to have held short sterling positions totaling $11.7 billion, a position more than twice that of the U.K. current account deficit in third quarter 1992 ($5.4 billion), equal to its financial account deficit during the same quarter ($11.4 billion), and in excess of 25 percent of the government's official reserves in 1992 ($40 billion). Even in the broader context of the entire ERM, an $11.7 billion position was sizable. As of August 1992, the official reserves of the eight countries involved in the ERM crisis (France, Germany, Italy, Ireland, Portugal, Spain, Sweden, and the United Kingdom) totaled $268 billion. By the end of September, the official reserves of the six countries that remained in the ERM had fallen by $17.8 billion, while their central banks had spent $82.6 billion in defending their currencies. The United Kingdom issued private debt of Euro Currency Unit (ECU) 10 billion and Sweden issued ECU 11 billion (a total of $29.4 billion in intervention) to bolster their reserve positions. The German Bundesbank is estimated to have spent another DM 92 billion, or $53.2 billion, to support the ERM currencies. By September 1992, central bank interventions in the ERM totaled roughly $100 billion. The hedge fund positions amounted to 4.4 percent of the official reserves of the ERM central banks and 11.7 percent of the amount the banks spent to support their currencies. On the basis of these amounts, it is reasonable to conclude that the estimated $11.7 billion short sterling position generated a material impact on the exchange rate and on the external

value of the British pound." If this could be achieved in the European context, much more could be ensured in emerging markets.

Despite these features, which make them opaque and controversial, financial liberalization in developing countries has ensured these funds a growing presence in their markets. Thus a recent IOSCO survey identified 337 hedge funds in Brazil with assets of $17.5 billion under management and 13 in Hong Kong with assets of $1.2 billion. In October 2003, The Economist reported that: "Although a few hedge funds had invested in India soon after the country began liberalising its financial markets in the early 1990s, their interest has surged recently. Industry sources estimate that perhaps 25-30 per cent of all foreign equity investments are now held by hedge funds."

As Fung, Hsieh, and Stsatsaronis (2000) observe: "By their very nature, hedge funds employ opportunistic trading strategies on a leveraged basis. A small bet by large hedge funds may amount to a sizable transaction that can affect a market, especially one that has limited liquidity; it is natural to find their footprints in most major market events." In their view, highly leveraged trading strategies can lead to a convergence of bets, which make markets vulnerable to disruption when confidence erodes and participants seek to exit.

The problem is that at times regulators do not even know the extent of hedge fund involvement, because of the use of opaque instruments whose owners cannot be traced. For example, these hedge funds, among other investors, exploit the route offered by sub-accounts and opaque instruments like participatory notes to invest in the Indian market.. Since FIIs permitted to register in India include asset management companies and incorporated/institutional portfolio managers, guidelines issued in 1992 allowed them to invest on behalf of clients who themselves are not registered in the country. These clients are the 'sub-accounts' of registered FIIs. Participatory notes are instruments sold by FIIs registered in the country to clients abroad that are derivatives linked to an underlying security traded in the domestic market. These derivatives not only allow the foreign clients of the FIIs to earn incomes from trading in the domestic market, but to trade these notes themselves in international markets. By the end of August 2005, the value of equity, debt and derivative instruments underlying participatory notes that had been issued by FIIs amounted to Rs. 87,839 crore or 52 per cent of cumulative net FII investment. Between January 2006 and January 2007, SEBI estimates that the value of PNs in the Indian stock market grew by 70 per cent, though overall FII flows have reportedly reduced the share of PNs in FII investments to 34 per cent.[13] Through these routes, entities not expected to play a role in the Indian market can have a significant influence on market movements.

The problem with private equity

The other sets of agents who could adversely influence development in developing countries are private equity firms or funds. They are most often limited partnerships, with the firm as the general partner that manages the fund being paid an annual fee (calculated as a percentage of the money invested in and managed by the fund) as well as a share of

[13] Abraham, Rajesh (2007), "PNs grow 70% in one year", *Business Standard*, New Delhi 10 May, p. 1.

the profits, if any, garnered by the fund. The investors themselves are limited partners with a right only to a share of the profits.

Since the shares are not traded, the exit from an investment by a private equity investor normally takes one of four forms: (i) direct sale to investors seeking a shareholding in the a firm acquired by the fund; (ii) post-purchase listing of the company permitting sale of equity through the stock market; (iii) "recapitalisation" by increasing the debt outstanding and using the money to make dividend payments that the fund distributes to its limited partners; or (iv) sale to another private equity firm, referred to as a secondary buy-out. Realising profits through these means often requires waiting for as long as ten years or more, during which period expectations of an increase in the value of the original investment may or may not be realised. The consequent relative illiquidity of the investment implies that private equity investors expect to take in their returns over the medium or long term, unlike many investors in publicly traded equity. Given the risks involved and the long periods for which capital is locked up, private equity investors normally expect their investments to significantly outperform investments in bond and equity markets. This can create a problem inasmuch as the original investment is based on a purely financial calculation, while the realisation of returns implicit in that calculation requires counterpart investors looking for returns from acquiring an asset that allows engaging in a profitable non-financial activity. That is, the expectations of conventional investors in different kinds of economic activities must match, with a lag, that of pure financial investors represented by private equity firms.

Since private equity returns derive from an appreciation in the value of the acquired asset or company, private equity investments are often followed by efforts at restructuring to resuscitate loss-making companies or substantially improving the performance of profit-making ones. These efforts are aimed at adding value to the investment before private equity investors exit with a profit. Less appreciated forms of intervention by private equity firms are those in which bought-out firms are stripped of assets or are broken up so that the pieces can be sold to the highest bidder for an aggregate sale price that exceeds the purchase price. Such means of reviving or improving the performance of poorly performing companies must be a prerequisite for ensuring the appreciation of an asset, excepting in cases where: (i) the company concerned was bought cheap and could therefore be sold for a profit, which would be more an aberration than the rule; (ii) the market for the company's products takes a turn for the better, which was not foreseen by the original owner but expected by the private equity firm; or (iii) the company develops a new product or technology which can be commercialised for a large profit, as does happen in the case of some venture capital investments.

While these may be the principles, on the basis of which the private equity business is rationalised, in the final analysis the business rests on the fact that "valuations" are speculative. Private equity firms would like to keep their buy-out prices cheap, but loaded with funds find the need to push up valuations to acquire assets. While informed by the profit potential of the target, these valuations do often imply a high degree of risk. But the very fact that such initial valuations are made, by firms led by individuals with a track record, creates an environment for future sale at a price that incorporate a profit. And the longer investors in private equity funds are willing to wait for returns, the longer would fund managers have to wait out the market in search of a profitable sale. Further, in

certain circumstances, valuations in the private equity market could influence stock market prices as well, with high valuations in the former encouraging higher price earnings ratios in the latter. This could help sale of assets through the stock market.

Valuations may also be sticky upwards in the relatively good times or when there is liquid capital looking for avenues to invest because of a fact noted earlier: the distinction between purely financial capital and capital aiming to derive returns from production of goods or services in the long run has blurred. Increasingly, investments in production are driven by the possibility that the creation of a successful company could offer the option of selling out at a high price, delivering wealth that can be invested in financial assets. Since wealth is measured by the prevailing market value of the asset, the process can feed itself leading to unsustainable valuations at which someone has to carry a loss. The bourgeoning of finance results in the "dematerialisation" of wealth, permitting wealth accumulation at a pace much faster than the growth of production, so long as the game of rising valuations can be sustained.

What needs to be noted is that this process breeds in an environment of inequality and feeds on it. Global and national inequalities concentrate incomes among a few, whether they be the millionaires in the developed and developing world who accumulate savings looking for avenues of investment or sections of the middle class that accumulate financial capital through investments in mutual and pension funds, that need to be invested to meet future commitments. Neo-liberal reform by reducing State provisions for social security only aggravates this process, since it requires the middle class to save for contingencies or old age. The financial component of neo-liberal reform permits pension funds and insurance companies to invest this capital in a wider range of assets, resulting in the expansion of an asset class like private equity. The financial system adjusts by courting risk.

Since interest in alternative asset classes like private equity is driven by the amount of capital in circulation looking for financial investment opportunities, while the return on private equity is dependent on the demand from investors outside the private equity business for profitable long-term assets, there is a fundamental asymmetry that underlies the business. There could be a period when poor performance in stock markets or low long term yields on bonds, or a combination of the two, results in intensified interest in private equity. To cash in on this interest private equity firms can trade their reputation to mobilise funds to invest which they search for buy-out opportunities. When the inflow into private equity is large, some or all firms would have to make investments in whose case the probability of subsequent sale at a profit is lower.

This, however, would not deter private equity firms as intermediaries from mobilising large volumes of capital, since a large part of their returns derive from a one time management fee defined as a percentage of the volume of the fund, and are therefore linked to the amount of capital they mobilise. In fact, the evidence seems to be that when funds are aplenty, private equity firms agree to reduce the management fee defined in percentage terms. But with bigger funds, fees only increase. To quote an insider analysis of the problem: "When prospective investors in Bear Stearns Merchant Banking's third buyout fund balked at some details of the fund's planned fee structure, the firm's response at first glance looked quite generous. Bear Stearns dutifully lowered the fund's management fee to 1.75 percent from 2 percent. All other things being constant, the move

would have resulted in about $4 million of savings a year for limited partners – a clear win. But other variables changed. Bear Stearns decided to raise the overall size of its fund to at least $2.5 billion from $1.5 billion, meaning it will collect more fees in absolute terms, despite its willingness to give ground on a percentage basis." (Kreuzer 2006)

This ability to acquire equity through the private market suggests that foreign acquisitions could increase sharply in Asia, since it is known that there is a substantial section of industry in these countries that are either unlisted or in which free-floating (as opposed promoter-held) shares are a small proportion. Despite this there has already been some evidence of increased acquisition through the stock market. In India, for example, as per the original September 1992 policy permitting foreign institutional investment, registered FIIs could individually invest in a maximum of 5 per cent of a company's issued capital and all FIIs together up to a maximum of 24 per cent. The 5 per cent individual-FII limit was raised to 10 per cent in June 1998. However, as of March 2001, FIIs as a group were allowed to invest in excess of 24 per cent and up to 40 per cent of the paid up capital of a company with the approval of the general body of the shareholders granted through a special resolution. This aggregate FII limit was raised to the sectoral cap for foreign investment as of September 2001. (Ministry of Finance, Government of India, 2005). These changes obviously substantially expanded the role that FIIs could play even in a market that was still relatively shallow in terms of the number of shares that were available for active trading.

This is because the process of liberalisation keeps alive expectations that the caps on foreign direct investment in different sectors would be relaxed over time, providing the basis for foreign control. Thus, acquisition of shares through the FII route today paves the way for the sale of those shares to foreign players interested in acquiring companies as and when the demand arises and/or FDI norms are relaxed. This creates the ground for speculative forays into the Indian market, with investment banks and hedge funds using various routes, including sub-accounts and participatory notes, to establish a presence. If the expectations underlying such speculative investments are to be realised, sale to a firm seeking to acquire assets to establish an Indian presence would be the best option.

This trend of transfer of ownership from Indian to foreign owners would now be aggravated by the private equity boom, which is not even restrained by the extent of free-floating shares available for trading in stock markets. Private equity firms can seek out appropriate investment targets and persuade domestic firms to part with a significant share of equity using valuations that would be substantial by domestic wealth standards and may or not be so by international standards. Since private equity expects to make its returns in the medium term, it can then wait till policies on foreign ownership are adequately relaxed and an international firm is interested in an acquisition in the area concerned. The rapid expansion of private equity in emerging markets suggests that this is the route the private equity business is seeking given the fact that the potential for such activity in the developed countries is reaching saturation levels. The dematerialisation of wealth has as its counterpart rising foreign ownership in developing countries like India.

If this tendency persists valuations in emerging markets are bound to rise as well with implications for price earnings ratios in their stock markets too. The fragility that spells in shallow markets with substantial foreign capital presence need not be spelt out. If the boom goes bust investors from developed countries such as the pension funds and

insurance companies could burn their fingers. But this may not deter private equity from traversing this path given the misalignment of incentives driving general and limited partners that was noted earlier. In the developing countries themselves, the bust would have implications that go beyond individual firms and companies as the recent financial crises in developing countries illustrate.

Further, once there are institutions that are free of the now-diluted regulatory system, even those that are more regulated are entangled in risky operations. They are entangled, because they themselves have lent large sums in order to benefit from the promise of larger returns from the risky investments undertaken by the unregulated institutions. They are also entangled because the securities on which these institutions bet in a speculative manner are also securities that these banks hold as "safe investments". If changes in the environment force these funds to dump some of their holdings to clear claims that are made on them, the prices of securities the banks directly hold tend to fall, affecting their assets position adversely. This means that there are two consequences of the new financial scenario: it is difficult to judge the actual volume and risk of the exposure of individual financial institutions; and within the financial world there is a complex web of entanglement with all firms mutually exposed, but each individual firm exposed to differing degrees to any particular financial entity. The increase in the incidence of cross-industry mergers within the financial sector consolidates this tendency towards entanglement of agents involved in sectors of financial activity characterized by differential risk and substantially differential returns, thereby increasing the share of high-risk assets in the portfolio of large financial agents.

The other fall-out of this tendency would be a change in the pattern of asset-ownership in developing countries, with foreign investors controlling a rising share of total assets. Many argue that this is inevitable in a globalising world and that ownership *per se* does not matter so long as the assets are maintained and operated in the developing countries themselves. But there is no guarantee that this would be the case once domestic assets become parts of the international operations of transnational firms with transnational strategies. Those assets may at some point be kept dormant and even be retrenched. What is more, the ability of domestic forces and the domestic State to influence the pattern and pace of growth of domestic economic activity would have been substantially eroded.

Macroeconomic effects

Another set of consequences of one or another group of developing countries being discovered at different points in time as a “favourable” destination for foreign financial investors is macroeconomic. Increasingly, this has meant that the international flows of capital to developing countries have little to do with the need of these countries either for balance of payments or investment finance. Thus, since 2000, developing and other emerging market countries as a group (as defined by the IMF’s World Economic Outlook), have recorded a surplus in the current account of their balance of payments. That surplus was just short of $150 billion in 2003. Yet, in 2003, residents of this group of countries borrowed from abroad to the tune of $91.5 billion and foreign direct and portfolio investment in these countries exceeded $140 billion. Being recipients of foreign capital flows that were not needed to finance their balance of payments, these countries as a group increased their foreign exchange reserve holdings by as much as $298 billion.

Of this increase in reserves, as much as $164 billion was accounted for by developing countries in Asia.

Since much of these reserves are invested in US government securities which offer an extremely low rate of interest, these countries are paying out huge returns to foreign investors, but are obtaining little by way of return on their own investments. Further, the growing presence of foreign financial firms creates a whole host of difficulties. To start with, sudden and whimsical reversals in flows are known to occur, which can set off currency speculation in the host country and lead to a currency collapse. Initially, a decline in investor confidence results in a withdrawal of funds invested in equities and also prevents the rollover of short term debt by multinational banks. Then, there is a scramble for dollars on the part of domestic banks and corporations with imminent dollar commitments, the domestic currency costs of which are rising in the wake of depreciation. And finally, there is an increase in speculative operations by domestic and international traders cashing in on currency volatility.

Secondly, if a country is suddenly chosen as a preferred site for foreign portfolio investment, it can lead to huge inflows which in turn cause the currency to appreciate. As a result, investment gets diverted away from tradables to nontradables. Typically, internationally accessed capital goes to sustain an "investment boom" in stock and real estate markets, raising rates of return on such investments and fuelling the thrust to garner quick profits through arbitrage. This renders the country prone to financial failure.

Finally, the inflow of capital imposes a deflationary environment on these countries. One requirement for keeping financial investors happy is to substantially reduce the deficit of the government or its expenditures financed with borrowing. Financial interests are against deficit-financed spending by the state for a number of reasons. To start with, deficit financing is seen to increase the liquidity overhang in the system, and therefore as being potentially inflationary. Inflation is anathema to finance since it erodes the real value of financial assets. Second, since government spending is "autonomous" in character, the use of debt to finance such autonomous spending is seen as introducing into financial markets an arbitrary player not driven by the profit motive, whose activities can render interest rate differentials that determine financial profits more unpredictable. Finally, if deficit spending leads to a substantial build-up of the state's debt and interest burden, it may intervene in financial markets to lower interest rates with implications for financial returns. Financial interests wanting to guard against that possibility tend to oppose deficit spending. Given the consequent dislike of expansionary fiscal policy on the part of financial investors, countries seeking to attract financial flows or satisfy existing financial investors are forced to adopt a deflationary fiscal stance, which limits their policy option.

Further, if a country is successful in attracting financial flows, the consequent tendency for its currency to appreciate, forces the central bank to intervene in currency markets to purchase foreign currency and prevent excessive appreciation. The consequent build-up of foreign currency assets, while initially sterilized through sale of domestic assets, especially government securities, soon reduces the monetary policy flexibility of the central bank. Governments in Asia, especially India, faced with these conditions are increasingly resorting to trade and capital account liberalization to expend foreign currency and reduce the compulsion on the central bank to keep building foreign

reserves. That is, if financial liberalisation is successful, in the first instance, in attracting capital flows, it inevitably triggers further liberalization, including of capital outflows, leading to an increase in financial fragility.

Thus, financial liberalisation that successfully attracts capital flows and increases vulnerability limits the policy space of the government. Unfortunately, the dominance of finance globally has meant that such debilitating flows occur even when individual developing countries or developing countries as a group have no need for such flows to finance their balance of payments or augment their savings.

In sum a decade after the 1997 crisis we are witnessing trends which imply an increase in financial fragility that can lead to further financial crises, with extremely adverse implications for growth, stability, employment and social welfare. This is the element of continuity in a world that is seen as having changed substantially. Self-regulation clearly does not help. New measures to govern finance and financial flows are a necessity.

A lesson from Thailand

The problem is that limited measures to deal with this problem will only increase instability. Nine years after the 1997 crisis, on December 19th , 2006 the stock market in Thailand collapsed after the government introduced limited market-based capital controls aimed at stalling the rapid appreciation of the Thai baht.

The collapse was the result of the decision made by a bunch of foreign investors to dump their holdings in the Thai stock market. The stock exchange of Thailand (SET) index fell 15 per cent in a single day, losing much of the gains it had registered over the previous year. The collapse forced the government to retreat by limiting its intervention, raising questions about policy sovereignty in developing countries that have opened their financial markets to flows of portfolio capital. Finance capital it appears can bring governments to heel if they impose conditions on their activity.

The controls on cross-border capital inflows were imposed by the government in a bid to reverse a runaway appreciation of the Thai baht (Chart 7). The baht, which stood at 41.28 baht to the dollar at the beginning of December 2007, had been on a near-consistent climb since then, to touch a 9-year high of 35.18 at the middle of December 2006. The reason for this appreciation was a surge in capital inflows into equity securities over 2005 and 2006, with gross inflows amounting to between $8 and $12 billion per quarter. Even though outflows were considerable as well, there was a significant net inflow into the country. Flows of this magnitude were not needed to finance Thailand's balance of payments, which recorded small current account surpluses or small deficits in most recent quarters.

These flows proved a problem because, after the last crisis, Thailand moved to a floating exchange rate, so that any excess supply of dollars results in an appreciation of the currency. Exchange rate management in such situations involves intervention by the central bank to acquire foreign currency and reduce the pressure on the local currency. Clearly, the Bank of Thailand has resorted to this instrument in large measure. As a result, Thailand's international reserves rose by more than $11 billion (starting from around $53 billion) in the first 11 months of 2006.

The dangers of piling up reserves to stabilize the currency are well known. It results in an excessive accumulation of foreign exchange assets with the central bank reducing its control over money supply. Further, it can never completely prevent appreciation. Foreign investors, skeptical of the ability of the central bank to keep the currency down, would make speculative investments to benefit from an appreciation of the currency. Investments made by converting dollars into baht, when redeemed, would not merely deliver capital gains because of stock value appreciation, but an additional gain in dollar terms when baht receipts are converted back into dollars, because of appreciation of the baht. As more and more investors troop in to capture these benefits, the market and the baht are likely to appreciate, fuelling further speculative investments.

Speaking on radio immediately after the imposition of capital controls, Bank of Thailand Governor Tarisa Watanagase reported that returns on investments in Thailand were around 20 per cent, of which just 5 per cent came from capital gains, whereas 15 per cent came from gains from Baht appreciation. The speculation this had triggered had meant that speculative capital inflows had risen to US$950 million per week in December from $300 million in November.

In the event the baht appreciated quite sharply. Fearing that this would hurt exporters adversely, the government and the central bank decided to intervene to slow the inflow of capital. Implicit in their action was the view that any value of the baht below 35 to the dollar was unacceptable. “We didn’t want it to break through that,” finance minister Pridiyathorn Devakula reportedly told Reuters. “If you break 35, you see 34, you can also see 33 and 32.”

To prevent the baht from breaking through the 35-to-the-dollar floor, the central bank crafted a cautious set of market-based measures aimed at preventing short term inflows from investors planning to hold their investments for less than a year in search of speculative returns. The measures amounted to imposing a reserve requirement on all *incremental, short-term* capital flows. As per the policy announced on December 19, 2006, financial institutions were required to withhold (as a no interest deposit) for a year, 30 per cent of foreign currencies bought or exchanged against the baht, except those related to trade in goods and services, or repatriation of investments abroad by residents. After a year, investors could request and obtain a refund of the reserve after submitting evidence of having held their investments for a year. Should an investor wish to sell out and repatriate funds earlier than one year, s/he will be refunded only two-thirds of the amount brought in. What is important to note is that foreign exchange transactions that had occurred prior to December 19, 2006 were exempt from this reserve requirement. Foreign direct investments or unrequited transfers too were obviously exempt.

Clearly, the Bank of Thailand was operating with the expectation that these measures would have no major impact on past investments, while simultaneously limiting purely speculative short-term investments in future. Its expectations were possibly based on three grounds. First, there was no quantitative control on the amount of flows, but merely intervention to reduce the returns on speculative short term flows. Such reserve requirement measures—identified as market-based capital controls—had been experimented with successfully in other contexts such as Chile, in the past. Second, the penalty being imposed even on speculative flows was small. Tarisa Watanagase reportedly estimates that investors' profits would be trimmed by around 1.5 per cent as a

result of the introduction of the reserve measure, which was a small part of the 20 per cent return they were making. Finally, the Bank of Thailand seems to have expected that the measure would bother only new investors, since it was not applicable to transactions completed before December 19, 2006.

In practice, however, there was not just a sharp cutback in incremental investments but a sellout by existing investors. Once we accept that a substantial share of the surge in capital inflows was speculative, then the panic exit was to be expected. Speculative investments are made not on the basis of where the value of a stock index or the value of a currency rests, but expectations of where they are headed. The latter expectations, with regard to the direction and extent of future movements, are in turn based on presumptions of how much new liquidity would come into the market. Thus, if controls are placed on new, incremental investment, this does not mean that investors who came in earlier would not respond. Since their investments were made on expectations of future capital inflows, they are bound to adjust their portfolios in the new environment. That is what triggered the exit of investors and the collapse of the market.

This obviously suggests that countries that have been operating with a relatively open capital account and have accumulated a stock of portfolio investment cannot plan capital control measures directed purely at new inflows. If such measures have to be successful they have to place restrictions on outflows as well. In Thailand’s case the failure to do this resulted in an outflow, a collapse of the market and a decision of the central bank to “partially” relax the reserve requirement rule by exempting equity investments from its ambit and promising to do the same for property purchases. However, much the government and the central bank may protest, this retreat amounted to a substantial withdrawal of the measures since most of the speculative flows came into these two areas. In sum, the effort to stem the appreciation of the baht had been aborted, leaving the problem unresolved.

Clearly Thailand’s rulers shared the concern about the baht. Prime Minister Surayud Chulanont is reported to have said he fully supported the Bank of Thailand's “measures aimed at limiting speculation on the baht as well as it's softening of those steps. The policy isn't flip-flopping," he is reported having told the media. "There has been no change in policy. The policy is clear that we don't want to see the baht rise too much, as it would affect the overall economy."

If there is consensus on the policy but it cannot be implemented, the signs are clearly of a loss of policy sovereignty. Thailand, like other developing countries that have liberalised their capital accounts to differing degrees, is finding it difficult to even marginally reverse the extent of liberalization even though the evidence clearly shows that the economy is now being held to ransom by speculators.

The problem, however, is that this is not just a Thai problem, but one faced by most emerging market, especially those in Asia. The increase in liquidity in the international financial system as a result of the high prices and large surpluses that were garnered by oil exporters has, among other things, increased the volume of capital in search of high returns. This is bound to spur currency appreciation and undermine export competitiveness in other contexts as well. While the US with its gaping trade and current account deficits may see this as a way of partially increasing its exports and reducing

imports to and from these countries, the countries concerned themselves will want to shield themselves from excessive currency appreciation not warranted by fundamentals. The answer then would have to be capital controls. But whether there would be a government which is willing to go further than Thailand did to successfully combat speculation is yet to be seen. Meanwhile, financial investors are notching up profits and huge bonuses, and are reportedly still counting.

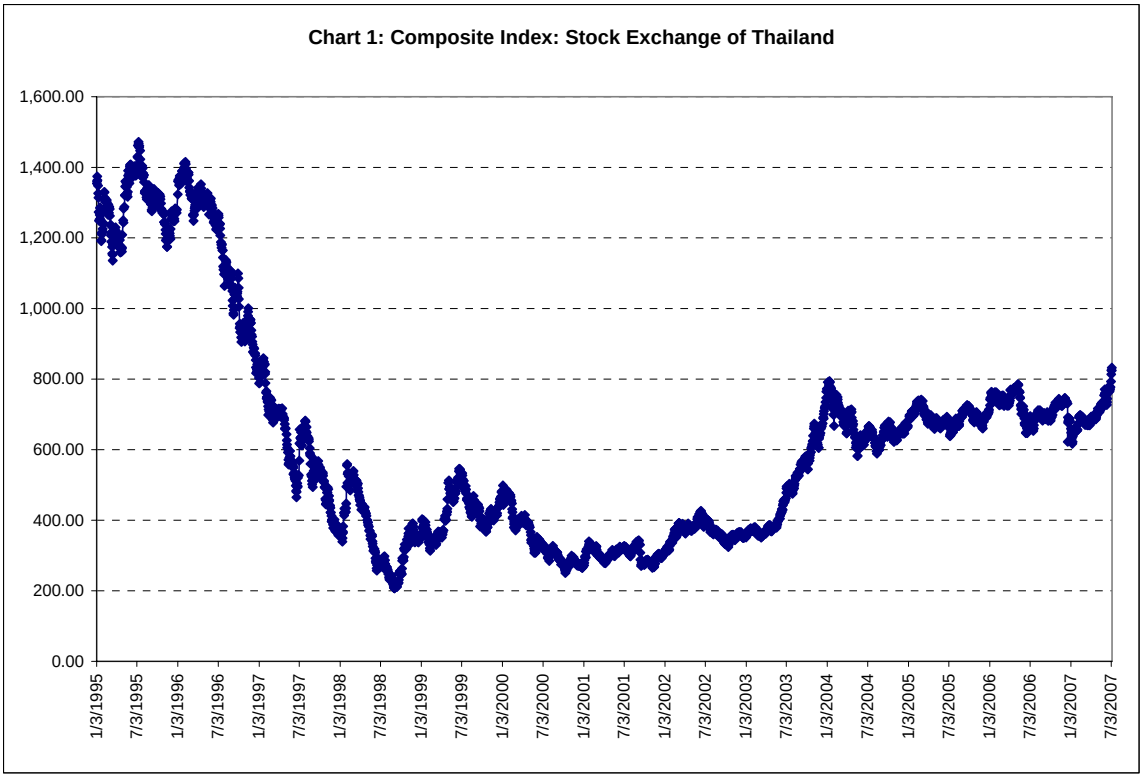


Chart 1: Composite Index: Stock Exchange of Thailand
1,600.00
1,400.00
1,200.00
1,000.00
800.00
600.00
400.00
200.00
0.00
1/3/1995
7/3/1995
1/3/1996
7/3/1996
1/3/1997
7/3/1997
1/3/1998
7/3/1998
1/3/1999
7/3/1999
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7/3/2007

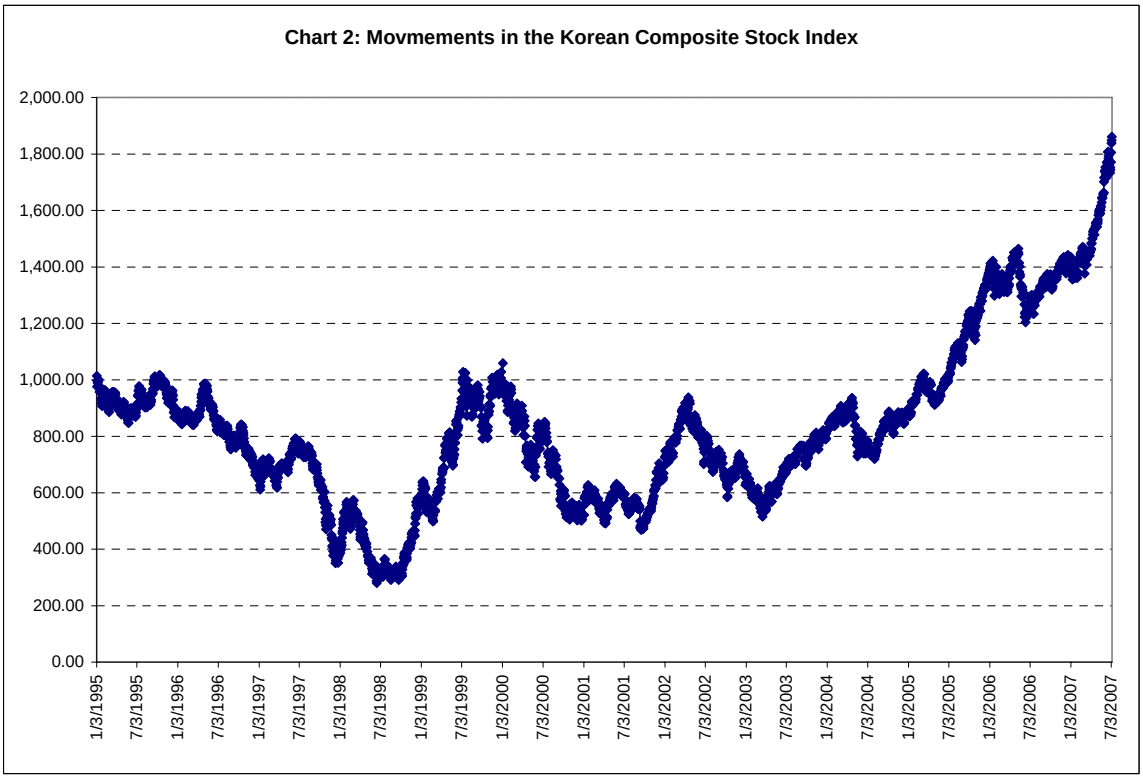
Chart 2: Movmements in the Korean Composite Stock Index
2,000.00
1,800.00
1,600.00
1,400.00
1,200.00
1,000.00
800.00
600.00
400.00
200.00
0.00
1/3/1995
7/3/1995
1/3/1996
7/3/1996
1/3/1997
7/3/1997
1/3/1998
7/3/1998
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1/3/2006
7/3/2006
1/3/2007
7/3/2007

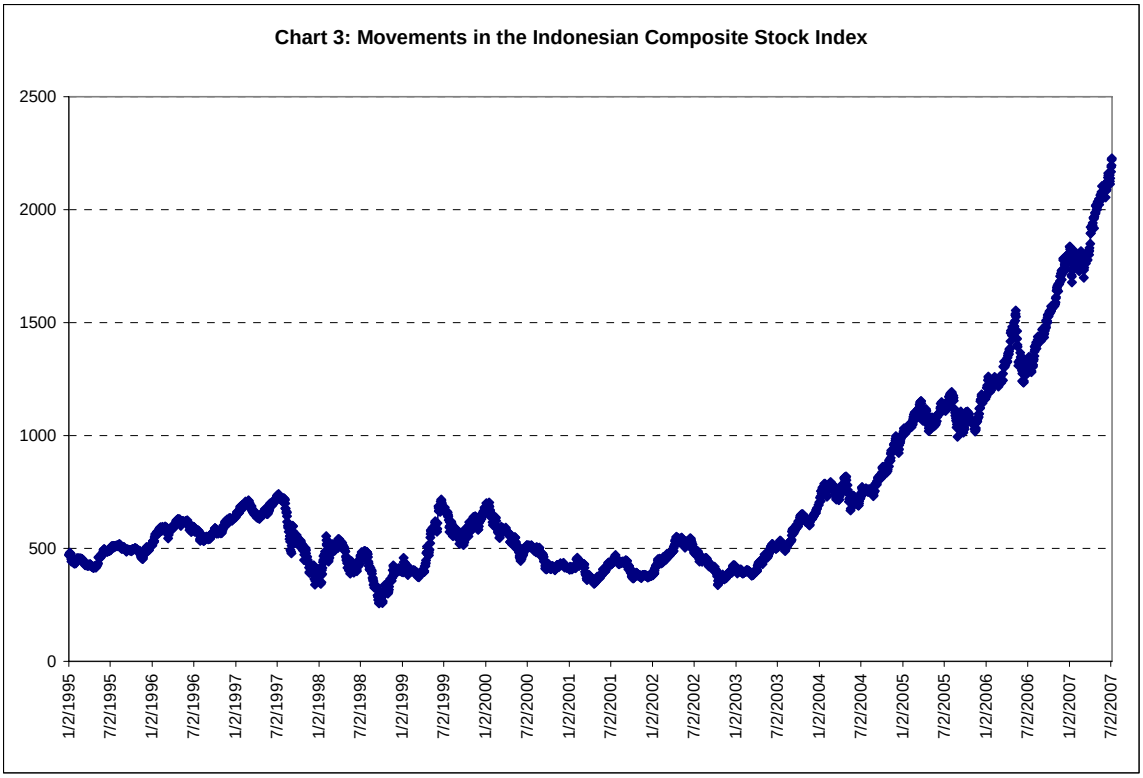
Chart 3: Movements in the Indonesian Composite Stock Index
2500
2000
1500
1000
500
0
1/2/1995
7/2/1995
1/2/1996
7/2/1996
1/2/1997
7/2/1997
1/2/1998
7/2/1998
1/2/1999
7/2/1999
1/2/2000
7/2/2000
1/2/2001
7/2/2001
1/2/2002
7/2/2002
1/2/2003
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7/2/2006
1/2/2007
7/2/2007

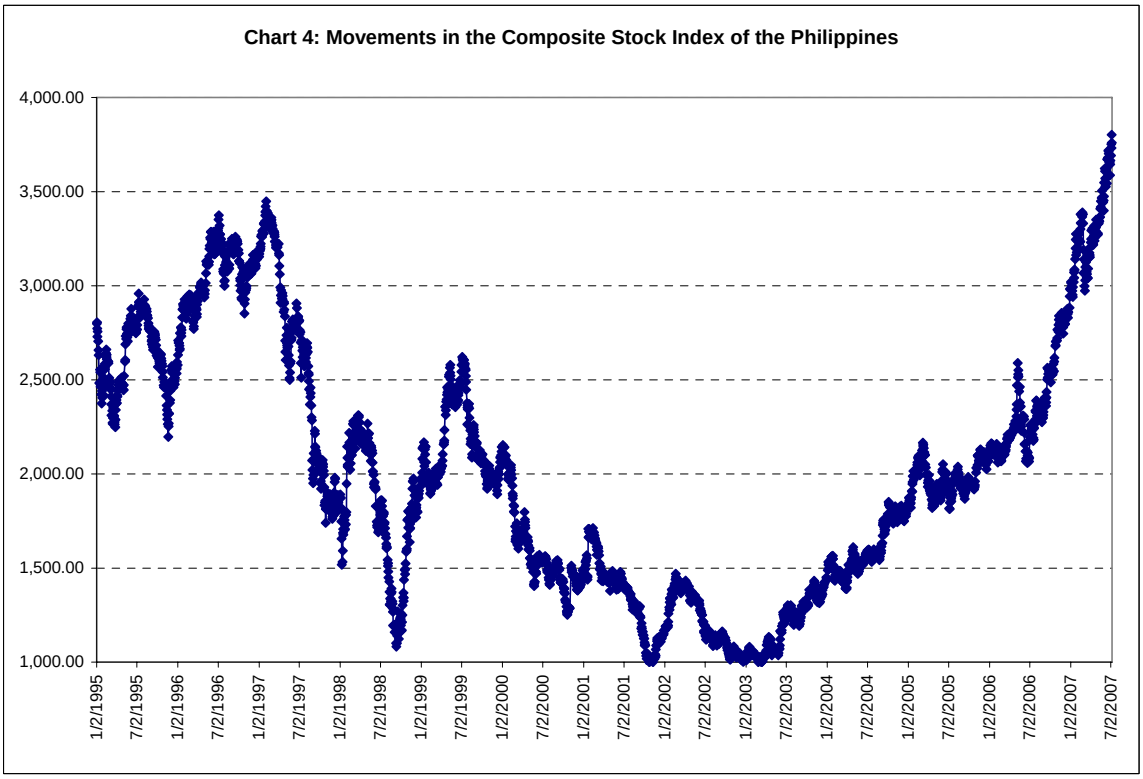
Chart 4: Movements in the Composite Stock Index of the Philippines
4,000.00
3,500.00
3,000.00
2,500.00
2,000.00
1,500.00
1,000.00
1/2/1995
7/2/1995
1/2/1996
7/2/1996
1/2/1997
7/2/1997
1/2/1998
7/2/1998
1/2/1999
7/2/1999
1/2/2000
7/2/2000
1/2/2001
7/2/2001
1/2/2002
7/2/2002
1/2/2003
7/2/2003
1/2/2004
7/2/2004
1/2/2005
7/2/2005
1/2/2006
7/2/2006
1/2/2007
7/2/2007

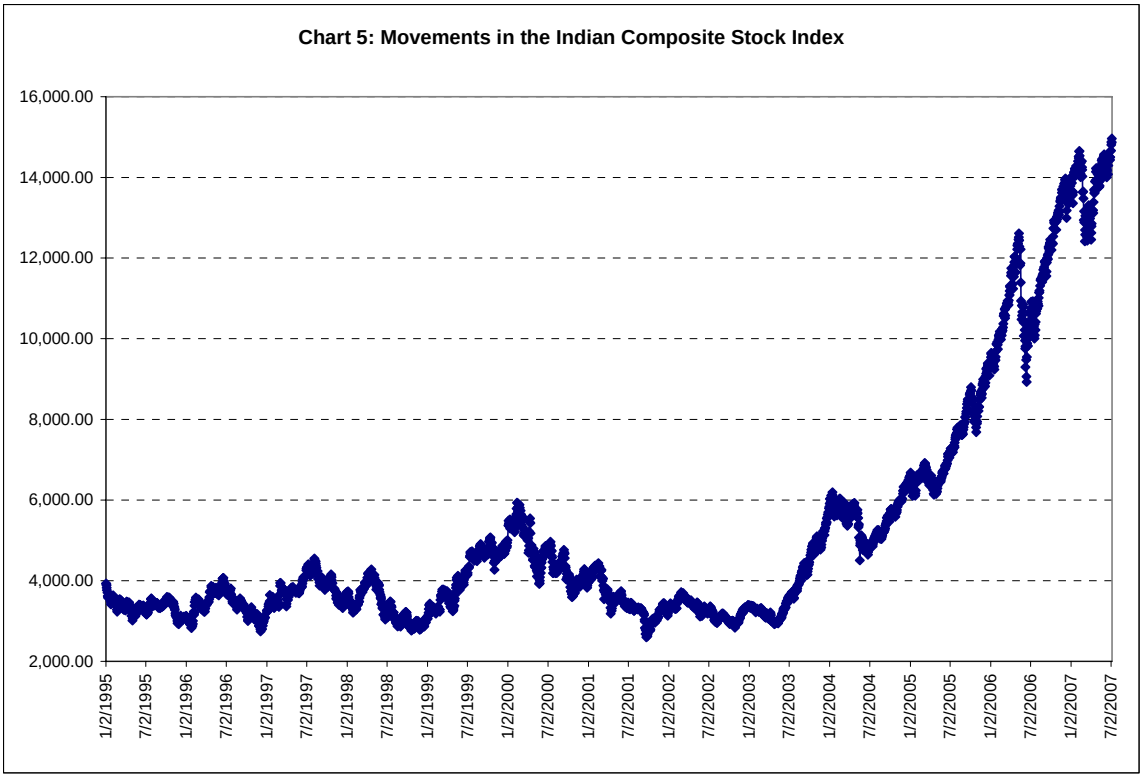
Chart 5: Movements in the Indian Composite Stock Index
16,000.00
14,000.00
12,000.00
10,000.00
8,000.00
6,000.00
4,000.00
2,000.00
1/2/1995
7/2/1995
1/2/1996
7/2/1996
1/2/1997
7/2/1997
1/2/1998
7/2/1998
1/2/1999
7/2/1999
1/2/2000
7/2/2000
1/2/2001
7/2/2001
1/2/2002
7/2/2002
1/2/2003
7/2/2003
1/2/2004
7/2/2004
1/2/2005
7/2/2005
1/2/2006
7/2/2006
1/2/2007
7/2/2007


Chart 6: Movements in the Chinese Composite Stock Index
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
1/3/1995
7/3/1995
1/3/1996
7/3/1996
1/3/1997
7/3/1997
1/3/1998
7/3/1998
1/3/1999
7/3/1999
1/3/2000
7/3/2000
1/3/2001
7/3/2001
1/3/2002
7/3/2002
1/3/2003
7/3/2003
1/3/2004
7/3/2004
1/3/2005
7/3/2005
1/3/2006
7/3/2006
1/3/2007
7/3/2007

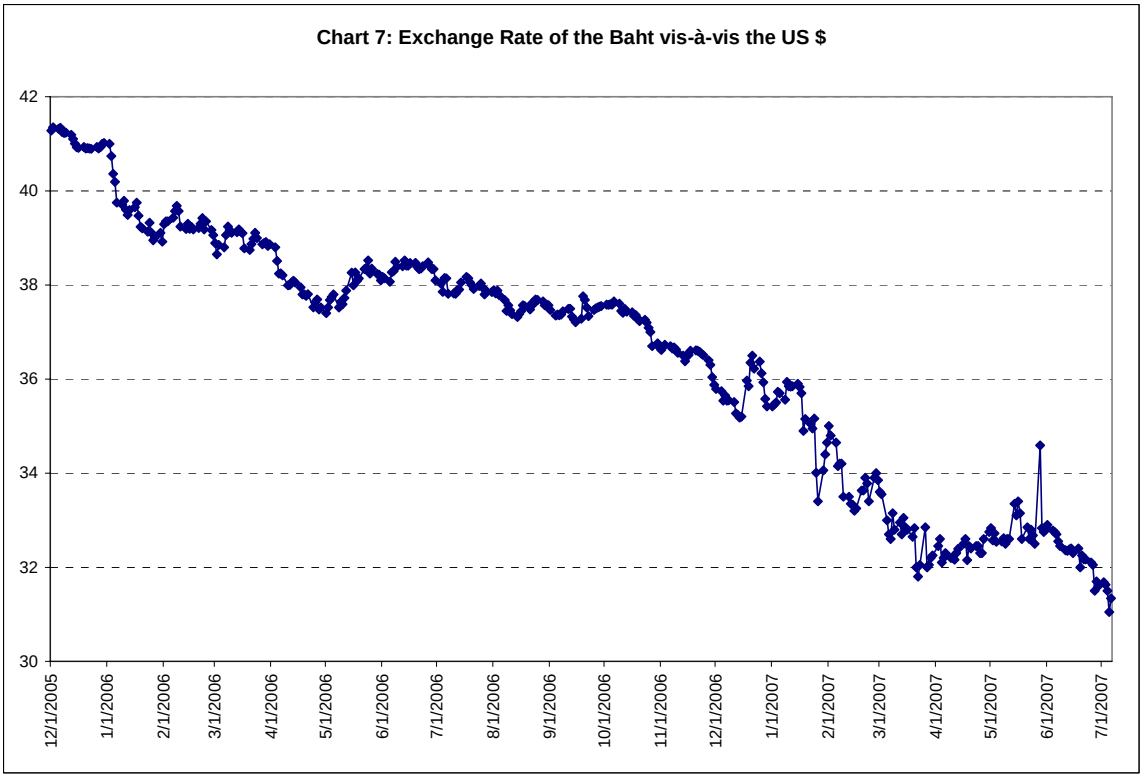
Chart 7: Exchange Rate of the Baht vis-à-vis the US $
42
40
38
36
34
32
30
12/1/2005
1/1/2006
2/1/2006
3/1/2006
4/1/2006
5/1/2006
6/1/2006
7/1/2006
8/1/2006
9/1/2006
10/1/2006
11/1/2006
12/1/2006
1/1/2007
2/1/2007
3/1/2007
4/1/2007
5/1/2007
6/1/2007
7/1/2007